LUNA INNOVATIONS INC
Form S-4/A
March 24, 2015
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As filed with the Securities and Exchange Commission on March 24, 2015

Registration No. 333-201956

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 3

To

Form S-4

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

LUNA INNOVATIONS INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware	8731	54-1560050
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

One Riverside Circle, Suite 400

Roanoke, Virginia 24016

Telephone: (540) 769-8400

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant s Principal Executive Offices)

Talfourd H. Kemper, Jr.

General Counsel

One Riverside Circle, Suite 400

Roanoke, Virginia 24016

Telephone: (540) 769-8400

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copies to:

Darren K. DeStefano

Cooley LLP

One Freedom Square, Reston Town Center

11951 Freedom Drive

Reston, VA 20190

Telephone: (703) 456-8034

Facsimile: (703) 456-8100

Landey Strongin

Tarter Krinsky & Drogin LLP

1350 Broadway

New York, NY 10018

Telephone: (212) 216-8000

Facsimile: (212) 216-8001

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement and the satisfaction or waiver of all other conditions to the Merger described in the joint proxy statement/prospectus.

If the securities being registered on this Form are to be offered in connection with the formation of a holding company and there is compliance with General Instruction G, check the following box. ¨

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ¨

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	¨	Accelerated filer	¨
Non-accelerated filer	¨ (Do not check if a smaller reporting company)	Smaller reporting company	x

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issue Tender Offer) ¨

Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer ¨

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

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Information contained herein is subject to completion or amendment. A registration statement relating to the Luna Innovations common shares to be issued in the Merger has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This joint proxy statement/prospectus shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale is not permitted or would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction.

SUBJECT TO COMPLETION, DATED MARCH 24, 2015

JOINT PROXY STATEMENT FOR ANNUAL MEETING OF THE STOCKHOLDERS OF LUNA INNOVATIONS INCORPORATED AND SPECIAL MEETING OF THE STOCKHOLDERS OF ADVANCED PHOTONIX, INC. AND PROSPECTUS OF LUNA INNOVATIONS INCORPORATED FOR UP TO 12,961,602 SHARES OF COMMON STOCK OF LUNA INNOVATIONS INCORPORATED

PROPOSED MERGER

To the stockholders of each of Luna Innovations Incorporated and Advanced Photonix, Inc.:

The boards of directors of each of Luna Innovations Incorporated (Luna) and Advanced Photonix, Inc. (API) have approved a merger transaction (Merger) in which the businesses of Luna and API will be combined under the terms of a merger agreement (Merger Agreement). Luna and API are sending the accompanying joint proxy statement/prospectus to you to ask you to vote in favor of the adoption of the Merger Agreement and approval of the transactions contemplated thereby.

Luna is holding an annual meeting of its stockholders in order to elect directors and to obtain the stockholder approval necessary to complete the Merger with API and certain other matters. At the Luna annual meeting, which will be held at 9:00 a.m., local time, on May 8, 2015, at the Roanoke Higher Education Center, 108 N. Jefferson St., Roanoke, Virginia, 24016, unless postponed or adjourned to a later date, Luna will ask its stockholders to elect two directors and to approve, among other items, the issuance of shares of Luna common stock to the securityholders of API in connection with the Merger, as described in the accompanying joint proxy statement/prospectus.

Luna s board of directors has approved the Merger, the Merger Agreement and the related issuance of shares of Luna common stock, par value $0.001, and has determined that the Merger, the Merger Agreement and such issuance of shares is in the best interests of Luna and its stockholders. **Accordingly, Luna s board of directors unanimously recommends that the Luna stockholders vote FOR each of the proposals submitted to the Luna stockholders at the Luna annual meeting, including, without limitation, the issuance of shares of Luna common stock to the securityholders of API in connection with the Merger.**

Luna directors and executive officers, and their affiliates, who in the aggregate own approximately 6.6% of the outstanding shares of Luna common stock, have entered into Voting Agreements whereby they have agreed to vote in favor of the issuance of Luna common stock to be issued under the terms of the Merger Agreement.

API is holding a special meeting of its stockholders in order to obtain the stockholder approval necessary to complete the Merger with Luna. At the API special meeting, which will be held at 9:00 a.m., local time, on May 8, 2015, at API s corporate headquarters located at 2925 Boardwalk Drive, Ann Arbor, Michigan 48104, unless postponed or adjourned to a later date, API will ask its stockholders to approve, among other items, the Merger and adoption of the Merger Agreement, as described in the accompanying joint proxy statement/prospectus.

API s board of directors has approved the Merger and the Merger Agreement and has determined that the Merger and the Merger Agreement are advisable and in the best interests of API and its stockholders. **Accordingly, API s board of directors unanimously recommends that the API stockholders vote FOR each of the proposals submitted to the API stockholders at the API special meeting, including, without limitation, adoption of the Merger Agreement and approval of the transactions contemplated thereby.**

Certain API directors and executive officers, and their affiliates, who in the aggregate own approximately 10.8% of the outstanding shares of API common stock, have entered into Voting Agreements whereby they have agreed to vote in favor of the adoption of the Merger Agreement and approval of the transactions contemplated thereby.

Luna s common stock is currently listed on the NASDAQ Capital Market under the symbol LUNA. On , 2015, the last trading day before the date of this joint proxy statement/prospectus, the closing sale price of Luna common stock was $ per share.

API s common stock is currently listed on the NYSE MKT under the symbol API. On , 2015, the last trading day before the date of this joint proxy statement/prospectus, the closing sale price of API common stock was $ per share.

More information about Luna, API and the proposed Merger is contained in the accompanying joint proxy statement/prospectus. **Luna and API urge you to read the accompanying joint proxy statement/prospectus carefully and in its entirety. In particular, you should carefully consider the matters discussed in the section entitled Risk Factors, beginning on page 21 of the accompanying joint proxy statement/prospectus**.

Your vote is very important, regardless of the number of shares of Luna or API you own. Please read the accompanying joint proxy statement/prospectus carefully and submit your proxy to have your shares voted as promptly as possible.

Luna and API are excited about the opportunities the proposed Merger may bring to the stockholders of Luna and API, and thank you for your consideration and continued support.

My E. Chung
President and Chief Executive Officer
Luna Innovations Incorporated

Richard D. Kurtz
President and Chief Executive Officer
Advanced Photonix, Inc.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved the Merger or the securities of Luna to be issued in connection with the Merger, or determined if this joint proxy statement/prospectus is adequate or accurate. Any representation to the contrary is a criminal offense.

The accompanying joint proxy statement/prospectus is dated , 2015, and is first being mailed to the stockholders of Luna and API on or about , 2015.

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Luna Innovations Incorporated

One Riverside Circle, Suite 400

Roanoke, Virginia 24016

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On May 8, 2015

To Luna Innovations Incorporated Stockholders:

NOTICE IS HEREBY GIVEN that an annual meeting of stockholders of Luna Innovations Incorporated, a Delaware corporation (Luna), will be held at the Roanoke Higher Education Center, 108 N. Jefferson Street, Roanoke, Virginia 24016 on May 8, 2015 at 9:00 a.m., local time for the following purposes:

1. To consider and vote upon a proposal to approve the issuance of shares of Luna common stock, par value $0.001 per share, to securityholders of Advanced Photonix, Inc. (API), in connection with the Merger contemplated by the Agreement and Plan of Merger and Reorganization, dated as of January 30, 2015, by and among Luna, API, and API Merger Sub, Inc., a wholly owned subsidiary of Luna, as amended from time to time, pursuant to which API will become a wholly owned subsidiary of Luna through the Merger;

2. To consider and vote upon an adjournment of the Luna annual meeting from time to time, if necessary or appropriate (as determined by Luna), to solicit additional proxies if there are not sufficient votes to approve the proposal described immediately above;

3. To elect My E. Chung and Neil D. Wilkin, Jr., as Class III members of the board of directors, to serve until Luna s 2018 annual meeting of stockholders and until their successors are duly elected and qualified; provided, however, that, if the Merger is completed, the board of directors of Luna will be reconstituted as described in this joint proxy statement/prospectus;

4. To approve, on a non-binding, advisory basis, the compensation of Luna s named executive officers, as disclosed in this joint proxy statement/prospectus;

5. To ratify the selection, by the Audit Committee of Luna s board of directors, of Grant Thornton LLP as Luna s independent registered public accounting firm for the fiscal year ending December 31, 2015; and

6. To transact such other business as may be properly brought before the annual meeting, or any adjournment or postponement thereof, by or at the direction of the board of directors of Luna.

The foregoing proposals and the Agreement and Plan of Merger and Reorganization are more fully described in the joint proxy statement/prospectus accompanying this Notice. Only Luna stockholders of record at the close of business on March 23, 2015, the record date for the Luna annual meeting, will be entitled to notice of, and a vote at, the Luna annual meeting or any adjournment or postponement thereof. At the close of business on March 23, 2015, Luna had 15,095,017 shares of common stock outstanding and entitled to vote. A list of Luna stockholders entitled to vote at the Luna annual meeting will be available for inspection at Luna s principal executive offices in Roanoke, Virginia, at least 10 days before the date of the annual meeting.

The board of directors of Luna has determined that the Agreement and Plan of Merger and Reorganization and the Merger are advisable and fair to, and in the best interests of, Luna and its stockholders, and recommends that Luna s stockholders vote to approve the issuance of shares of Luna common stock pursuant to the Merger Agreement.

All Luna stockholders are cordially invited to attend the Luna annual meeting in person. ***Whether or not you plan to attend the Luna annual meeting in person, please sign and return the enclosed proxy card, or submit your proxy over the telephone or the internet as instructed in these materials, to ensure that your Luna shares will be represented at the Luna annual meeting****. Voting instructions are included with your Luna proxy card. You may revoke your Luna proxy card at any time prior to the Luna annual meeting by following the instructions in the accompanying joint proxy statement/prospectus. If you attend the Luna annual meeting and vote by ballot, then your proxy vote will be revoked automatically and only your vote by ballot at the Luna annual meeting will be counted.* ***Regardless of the number of shares of Luna that you own or whether or not you plan to attend the Luna annual meeting, it is important that your Luna shares be represented and voted.*** *No postage need be affixed if your proxy card is mailed in the United States.*

By Order of the Luna Board of Directors,

My E. Chung

President and Chief Executive Officer

Roanoke, Virginia

, 2015

LUNA S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR PROPOSALS 1, 2, 3, 4 and 5.

Important Notice Regarding the Availability of Proxy Materials for the Meeting of Stockholders to be held on May 8, 2015: This Joint Proxy Statement/Prospectus is available at www.proxyvote.com.

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ADVANCED PHOTONIX, INC.

2925 Boardwalk Drive

Ann Arbor, MI 48104

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

To Be Held On May 8, 2015

Dear Advanced Photonix, Inc. Stockholders:

You are cordially invited to attend a special meeting of the stockholders of Advanced Photonix, Inc., a Delaware corporation (API). The meeting will be held at API s corporate headquarters located at 2925 Boardwalk Drive, Ann Arbor, MI 48104 on May 8, 2015 at 9:00 a.m. local time for the following purposes:

1. To consider and vote upon a proposal to adopt the Agreement and Plan of Merger and Reorganization, dated January 30, 2015, by and among API, Luna Innovations Incorporated, a Delaware corporation (Luna), and API Merger Sub, Inc., a wholly owned subsidiary of Luna, as amended from time to time, and approve the transactions contemplated thereby;

2. To consider and vote upon an adjournment of the API special meeting from time to time, if necessary or appropriate (as determined by API), to solicit additional proxies if there are not sufficient votes in favor of the adoption and approval of the foregoing Proposal No. 1; and

3. To transact such other business as may be properly brought before the special meeting, or any adjournment or postponement thereof, by or at the direction of the board of directors of API.

These proposals are more fully described in the accompanying joint proxy statement/prospectus, which API urges you to read very carefully. API has included a copy of the Agreement and Plan of Merger and Reorganization as Annex A to the accompanying joint proxy statement/prospectus. Only API stockholders of record at the close of business on March 23, 2015, the record date for the API special meeting, are entitled to notice of and to vote at the API special meeting or any adjournment or postponement of the API special meeting. At the close of business on March 23, 2015, API had 37,381,413 shares of common stock outstanding and entitled to vote. A list of API stockholders entitled to vote at the API special meeting will be available for inspection at API s principal executive offices in Ann Arbor, Michigan at least 10 days before the date of the special meeting.

The board of directors of API has determined that the Agreement and Plan of Merger and Reorganization, sometimes referred to as the Merger Agreement, and the Merger are advisable and fair to, and in the best interests of, API and its

stockholders and recommends that the API stockholders vote in favor of the adoption of the Merger Agreement.

The board of directors of API unanimously recommends that you vote FOR Proposal No. 1 to adopt the Merger Agreement and approve the transactions contemplated thereby and FOR Proposal No. 2 for an adjournment of the API special meeting from time to time, if necessary or appropriate (as determined by API), to solicit additional proxies if there are not sufficient votes in favor of the adoption and approval of the foregoing Proposal No. 1.

Even if you plan to attend the API special meeting in person, API requests that you sign and return the enclosed API proxy card, or submit your proxy by telephone or over the internet as instructed in these materials, to ensure that your API shares will be represented at the API special meeting if you are unable to attend.

By Order of the API Board of Directors,

Richard D. Kurtz

President and Chief Executive Officer

Ann Arbor, MI

, 2015

PLEASE DO NOT SEND IN ANY API STOCK CERTIFICATES AT THIS TIME; FURTHER DOCUMENTATION FOR SUCH PURPOSE WILL BE SENT TO API STOCKHOLDERS AFTER APPROVAL AND COMPLETION OF THE MERGER.

Important Notice Regarding the Availability of Proxy Materials for the Special Meeting of Stockholders to be held on May 8, 2015: This Joint Proxy Statement/Prospectus is available at http://www.cstproxy.com/advancedphotonix/sm2015

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REFERENCE TO ADDITIONAL INFORMATION

This joint proxy statement/prospectus incorporates important business and financial information about Luna and API from documents that are not included in or delivered with this joint proxy statement/prospectus. You can obtain such documents by requesting them in writing or by telephone from Luna or API, as the case may be, at the following addresses:

Luna Innovations Incorporated
One Riverside Circle, Suite 400
Roanoke, VA 24016
Tel: (540) 769-8400
ir@lunainc.com

Advanced Photonix, Inc.
2925 Boardwalk Drive
Ann Arbor, MI 48104
Tel: (734) 864-5647
Rkurtz@advancedphotonix.com

You will not be charged for any documents that you request. If you would like to request documents, please do so at least ten days before the meeting. See the section entitled Where You Can Find More Information for a detailed description of how to find additional documents related to this joint proxy statement/prospectus.

To ensure timely delivery of additional documents, you must request the information no later than five business days before the date of the special meeting for API or annual meeting for Luna. The last date to make a request is May 1, 2015.

ABOUT THIS DOCUMENT

This joint proxy statement/prospectus forms a part of a registration statement on Form S-4 (Registration No. 333-201956), filed by Luna Innovations Incorporated with the U.S. Securities and Exchange Commission, and constitutes a prospectus of Luna under Section 5 of the Securities Act of 1933, as amended, and the rules thereunder, with respect to the shares of Luna common stock to be issued to securityholders of API in connection with the proposed Merger Agreement and the transactions contemplated thereby.

In addition, this joint proxy statement/prospectus constitutes:

- a notice of meeting with respect to the Luna annual meeting at which Luna s stockholders will consider and vote on certain proposals, including the proposal regarding the issuance of Luna common stock in connection with the Merger;

- a proxy statement under Section 14(a) of the Securities Exchange Act of 1934, as amended, and the rules thereunder, with respect to the Luna annual meeting;

- a notice of meeting with respect to the API special meeting at which API s stockholders will consider a proposal regarding adoption of the Merger Agreement; and

a proxy statement under Section 14(a) of the Securities Exchange Act of 1934, as amended, and the rules thereunder, with respect to the API special meeting.

NOTE REGARDING TRADEMARKS

This joint proxy statement/prospectus may also include trademarks and trade names owned by other parties, and all other such trademarks and trade names mentioned in this joint proxy statement/prospectus are the property of their respective owners.

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ANNEXES

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Annex B	Fairness Opinion of Mooreland Partners LLC
Annex C	Fairness Opinion of B. Riley & Co., LLC

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QUESTIONS AND ANSWERS ABOUT THE MERGER,

THE LUNA ANNUAL MEETING AND THE API SPECIAL MEETING

The following section provides answers to certain frequently asked questions about the proposed acquisition and the annual meeting of the stockholders of Luna and the special meeting of the stockholders of API. Please note that this section may not address all issues that may be important to you as a Luna or API stockholder. To better understand these matters, and for a description of the legal terms governing the proposed transaction, Luna and API urge you to read carefully and in its entirety this joint proxy statement/prospectus, including the Annexes to this joint proxy statement/prospectus. See Where You Can Find More Information beginning on page 250.

Q. Why am I receiving this joint proxy statement/prospectus?

A. You are receiving this joint proxy statement/prospectus because you are a stockholder of either Luna or API as of the respective record date of each respective company s annual meeting or special meeting of its stockholders. This joint proxy statement/prospectus is being used by the boards of directors of each of Luna and API to solicit proxies for the annual meeting of Luna and special meeting of API. This joint proxy statement/prospectus also serves as the prospectus for shares of Luna common stock to be issued in exchange for shares of API common stock in connection with the Merger.

Q. What is the purpose of this document?

A. This joint proxy statement/prospectus contains important information about the Merger, the Agreement and Plan of Merger and Reorganization, as amended from time to time (the Merger Agreement), the Luna annual meeting and the API special meeting, which you should read carefully before submitting your proxy or voting. The enclosed voting materials allow you to cause your shares of Luna common stock or API common stock, as the case may be, to be voted, without attending the annual meeting of Luna or special meeting of API.

About the Merger

Q. What is the Merger?

A. The proposed merger is a transaction that will result in the combination of the businesses of Luna and API, whereby API will become a wholly owned subsidiary of Luna.

In exchange for shares of API Class A common stock, par value $0.001, API s only class of common stock outstanding (API common stock), the securityholders of API will receive shares of Luna common stock.

Q. What if the Merger is not completed?

A. It is possible that the Merger and the other transactions contemplated by the Merger Agreement will not be completed. This might happen if, for example, Luna s stockholders do not approve the issuance of the Luna shares in connection with the Merger, or if API s stockholders do not adopt the Merger Agreement. Should that occur, neither Luna nor API will be under any obligation to make or consider any alternative proposal regarding the combination of Luna and API. In certain circumstances, however, Luna or API may be obligated to pay the other party a termination fee or reimburse the other party for certain expenses, as further described in the section entitled The Merger Agreement Termination Fee in this joint proxy statement/prospectus.

Q. Why are Luna and API proposing the Merger?

A. After reviewing strategic alternatives to address the opportunities and challenges facing the companies, the boards of both API and Luna reached the same conclusion this Merger represents the best strategic alternative for both respective companies. Specifically, Luna and API believe the Merger will provide

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certain strategic and financial benefits, including the following: a reduction in costs and other synergies; an increase in product development capabilities; greater depth of relationships with customers and a broader portfolio of complementary products; and enhanced opportunities for growth and innovation.

Q. What vote is required by the Luna stockholders to consummate the Merger?

A. To consummate the Merger, Luna stockholders must approve the issuance of shares of Luna common stock. The approval of such issuance requires the affirmative vote of a majority of the shares of Luna common stock present in person or represented by proxy and entitled to vote on the matter at the Luna annual meeting.

Q. What vote is required by the API stockholders to consummate the Merger?

A. To consummate the Merger, API stockholders must adopt the Merger Agreement and approve the Merger, which requires the affirmative vote of the holders of a majority of the outstanding API common stock as of the record date for the API special meeting.

Q. As an API stockholder, what will I receive in the Merger?

A. If the Merger is completed, API stockholders will receive 0.31782 shares of Luna common stock for each share of API common stock as the Merger consideration, except with respect to cash received in lieu of fractional shares of Luna common stock. The ratio of API shares per share of Luna common stock is referred to as the Exchange Ratio. At the effective time of the Merger (the Effective Time), each option to purchase shares of API common stock outstanding and unexercised immediately prior to the Effective Time, whether or not vested, shall be converted at the Exchange Ratio (as defined in the Merger Agreement) and become an option to purchase Luna common stock, and Luna shall assume such API option in accordance with the terms of the applicable API option plan and the terms of the stock option agreement by which such API option is evidenced. Each share of API restricted common stock will be converted at the Effective Time into Luna restricted common stock (based on the Exchange Ratio). At the Effective Time, except for the warrants held by Silicon Valley Bank, Partners for Growth III, L.P., and PFG Equity Investors, LLC, the terms of which provide that the warrants may be exchanged, at the option of the holder, for a cash sum payment from the combined company after the Merger not to exceed $250,000 in the aggregate, each warrant to acquire API common stock outstanding immediately prior to the Effective Time (API Warrants) will be assumed or substituted by Luna in accordance with the terms of such warrant, and will therefore become a warrant to purchase the number of shares of Luna common stock, with appropriate adjustments made to the exercise price, number of shares and other terms of the warrants to reflect the Merger and the Exchange Ratio.

Q. What are the Voting Agreements and who are the parties to these agreements?

A. The members of API s board of directors and members of its management team and their respective affiliates have entered into Voting Agreements with Luna. Each party signing one of these agreements has agreed (solely in his

capacity as an API stockholder), among other things, to vote all of his shares of API common stock in favor of the adoption of the Merger Agreement and approval of the transactions contemplated thereby and against any other action or agreement that is intended, or could reasonably be expected to, impede, interfere with, delay, postpone, or materially adversely affect the Merger or any of the other transactions contemplated by the Merger Agreement. These Voting Agreements also grant My E. Chung, Luna s president and chief executive officer, and Luna an irrevocable proxy to vote the API shares subject to the agreements in accordance with the terms of the agreements. As of March 23, 2015, API stockholders owning in the aggregate 4,022,152 shares of API common stock, representing approximately 10.8% of the outstanding API common stock as of March 23, 2015, had entered into these Voting Agreements.

In addition, certain stockholders of Luna have entered into Voting Agreements with API. Under the terms of these agreements, each party signing one of these agreements has agreed that (solely in his capacity as a

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Luna stockholder), among other things, to vote all of his shares of Luna common stock in favor of the issuance of Luna common stock to be issued under the terms of the Merger Agreement and against any other action or agreement that is intended, or could reasonably be expected to, impede, interfere with, delay, postpone, or materially adversely affect the Merger or any of the other transactions contemplated by the Merger Agreement. These Voting Agreements also grant Donald Pastor, API s chairman of the board of directors, and API an irrevocable proxy to vote the Luna shares subject to the agreements in accordance with the terms of the agreements. As of March 23, 2015, existing Luna stockholders owning in the aggregate 992,783 shares of Luna common stock, representing approximately 6.6% of the Luna common stock, had entered into these Voting Agreements.

For a more complete description of the Voting Agreements, see the sections entitled Certain Agreements Related to the Merger Luna Voting Agreements and Certain Agreements Related to the Merger API Voting Agreements in this joint proxy statement/prospectus.

Q. Are there other conditions that need to be satisfied to consummate the Merger?

A. In addition to the requirement of obtaining stockholder approval of Luna and API, each of the other closing conditions set forth in the Merger Agreement must be satisfied or waived by the appropriate party. For a summary of the conditions that need to be satisfied to consummate the Merger, see the section entitled The Merger Agreement Conditions to the Merger in this joint proxy statement/prospectus.

Q. Will the number of shares of Luna common stock issuable to API common stockholders in connection with the Merger be subject to adjustment if either Luna s or API s stock price fluctuates?

A. No. The number of shares of Luna common stock to be issued in connection with the Merger for each share of API common stock is fixed.

Q. Will Luna common stock issued in connection with the Merger be registered and listed on an exchange?

A. Yes. The Luna common stock to be issued in connection with the Merger will be registered under the Securities Act of 1933, as amended, and will be listed on the NASDAQ Capital Market under the symbol LUNA.

Q. Will there be any transfer restrictions affecting the shares of Luna common stock issuable to API stockholders in connection with the Merger?

A. No, unless you are an affiliate of Luna, as defined in the federal securities laws, in which case, your resale of shares of Luna Stock will be subject to certain resale limitations under Rule 144 under the Securities Act. Additionally, if you are employed by Luna or its subsidiaries after the Merger your shares will be subject to Luna s insider trading policies.

Q. What will happen to the API options?

A. Each option to purchase shares of API common stock outstanding and unexercised immediately prior to the Merger will be converted into and become an option to purchase Luna common stock, determined in accordance with the terms set forth in the Merger Agreement. For more information regarding the treatment of the API options, see the section entitled The Merger Agreement Merger Consideration in this joint proxy statement/prospectus.

Q. What will happen to the API restricted common stock?

A. Each share of API restricted common stock outstanding immediately prior to the Effective Time shall be converted at the Exchange Ratio and become Luna restricted common stock, determined in accordance with

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the terms set forth in the Merger Agreement. For more information regarding the treatment of the API restricted common stock, see the section entitled The Merger Agreement Merger Consideration in this joint proxy statement/prospectus.

Q. What will happen to the API Warrants?

A. Except for the warrants held by Silicon Valley Bank, Partners for Growth III, L.P., and PFG Equity Investors, LLC, the terms of which provide that the warrants may be exchanged, at the option of the holder, for a cash sum payment from the combined company after the Merger not to exceed $250,000 in the aggregate, each API Warrant outstanding and not exercised immediately prior to the Merger will be converted into a warrant to purchase the number of shares of Luna common stock calculated according to the exchange ratio set out in the Merger Agreement. For more information regarding the treatment of the API Warrants and the exchange ratio, see the section entitled The Merger Agreement Merger Consideration in this joint proxy statement/prospectus.

Q. Will there be any change to the shares of Luna common stock held by Luna stockholders?

A. No. The Merger does not result in any changes to the existing shares of Luna common stock. The current stockholders of Luna will continue to be stockholders of Luna after the Merger.

Q. Who will be the directors of Luna following the Merger?

A. Immediately following the Effective Time, the board of directors of Luna will be composed of the following members:

Name	**Position and Director Term Expiration**
Donald Pastor	Class III Director (term to expire at 2018 annual meeting)
My E. Chung	Class III Director (term to expire at 2018 annual meeting)
Richard W. Roedel	Chairman of the Board/Class I Director (term to expire at 2016 annual meeting)
Ed J. Coringrato Jr.	Class I Director (term to expire at 2016 annual meeting)
Michael M. Wise	Class II Director (term to expire at 2017 annual meeting)
John B. Williamson, III	Class II Director (term to expire at 2017 annual meeting)
Gary Spiegel	Class II Director (term to expire at 2017 annual meeting)

Q. Who will be the executive officers of Luna immediately following the Merger?

A. Immediately following the Effective Time, the executive officers of Luna are expected to be composed of the following members:

Name	Position
My E. Chung	President and CEO
Scott A. Graeff	Treasurer and Chief Strategy Officer
Talfourd H. Kemper, Jr.	Vice President and General Counsel
Dale E. Messick	Chief Financial Officer

Q. What are the material U.S. federal income tax consequences of the Merger to API stockholders?

A. The Merger is intended to qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986, as amended, or the Code and it is a condition to the completion of the Merger that Luna and API each receive written opinions from their respective outside legal counsel regarding such

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qualification. Assuming the Merger qualifies as a reorganization, API stockholders will not recognize gain or loss for U.S. federal income tax purposes upon the exchange of their shares of API common stock for shares of Luna common stock in connection with the Merger, except with respect to cash received in lieu of fractional shares of Luna common stock.

Tax matters are very complicated, and the tax consequences of the Merger to a particular stockholder will depend on such stockholder s circumstances. Accordingly, Luna and API urge you to consult your tax advisor for a full understanding of the tax consequences of the Merger to you, including the applicability and effect of federal, state, local and foreign income and other tax laws. For a more complete discussion of the material U.S. federal income tax consequences of the Merger, see the section entitled Material U.S. Federal Income Tax Consequences of the Merger beginning on page 112.

Q. What are the material U.S. federal income tax consequences of the Merger to Luna stockholders?

A. Luna stockholders will not recognize a gain or loss as a result of the Merger.

Q. Do API stockholders or Luna stockholders have appraisal rights in connection with the Merger?

A. No. Neither API stockholders nor Luna stockholders have appraisal rights in connection with the Merger.

Q: What Luna proposals will be voted on at the Luna annual meeting in connection with the Merger?

A: Pursuant to the terms of the Merger Agreement, the following Luna proposals must be approved by the requisite stockholder vote:

Proposal No. 1 to consider and vote upon a proposal to approve the issuance of shares of Luna common stock to securityholders of API, in connection with the Merger contemplated by the Merger Agreement, pursuant to which API will become a wholly owned subsidiary of Luna through the Merger; and

Proposal No. 2 to consider and vote upon an adjournment of the Luna annual meeting from time to time, if necessary or appropriate (as determined by Luna), to solicit additional proxies if there are not sufficient votes to approve the proposal described immediately above.

Proposal No. 1 and No. 2 are collectively referred to as the Luna Merger Proposals. Only holders of record of shares of Luna common stock at the close of business on the record date are entitled to notice of, and to vote at, the annual meeting. At the close of business on the record date, Luna had 15,095,017 shares of common stock outstanding and entitled to vote.

Q: What proposals are to be voted on at the Luna annual meeting, other than the Luna Merger Proposals required in connection with the Merger?

A: Proposal No. 3 to elect My E. Chung and Neil D. Wilkin, Jr., as Class III members of the board of directors, to serve until Luna s 2018 annual meeting of stockholders and until their successors are duly elected and qualified; provided, however, that, if the Merger is completed, the board of directors of Luna will be reconstituted as described in this joint proxy statement/prospectus;

Proposal No. 4 to approve, on a non-binding, advisory basis, the compensation of Luna s named executive officers, as disclosed in this joint proxy statement/prospectus; and

Proposal No. 5 to ratify the selection, by the Audit Committee of Luna s board of directors, of Grant Thornton LLP as Luna s independent registered public accounting firm for the fiscal year ending December 31, 2015.

The approval of Proposals No. 3, No. 4, and No. 5 are not conditions to the Merger.

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Q. As a Luna stockholder, how does the Luna board of directors recommend that I vote?

A. The Luna board of directors recommends that Luna stockholders vote:
FOR Proposal No. 1 to approve the issuance of the shares of Luna common stock in connection with the Merger;

FOR Proposal No. 2 to adjourn the Luna annual meeting from time to time, if necessary or appropriate (as determined by Luna), to solicit additional proxies if there are not sufficient votes to approve Proposal No. 1;

FOR Proposal No. 3 to elect My E. Chung and Neil D. Wilkin, Jr., as Class III members of the board of directors, to serve until Luna s 2018 annual meeting of stockholders and until their successors are duly elected and qualified; provided, however, that, if the Merger is completed, the board of directors of Luna will be reconstituted as described in this joint proxy statement/prospectus;

FOR Proposal No. 4 to approve, on a non-binding, advisory basis, the compensation of Luna s named executive officers, as disclosed in this joint proxy statement/prospectus; and

FOR Proposal No. 5 to ratify the selection, by the Audit Committee of Luna s board of directors, of Grant Thornton LLP as Luna s independent registered public accounting firm for the fiscal year ending December 31, 2015.

Q. As an API stockholder, how does the API board of directors recommend that I vote?

A. The API board of directors recommends that API stockholders vote:
FOR Proposal No. 1 to adopt the Merger Agreement and approve the transactions contemplated thereby; and

FOR Proposal No. 2 to adjourn the API special meeting from time to time, if necessary or appropriate (as determined by API), to solicit additional proxies if there are not sufficient votes to adopt and approve Proposal No. 1.

Q. What risks should I consider in deciding how to vote?

A. You should carefully read this entire joint proxy statement/prospectus, including each of the annexes, and pay specific attention to the section entitled Risk Factors, which sets forth certain risks and uncertainties related to the Merger and the businesses of Luna and API.

Q. When do you expect the Merger to be consummated?

A. Luna and API cannot predict the exact timing of the completion of the Merger and the related transactions. It is currently anticipated that the Merger will occur as soon as reasonably practicable after the satisfaction or waiver by the appropriate party of each of the closing conditions set forth in the Merger Agreement. One of the closing conditions is that the required approvals are obtained at the Luna annual meeting to be held on May 8, 2015 and

the API special meeting to be held on May 8, 2015. For more information regarding timing, see the section entitled The Merger Agreement Conditions to the Merger in this joint proxy statement/prospectus.

Q. What do Luna and API stockholders need to do now?

A. After carefully reading and considering the information contained in this joint proxy statement/prospectus, please mail your signed proxy card in the enclosed return envelope as soon as possible so that your shares may be represented at the API special meeting or Luna annual meeting. Alternatively, you may submit your proxy by telephone or over the internet as instructed by your broker or bank. You may also attend the API special meeting or Luna annual meeting and vote in person.

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If you are an API stockholder and your shares are held in street name by your broker or bank, your broker or bank will vote your shares only if you provide instructions on how to vote. You should follow the directions provided by your broker or bank regarding how to instruct your broker or bank to vote your shares.

If you are a Luna stockholder and your shares are held in street name by your broker or bank, and you do not instruct your broker, bank, or other agent how to vote your shares, your broker or bank may not vote your shares on Proposals No. 1, No. 3 or No. 4, but may vote your shares on Proposals No. 2 and No. 5. Please see the section labeled Required Vote for Approval of Proposals at Luna Annual Meeting; Broker Non-Votes; Abstentions on page 239 for more information. You should follow the directions provided by your broker or bank regarding how to instruct your broker or bank to vote your shares.

Q. What if I do not vote or do not fully complete my proxy card?

A. It is very important for you to vote.
If you are a Luna stockholder of record and you do not submit a proxy and you do not attend the annual meeting in person, there will be no effect on the determination of whether the proposals have received the affirmative vote of a majority of the shares of common stock present or represented by proxy and entitled to vote on the matter at the meeting. If you submit a signed proxy without specifying the manner in which you would like your shares to be voted, your shares will be voted FOR the proposals. However, if your shares are held in street name and you do not instruct your broker how to vote your shares, your broker will not vote your shares (other than on Proposals No. 2 and No. 5), such failure to vote being referred to as a broker non-vote, in which case your shares will be counted for purposes of determining the presence or absence of a quorum for the approval of the proposals, but will have no effect on the outcome of the vote on Proposals No. 1, No. 3 and No. 4. If you submit a proxy card or provide proxy instructions by telephone or over the internet and affirmatively elect to abstain from voting, your proxy will be counted as present for the purpose of determining the presence of a quorum for the Luna annual meeting, but will not be voted at the Luna annual meeting. As a result, your abstention will have the same effect as voting AGAINST Proposals No. 1, No. 2, No. 4 and No. 5. Please follow the directions provided by your broker regarding how to instruct your broker to vote your shares in order to ensure that your shares will be voted at the annual meeting.

If you are an API stockholder of record and you do not submit a proxy, and you do not vote in person at the special meeting, the effect will be the same as if you voted AGAINST the adoption of the Merger Agreement. If you submit a signed proxy without specifying the manner in which you would like your shares to be voted, your shares will be voted FOR the adoption of the Merger Agreement. If your API shares are held in street name and you do not instruct your broker how to vote your shares, your broker will not vote your shares, such failure to vote being referred to as a broker non-vote, which will have the same effect as voting AGAINST the proposal to adopt the Merger Agreement. If you submit a proxy card or provide proxy instructions by telephone or over the internet and affirmatively elect to abstain from voting, your proxy will be counted as present for the purpose of determining the presence of a quorum for the API special meeting, but will not be voted at the API special meeting. As a result, your abstention will

have the same effect as voting AGAINST the proposals. Please follow the directions provided by your broker regarding how to instruct your broker to vote your shares in order to ensure that your shares will be voted at the special meeting.

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About the Luna annual meeting and the API special meeting

Q. When and where is the Luna annual meeting of stockholders?

A. The Luna annual meeting will be held at the Roanoke Higher Education Center, 108 N. Jefferson Street, Roanoke, Virginia 24016 at 9:00 a.m., local time on May 8, 2015. All Luna stockholders as of the record date, or their duly appointed proxies, may attend the Luna annual meeting.

Q. When and where is the API special meeting of stockholders?

A. The API special meeting will be held at API s corporate headquarters located at 2925 Boardwalk Drive, Ann Arbor, Michigan 48104, at 9:00 a.m., local time, on May 8, 2015. All API stockholders as of the record date, or their duly appointed proxies, may attend the API special meeting.

Q. Do I need to attend the API special meeting or Luna annual meeting in person?

A. No. It is not necessary for you to attend the API special meeting or Luna annual meeting to vote your shares if Luna or API, as applicable, has previously received your proxy, although you are welcome to attend.

Q. Who can attend and vote at the Luna annual meeting of stockholders?

A. Only holders of record of Luna common stock at the close of business on March 23, 2015 (the Luna record date), are entitled to notice of, and to vote at, the Luna annual meeting. As of the Luna record date, there were 15,095,017 shares of Luna common stock outstanding and entitled to vote at the Luna annual meeting, held by approximately 74 holders of record. Each holder of Luna common stock is entitled to one vote for each share of Luna common stock owned as of the Luna record date.

Q. Who can attend and vote at the API special meeting of stockholders?

A. Only holders of record of API common stock at the close of business on March 23, 2015 (the API record date), are entitled to notice of and to vote at the API special meeting. As of the API record date, there were 37,381,413 shares of API common stock outstanding and entitled to vote at the API special meeting, held by approximately 103 holders of record. Each holder of API common stock is entitled to one vote for each share of API stock owned as of the API record date.

Q. What happens if I do not return a proxy card or vote my shares in person?

A. If you are a Luna stockholder, the failure to return your proxy card or vote your shares in person will result in your shares not being counted for purposes of determining whether a quorum is present at the Luna annual meeting. In the event that a quorum is not reached or the necessary votes are not received, the Luna annual meeting may be adjourned to provide more time to obtain a quorum or the necessary votes.

If you are an API stockholder, if you fail to return your proxy or vote your shares in person, the effect will be the same as if you voted AGAINST the adoption of the Merger Agreement and your shares will not be counted for purposes of determining whether a quorum is present at the API special meeting. In the event that a quorum is not reached or the necessary votes are not received, the API special meeting may be adjourned to provide more time to obtain a quorum or the necessary votes.

Q. May I vote in person at the Luna annual meeting of stockholders?

A. If your shares of Luna common stock are registered directly in your name with the Luna transfer agent, American Stock Transfer & Trust Company, then you are considered to be the stockholder of record with respect to those shares, and the proxy materials and Luna proxy card are being sent directly to you by Luna.

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If you are a Luna stockholder of record, you may attend the Luna annual meeting and vote your shares in person. However, even if you plan to attend the Luna annual meeting in person, Luna requests that you sign and return the enclosed Luna proxy card to vote your shares. If your shares of Luna common stock are held in a brokerage account or by another nominee, then you are considered the beneficial owner of shares held in street name, and the proxy materials are being forwarded to you by your broker or other nominee together with a voting instruction card to return to your broker or other nominee to direct them to vote on your behalf. As the beneficial owner, you are also invited to attend the Luna annual meeting. Because a beneficial owner is not the stockholder of record, you may not vote these shares in person at the Luna annual meeting unless you obtain a proxy from the broker, trustee or nominee that holds your shares, giving you the right to vote the shares at the meeting.

Q. May I vote in person at the API special meeting of stockholders?

A. If your shares of API common stock are registered directly in your name with the API transfer agent, Continental Stock Transfer & Trust Company, then you are considered to be the stockholder of record with respect to those shares, and the proxy materials and API proxy are being sent directly to you by API. If you are an API stockholder of record, you may attend the API special meeting and vote your shares in person. However, even if you plan to attend the API special meeting in person, API requests that you sign and return the enclosed proxy to ensure that your shares will be represented at the API special meeting. If your shares of API common stock are held in a brokerage account or by another nominee, then you are considered the beneficial owner of shares held in street name, and the proxy materials are being forwarded to you by your broker or other nominee together with a voting instruction card to return to your broker or other nominee to direct them to vote on your behalf. As the beneficial owner, you are also invited to attend the API special meeting. Because a beneficial owner is not the stockholder of record, you may not vote these shares in person at the API special meeting unless you obtain a proxy from the broker, trustee or nominee that holds your shares, giving you the right to vote the shares at the meeting.

Q. If I am a Luna or API stockholder, may I submit my proxy via phone or the internet?

A. Instead of voting in person or submitting a proxy by mail, you may submit a proxy by telephone or over the internet. In order to submit a proxy by telephone or over the internet, please have the enclosed proxy card available for reference, and call the number or visit the website listed on the proxy card and follow the instructions. You will be asked to provide the company number and control number from the enclosed proxy card. Your proxy must be received by 7:00 p.m., Eastern Time on May 7, 2015 to ensure that it will be counted. The telephone and internet voting procedures are designed to authenticate stockholders identities, to allow stockholders to give their voting instructions and to confirm that stockholders instructions have been recorded properly.

Q. If my shares are held in street name by my broker, will my broker vote my shares for me?

A. Unless your broker has discretionary authority to vote on certain matters, your broker will not be able to vote your shares of Luna or API stock without instructions from you. Brokers are not expected to have discretionary authority to vote for the API proposals and are only expected to have discretionary authority to vote for Proposal

No. 5 of the Luna proposals. Therefore, in order to make sure that your vote is counted, you should instruct your broker to vote your shares following the procedures provided by your broker.

Q. May I change my vote after I have submitted a proxy or provided proxy instructions?

A. Yes. You may change your vote at any time before the vote takes place at the API special meeting or Luna annual meeting. To change your vote, you may (1) submit new proxy instructions either on a new proxy card, by telephone or over the internet, as and if applicable, or (2) send a signed written notice bearing a date later than the date of the proxy to the Secretary of Luna or President of API, as applicable, stating that you

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would like to revoke your proxy. You may also change your vote by attending the API special meeting or the Luna annual meeting and voting in person, although your attendance alone will not revoke your proxy. However, if you elect to vote in person at the API special meeting or Luna annual meeting and your shares are held by a broker, bank or other nominee, you must bring to the meeting a legal proxy from the broker, bank or other nominee authorizing you to vote the shares.

Q. What should a Luna stockholder do if he or she receives more than one set of voting materials?

A. As a Luna stockholder, you may receive more than one set of voting materials, including multiple copies of this joint proxy statement/prospectus and multiple Luna proxy cards or voting instruction cards. For example, if you hold your Luna shares in more than one brokerage account, you will receive a separate voting instruction card for each brokerage account in which you hold Luna shares. If you are a holder of record and your Luna shares are registered in more than one name, you will receive more than one proxy card. In addition, if you are a holder of both Luna common stock and API common stock, you will receive one or more separate proxy cards or voting instruction cards for each company.

Please complete, sign, date and return each proxy card and voting instruction card that you receive or otherwise follow the voting instructions set forth in this joint proxy statement/prospectus in the section entitled The Luna Innovations Incorporated Annual Meeting of Stockholders.

Q. What should an API stockholder do if he or she receives more than one set of voting materials?

A. As an API stockholder, you may receive more than one set of voting materials, including multiple copies of this joint proxy statement/prospectus and multiple proxy cards or voting instruction cards. For example, if you hold your API shares in more than one brokerage account, you will receive a separate voting instruction card for each brokerage account in which you hold API shares. If you are a holder of record and your API shares are registered in more than one name, you will receive more than one proxy card. In addition, if you are a holder of both Luna common stock and API common stock, you will receive one or more separate proxy cards or voting instruction cards for each company.

Please complete, sign, date and return each proxy card and voting instruction card that you receive or otherwise follow the voting instructions set forth in this joint proxy statement/prospectus in the section entitled The Advanced Photonix, Inc. Special Meeting of Stockholders.

Q. Should API stockholders send in their API stock certificates now?

A. No. After the Merger is completed, API stockholders will be sent written instructions for exchanging their API stock certificates for Luna common stock. PLEASE DO NOT SEND IN YOUR API STOCK CERTIFICATES NOW OR WITH YOUR API PROXY CARD.

Q. Who can help answer my questions?

A. If you are a Luna stockholder and would like additional copies, without charge, of this joint proxy statement/prospectus, or if you have questions about the Merger, including the procedures for voting your shares, you should contact:

Luna Innovations Incorporated

Attn: Secretary

One Riverside Circle, Suite 400

Roanoke, Virginia 24016

Telephone: (540) 769-8400

Email: ir@lunainc.com

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If you are an API stockholder, and would like additional copies, without charge, of this joint proxy statement/prospectus, or if you have questions about the Merger, including the procedures for voting your shares, you should contact:

Advanced Photonix, Inc.

Attn: President

2925 Boardwalk

Ann Arbor, MI 48104

Telephone: (734) 864-5647

Email: Rkurtz@advancedphotonix.com

or

API s proxy solicitation agent

The Proxy Advisory Group, LLC®

18 East 41st Street, New York, NY 10017

Telephone: (888) 557-7699 or (888) 55-PROXY (toll free) or (212) 610-2181

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SUMMARY

This summary highlights selected information from this joint proxy statement/prospectus. It does not contain all of the information that may be important to you. Luna and API encourage you to carefully read this entire joint proxy statement/prospectus, including annexes, and the other documents to which this joint proxy statement/prospectus refers, to fully understand the Merger proposals to be considered at the Luna annual meeting and the API special meeting.

Information About Luna and API (see pages 130 and 156)

Luna Innovations Incorporated

Luna Innovations Incorporated

Attn: Secretary

One Riverside Circle, Suite 400

Roanoke, Virginia 24016

Telephone: (540) 769-8400

Email:ir@lunainc.com

Luna Innovations Incorporated (Luna) is incorporated in the State of Delaware and headquartered in Roanoke, Virginia. Luna develops, manufactures and markets fiber optic sensing, test and measurement products and is focused on bringing new and innovative technology solutions to measure, monitor, protect and improve critical processes in the aerospace, automotive, energy, composite, telecommunications and defense industries. Luna is organized into two main groups, which work closely together to turn ideas into products: Luna s Technology Development segment and Luna s Products and Licensing segment. Luna s business model is designed to accelerate the process of bringing new and innovative technologies to market.

Advanced Photonix, Inc.

Advanced Photonix, Inc.

Attn: President

2925 Boardwalk

Ann Arbor, MI 48104

Phone: (734) 864-5647

Email: Rkurtz@advancedphotonix.com

Advanced Photonix, Inc. (API) is incorporated in the State of Delaware and is headquartered in Ann Arbor, Michigan. API is a leading test and measurement company that packages optoelectronic semiconductors into high-speed optical

receivers (HSOR products), custom optoelectronic subsystems (Optosolutions products) and Terahertz instrumentation (THz products), serving the test and measurement, telecommunications, military/aerospace and medical markets. API supports its customers from the initial concept and design phase of the product, through testing to full-scale production. API has two manufacturing facilities located in Camarillo, California and Ann Arbor, Michigan.

API Merger Sub, Inc.

API Merger Sub, Inc. is a Delaware corporation wholly owned by Luna that was formed by Luna for the purpose of merging with and into API. It has conducted no other business.

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The Merger (see page 66)

Under the terms of the Merger Agreement, which has been unanimously approved by both boards of directors, API common stock will be converted into the right to receive Luna common stock at a fixed exchange ratio of 0.31782 shares of Luna common stock for each outstanding share of API common stock.

Upon closing, former holders of outstanding API common stock will own approximately 44%, and existing holders of outstanding Luna common stock will own approximately 56%, of the combined company. Upon attributing ownership to the former API stockholders of shares of common stock that may be issued upon exercise of the options or warrants to purchase Luna common stock issued as a result of the Merger, and attributing ownership of the shares of Luna common stock issuable upon execise of outstanding Luna options and restricted stock units (but excluding, for this purpose, the shares of Luna common stock issuable upon conversion of Luna s outstanding Series A convertible preferred stock and upon payment of accrued dividends thereon), existing Luna securityholders would own approximately 57% of the common stock of Luna on a fully diluted basis and the former API securityholders would own approximately 43% of the common stock of Luna on a fully diluted basis, before giving effect to the potential exercise of put rights by the holders of certain API warrants. Certain API stockholders have executed agreements obligating them to vote in favor of the adoption of the Merger Agreement and approval of the transactions contemplated thereby. Additionally, certain Luna stockholders have executed agreements obligating them to vote in favor of the issuance of Luna common stock to be issued under the terms of the Merger Agreement.

Recommendation of the Luna Board of Directors and its Reasons for the Merger (see page 74)

The Luna board of directors has approved the Merger Agreement and the Merger. The Luna board of directors has also determined that the Merger Agreement and the Merger are advisable and fair to, and in the best interests of, Luna and its stockholders. Accordingly, the Luna board of directors unanimously recommends that Luna stockholders vote FOR the proposal of the issuance of Luna common stock in the Merger pursuant to the terms of the Merger Agreement. In reaching these decisions, the Luna board of directors considered a number of factors. See the section entitled The Merger Recommendation of the Luna Board of Directors and its Reasons for the Merger.

Recommendation of the API Board of Directors and its Reasons for the Merger (see page 77)

The API board of directors has approved the Merger Agreement and the Merger. The API board of directors has also determined that the Merger Agreement and the Merger are advisable and fair to, and in the best interests of, API and its stockholders, and therefore recommends that API stockholders vote FOR the adoption of the Merger Agreement and the approval of the transactions contemplated thereby. In reaching these decisions, the API board of directors considered a number of factors. See the section entitled The Merger Recommendation of the API Board of Directors and its Reasons for the Merger.

Risk Factors (see page 21)

Luna and API are subject to numerous risks associated with their businesses and their industries. In addition, the Merger, including the possibility that the closing of the Merger may be delayed or not be completed at all, poses a number of unique risks to both Luna s and API s stockholders, including the following risks:

- API stockholders will receive a fixed ratio of 0.31782 shares of Luna common stock for each share of API common stock regardless of any changes in market value of API common stock or Luna common stock

before the closing of the Merger.

The issuance of shares of Luna common stock to API stockholders in the Merger will substantially reduce the ownership interests of Luna stockholders.

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Failure to successfully integrate the businesses of Luna and API in the expected time-frame may adversely affect the combined company s future results.

Provisions of the Merger Agreement may deter alternative business combinations and could negatively impact the stock prices of Luna and API if the Merger Agreement is terminated in certain circumstances.

Luna, API and, following the Merger, the combined company, must continue to retain, recruit, and motivate executives and other key employees, and failure to do so could negatively affect the combined company.

The unaudited pro forma condensed combined financial information included in this joint proxy statement/prospectus may not be indicative of what the combined company s actual financial position or results of operations would have been.

If the proposed Merger is not completed, Luna and API will have incurred substantial costs that may adversely affect Luna s and API s financial results and operations and the market price of Luna and API common stock.

Comparative Market Price Data and Dividend Information (see page 64)

The closing sale price per share of Luna common stock as reported on the NASDAQ Capital Market on January 30, 2015, the last full trading day prior to the public announcement of entry into the Merger Agreement was $1.68 per share, and the closing sale price per share of Luna common stock on , 2015 (the last practicable date before the printing of this joint proxy statement/prospectus) as reported on the NASDAQ Capital Market was $ per share. Following the consummation of the Merger, Luna s common stock, including the shares of Luna common stock issued in connection with the Merger, are expected to continue to trade on the NASDAQ Capital Market under the symbol LUNA.

Luna has never declared nor paid cash dividends on its common stock. Luna currently intends to retain earnings, if any, to finance the growth and development of its business, and does not expect to pay any cash dividends to its stockholders in the foreseeable future.

The closing sale price per share of API common stock as reported on the NYSE MKT on January 30, 2015 (trading symbol API), the last full trading day prior to the public announcement of entry into the Merger Agreement was $0.33, and the closing sale price per share of API common stock on , 2015 (the last practicable date before the printing of this joint proxy statement/prospectus) as reported on the NYSE MKT was $ per share. Following the closing of the Merger, API s common stock will be owned by Luna and will not trade. API has never declared nor paid cash dividends on its common stock.

For more information, see the section entitled Comparative Market Price Data and Dividend Information.

Opinion of Mooreland Partners LLC to the Board of Directors of Luna (see page 79 and Annex B)

In connection with the Merger, Luna s financial advisor, Mooreland Partners LLC, delivered a written fairness opinion to the Luna board of directors concerning the fairness, from a financial point of view, of the Exchange Ratio. The full text of Mooreland Partners LLC s written opinion, dated January 30, 2015, is attached to this joint proxy

statement/prospectus as Annex B. Luna encourages you to read this opinion carefully in its entirety for a description of the procedures followed, assumptions made, matters considered and limitations on the review undertaken. The opinion is addressed to Luna s board of directors and does not constitute a recommendation to any stockholder as to how such stockholder should vote or act on any matter relating to the Merger.

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Opinion of B. Riley & Co., LLC to the Board of Directors of API (see page 91 and Annex C)

In connection with the Merger, API s financial advisor, B. Riley & Co., LLC (B. Riley), delivered a written fairness opinion to the API board of directors concerning the fairness, from a financial point of view, of the Exchange Ratio being used in connection with the Merger, to API stockholders. The full text of B. Riley s written opinion, dated January 29, 2015, is attached to this joint proxy statement/prospectus as Annex C. API encourages you to read this opinion carefully in its entirety for a description of the procedures followed, assumptions made, matters considered and limitations on the review undertaken. The opinion is addressed to API s board of directors and does not constitute a recommendation to any stockholder as to how such stockholder should vote or act on any matter relating to the Merger.

Overview of the Merger Agreement (see page 115)

The Merger Agreement contains the terms and conditions of the proposed combination of the businesses of Luna and API.

Merger Consideration

At the Effective Time:

- each share of issued and outstanding API common stock will automatically be canceled and retired and cease to exist, and be converted into the right to receive 0.31782 shares of Luna common stock;

- each option to purchase shares of API common stock outstanding and unexercised immediately prior to the Effective Time, whether or not vested, shall be converted at the Exchange Ratio and become an option to purchase Luna common stock, and Luna shall assume such API option in accordance with the terms of the applicable API option plan and the terms of the stock option agreement by which such API option is evidenced;

- each share of API restricted common stock outstanding immediately prior to the Effective Time shall be converted at the Exchange Ratio and become Luna restricted common stock; and

- except for the warrants with Silicon Valley Bank, Partners for Growth III, L.P., and PFG Equity Investors, LLC, the terms of which provide that the warrants may be exchanged, at the option of the holder, for a cash sum payment from the combined company after the Merger not to exceed $250,000 in the aggregate, the API warrants outstanding immediately prior to the Effective Time will be assumed or substituted by Luna in accordance with the terms of such company warrant, and will therefore become a warrant to purchase the number of shares of Luna common stock, with appropriate adjustments made to the exercise price, number of shares and other terms of the options to reflect this Merger and the Exchange Ratio.

Immediately after the Merger, based on the Exchange Ratio, existing holders of Luna common stock will own approximately 56% of the outstanding common stock of the combined company with former API common stockholders holding approximately 44% of the common stock of the combined company.

For a more complete description of the Merger consideration, see the section entitled The Merger Agreement Merger Consideration in this joint proxy statement/prospectus.

The Merger consideration and Exchange Ratio will be appropriately and proportionately adjusted to reflect any stock dividend, subdivision, reclassification, recapitalization, split, combination, or exchange of shares with respect to Luna or API common stock between the date of the Merger Agreement and the Effective Time.

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Conditions to Completion of the Merger

In addition to the requirement of obtaining the approval of Luna and API stockholders, each of the other closing conditions set forth in the Merger Agreement must be satisfied or waived by the appropriate party. For a summary of the conditions that need to be satisfied to consummate the Merger, see the section entitled The Merger Agreement Conditions to the Merger in this joint proxy statement/prospectus.

Termination of the Merger Agreement

It is possible that the Merger and the other transactions contemplated by the Merger Agreement will not be completed. This might happen if, for example, Luna s stockholders do not approve the issuance of the Luna shares in connection with the Merger, or if API s stockholders do not adopt the Merger Agreement or if other conditions to the Merger are not satisfied. Should that occur, neither Luna nor API will be under any obligation to make or consider any alternative proposal regarding the combination of Luna and API. The Merger Agreement may also be terminated by either Luna or API in other circumstances, including if the Merger has not been consummated on or before August 31, 2015 and for specified breaches of representations and warranties. For a more complete discussion of the manners in which the Merger Agreement may terminate, see the section entitled The Merger Agreement Termination in this joint proxy statement/prospectus.

Termination Fee

If the Merger Agreement is terminated in certain specified circumstances, API must pay Luna, or Luna must pay API, as applicable, a termination fee of $750,000. In addition, if the Merger Agreement is terminated following a meeting of the stockholders of Luna or API at which the adoption of the Merger Agreement and approval of the transactions contemplated thereby, or the approval of the issuance of shares of Luna common stock as consideration in the Merger, is considered but not approved, then, under specified circumstances, Luna or API, as applicable, will be required to pay an amount up to $250,000 in reimbursement of the other party s out-of-pocket expenses incurred in connection with the transaction. For a more complete discussion of the termination fee, see the section entitled The Merger Agreement Termination Fee and The Merger Agreement Expenses in this joint proxy statement/prospectus.

Voting Agreements

As of the API record date, existing API common stockholders that owned in the aggregate 4,022,152 shares of API common stock, representing approximately 10.8% of the outstanding shares of API common stock, had entered into voting agreements with Luna (the API Voting Agreements). The API stockholders who are parties to these agreements have agreed, solely in their capacity as API stockholders, to vote all of their shares of API common stock in favor of the Merger and the adoption of the Merger Agreement, against any other API acquisition proposals and against any action or agreement that would reasonably be expected to result in a breach of the Merger Agreement by API. The stockholders also granted Luna a proxy to vote their respective shares of API common stock in accordance with the terms of the Voting Agreements. A copy of the form of API Voting Agreement in favor of Luna is attached as Exhibit A-1 in Annex A to this joint proxy statement/prospectus.

As of the Luna record date, existing Luna stockholders that owned in the aggregate 992,783 shares of Luna outstanding common stock, representing approximately 6.6% of the shares of Luna outstanding common stock had entered into voting agreements with API (the Luna Voting Agreements). The Luna stockholders who are parties to these agreements have agreed, solely in their capacity as Luna stockholders, to vote all of their shares of Luna common stock in favor of the issuance of the Luna common stock to be issued in connection with the Merger. The stockholders also granted API a proxy to vote their respective Luna common stock in accordance with the terms of the

Voting Agreements. A copy of the form of Luna Voting Agreement in favor of API is attached as Exhibit A-2 in Annex A to this joint proxy statement/prospectus.

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Interests of Directors, Executive Officers and Affiliates of API

In considering the recommendation of the API board of directors with respect to adopting the Merger Agreement and approving the transactions contemplated thereby, API stockholders should be aware that members of the API board of directors and each executive officer of API have interests in the Merger that may be different from, or in addition to, interests they may have as API stockholders. For example:

- in connection with the Merger, Luna will assume outstanding options to purchase shares of API common stock and warrants of API held by such directors and executive officers;
- under the terms of his employment agreement with API, API s president and chief executive officer, Richard D. Kurtz, is entitled to receive severance if his employment is terminated without cause, and it is expected that he will not be retained by the combined company following the Merger;
- upon completion of the Merger, Luna will assume the employment agreements between API and each of Robin Risser, API s chief operating officer, and Steven Williamson, API s chief technology officer, in accordance with their existing terms;
- API directors and officers will be indemnified by the combined company with respect to certain acts or omissions by them in their capacities as such prior to the Effective Time of the Merger; and
- under the terms of the Merger Agreement, one current API director, Donald Pastor, will be designated to serve on the board of the combined company after the Effective Time of the Merger. Upon joining the board of the combined company, he will cease to be entitled to receive any compensation from API but will receive compensation in accordance with Luna s existing non-employee director compensation policy.

These interests and arrangements may create potential conflicts of interest. The API board of directors was aware of these potential conflicts of interest and considered them, among other matters, in reaching its decision to adopt the Merger Agreement and approve the transactions contemplated by the Merger Agreement.

No API Golden Parachute Compensation

There are not any agreements or understandings, whether written or unwritten, between any of API s named executive officers and either API or Luna concerning any type of compensation, whether present, deferred or contingent, that is based on or otherwise relates to the Merger. The Merger will not constitute a change in control under the employment agreement of any of API s named executive officers or under API s 2007 Equity Incentive Plan, as amended. API has not entered into any new agreement or arrangement to provide additional compensation in connection with the Merger and no additional payments to API s named executive officers are expected to be made in connection with the Merger. Therefore, the advisory stockholder vote relating to golden parachute compensation otherwise required by Item 402(t) of Regulation S-K is not required with respect to API s named executive officers.

Interests of Directors, Executive Officers and Affiliates of Luna

In considering the recommendation of the Luna board of directors with respect to approving the issuance of shares of common stock in connection with the Merger, Luna stockholders should be aware that members of the Luna board of directors and each executive officer of Luna have interests in the Merger that may be different from, or in addition to, interests they may have as Luna stockholders. For example:

- the board of directors of the combined company will include four of the six current members of the Luna board of directors, and such directors, with the exception of Mr. Chung, will continue to be entitled to compensation in accordance with Luna s existing non-employee director compensation policy;

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Mr. Chung will continue to serve as President and Chief Executive Officer of the combined company following the Merger;

the remaining executive officers of Luna will continue to serve in their existing capacities with the combined company following the Merger; and

pursuant to Luna s 2014 senior management incentive plan, Luna s executive officers will be entitled to bonuses upon the completion of the Merger based on the determination that the completion of the Merger meets the specified corporate objective to complete a strategic transaction.

These interests and arrangements may create potential conflicts of interest. The Luna board of directors was aware of these potential conflicts of interest and considered them, among other matters, in reaching its decision to approve the Merger Agreement and the transactions contemplated by the Merger Agreement.

Ownership of Luna Following the Merger

After the Merger, API will be a wholly owned subsidiary of Luna and API stockholders will no longer have any direct interest in API. Existing API common stockholders will own approximately 44% of Luna s outstanding common stock after the Merger, and existing Luna common stockholders will own approximately 56% of the outstanding shares of Luna common stock after the Merger. For a more complete discussion of ownership of Luna after the Merger, see the section entitled Principal Stockholders of the Combined Company.

Material U.S. Federal Income Tax Consequences of the Merger (see page 112)

The Merger is intended to qualify as a reorganization within the meaning of Section 368(a) of the Code and the Merger Agreement will qualify as a plan of reorganization within the meaning of Sections 1.368-2(g) and 1.368-3(a) of the United States Treasury Regulations and it is a condition of the completion of the Merger that Luna and API each receive written opinions from their respective outside legal counsel regarding such qualification. Accordingly, holders of API common stock generally will not recognize any gain or loss for U.S. federal income tax purposes on the exchange of their API common stock for Luna common stock in the Merger, except with respect to cash received in lieu of fractional shares of Luna common stock.

Tax matters are complicated and the tax consequences to API stockholders of the Merger will depend on each such holder s particular tax situation. In addition, API stockholders may be subject to state, local or foreign tax laws that are not discussed in this joint proxy statement/prospectus. Each API stockholder should consult his or her own tax advisor to fully understand the tax consequences of the Merger.

Regulatory Approvals (see page 110)

Luna must comply with applicable federal and state securities laws and the rules and regulations of the NASDAQ Capital Market in connection with the issuance of shares of Luna common stock to purchase shares of Luna common stock, and the filing of this joint proxy statement/prospectus with the SEC.

NASDAQ Capital Market Listing (see page 110)

Prior to consummation of the Merger, Luna intends to cause all shares of Luna common stock to be issued in connection with the Merger to be approved for listing (subject to notice of issuance) on the NASDAQ Capital Market

as of the Effective Time, including filing any required additional listing applications or notices.

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Anticipated Accounting Treatment (see page 110)

Luna will account for the acquisition of API as a purchase of a business, which means that the assets and liabilities of API will be recorded at their fair values and the results of operations of API will be included in Luna s results from and after the Effective Time, in accordance with Accounting Standards Codification Topic 805, Business Combinations.

Management of Combined Company Following the Merger (see page 189)

Luna currently anticipates that four current directors of Luna (Richard W. Roedel, My E. Chung, Michael M. Wise and John B. Williamson, III), the chairman of the board of directors of API, Donald Pastor, and two directors designated by API, Ed J. Coringrato Jr. and Gary Spiegel, will serve as its board of directors following completion of the Merger. For a complete discussion of the expected board of directors following the Merger, compensation of directors, and compensation of executive officers, see the section entitled Management of Luna Before the Merger and Management of Combined Company Following the Merger.

Comparison of Stockholders Rights (see page 215)

The rights of API stockholders are currently governed by the General Corporation Law of the State of Delaware (the Delaware General Corporation Law), API s certificate of incorporation, as amended, as currently in effect, and the amended bylaws of API. The rights of Luna s stockholders are currently governed by the Delaware General Corporation Law, the amended and restated certificate of incorporation of Luna, as currently in effect, and the amended and restated bylaws of Luna. If the Merger is completed, API stockholders will become stockholders of Luna, and their rights will be governed by the amended and restated certificate of incorporation and amended and restated bylaws of Luna in addition to the provisions of the Delaware General Corporation Law. Differences between the certificates of incorporation and bylaws of Luna and API are described under the section entitled Comparison of Luna Stockholders and Advanced Photonix Stockholders Rights and Corporate Governance Matters in this joint proxy statement/prospectus.

Luna Annual Meeting of Stockholders (see page 225)

The Luna annual meeting will be held at the Roanoke Higher Education Center, 108 N. Jefferson Street, Roanoke, Virginia 24016, at 9:00 a.m., local time, on May 8, 2015. Only holders of record of Luna common stock at the close of business on March 23, 2015 (the Luna record date) are entitled to notice of, attendance at and to vote at, the Luna annual meeting or at any adjournment or postponement of the annual meeting. As of the Luna record date, there were 15,095,017 shares of Luna common stock outstanding and entitled to vote at the Luna annual meeting, held by approximately 74 holders of record. Each holder of Luna common stock is entitled to one vote for each share of Luna common stock owned as of the Luna record date.

There are five proposals to be considered at the Luna annual meeting. The first proposal to be considered at the Luna annual meeting is a proposal to approve the issuance of shares of Luna common stock, par value $0.001 per share, in connection with Merger. The second proposal at the Luna annual meeting is a proposal to consider and vote upon an adjournment of the Luna annual meeting from time to time, if necessary or appropriate (as determined by Luna), to solicit additional proxies if there are not sufficient votes to approve the first proposal described immediately above. The third proposal at the Luna annual meeting is a proposal to elect My E. Chung and Neil D. Wilkin, Jr., as Class III members of the board of directors, to serve until Luna s 2018 annual meeting of stockholders and until their successors are duly elected and qualified; provided, however, that, if the Merger is completed, the board of directors of Luna will be reconstituted as described in the joint proxy statement/prospectus. The fourth proposal at the Luna annual meeting is a proposal to approve, on a non-binding, advisory basis, the compensation of Luna s named executive officers, as

disclosed in this joint proxy statement/prospectus. The fifth proposal at the Luna annual meeting is a proposal to ratify the selection, by the Audit Committee of Luna s board of directors, of Grant Thornton LLP as Luna s independent registered public

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accounting firm for the fiscal year ending December 31, 2015. If you are a Luna stockholder and fail to return your proxy card or otherwise provide proxy instructions and do not attend the annual meeting in person, this will result in your shares not being counted for purposes of determining whether a quorum is present at the Luna annual meeting. In the event that a quorum is not reached or the necessary votes to approve Proposal No. 1 are not received, the Luna annual meeting may be adjourned to obtain a quorum or the necessary votes.

The API Special Meeting of Stockholders (see page 245)

The API special meeting will be held at API s corporate headquarters located at 2925 Boardwalk Drive, Ann Arbor, Michigan 48104, at 9:00 a.m., local time, on May 8, 2015. Only holders of record of API common stock at the close of business on March 23, 2015 (the API record date) are entitled to notice of, attendance at and to vote at the API special meeting or at any adjournment or postponement of the special meeting. As of the API record date, there were 37,381,413 shares of API common stock outstanding and entitled to vote at the API special meeting, held by approximately 103 holders of record. Each holder of API common stock is entitled to one vote for each share of API common stock owned as of the API record date.

There are two proposals to be considered at the API special meeting. The first proposal to be considered at the API special meeting is a proposal to adopt the Merger Agreement and approve the transactions contemplated thereby. The second proposal to be considered at the API special meeting is a proposal to vote for an adjournment of the API special meeting from time to time, if necessary or appropriate (as determined by API) to solicit additional proxies if there are not sufficient votes to adopt the first proposal described above. If you are an API stockholder, the failure to return your proxy or otherwise provide proxy instructions or vote your shares in person will have the same effect as voting against API Proposal No. 1. If you are an API stockholder and fail to return your proxy card or otherwise provide proxy instructions and do not attend the API special meeting in person, this will result in your shares not being counted for purposes of determining whether a quorum is present at the API special meeting. In the event that a quorum is not reached or the necessary votes are not received, the API special meeting may be adjourned to obtain the necessary quorum or vote.

Litigation Involving the Merger (see page 110)

After the announcement of the Merger, three separate putative class action complaints were filed in Michigan and Delaware, alleging claims of breach of fiduciary duty against the API board of directors and naming Luna as a defendant for aiding and abetting the alleged breach of fiduciary duty. The plaintiffs seek injunctive relief and unspecified damages. Luna, API and the API board of directors believe that the claims asserted in these suits are without merit but, in order to avoid the costs, risks and uncertainties inherent in litigation and to allow stockholders to vote on the proposal to adopt the Merger Agreement and approve the transactions contemplated in the Merger Agreement, including the Merger, at the scheduled meetings, API and Luna have entered into a memorandum of understanding, or MOU, with the counsel of each of the plaintiffs in these actions. Under the terms of the MOU, API agreed to provide certain additional disclosure in the Registration Statement on Form S-4 that includes this preliminary joint proxy statement/prospectus with respect to, among other things, certain of the analyses undertaken by API s financial advisor and information regarding the background of the Merger.

The MOU reflects the parties agreement in principle to resolve the allegations by the settling plaintiffs against API, Luna and the other defendants in connection with the Merger and provides a release and settlement by the purported class of API s stockholders of all claims against API, Luna and the other defendants in connection with the Merger and the dismissal of the actions. The MOU and settlement are contingent upon, among other things, court approval and consummation of the Merger. If the MOU is not approved and such conditions are not satisfied, API and Luna will continue to vigorously defend these Actions.

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RISK FACTORS

The Merger involves risks for Luna stockholders and API stockholders. Luna stockholders will be choosing to permit dilution of their percentage ownership of Luna by voting in favor of the issuance of additional shares of Luna common stock in order to complete the Merger. API stockholders will be choosing to no longer control 100% of API and to become stockholders of Luna by voting in favor of the adoption of the Merger Agreement and approval of the transactions contemplated thereby. In addition to the risks that their respective businesses currently face, after the Merger, Luna will be faced with a market environment that cannot be predicted and that involves significant risks, many of which will be beyond its control. These risk factors are not intended to represent a complete list of risks that may affect Luna, API and the combined business, and these risk factors may not be exhaustive. You should carefully consider the risks described below and the other information contained in this joint proxy statement/prospectus, including the matters addressed in the section entitled Cautionary Statement Concerning Forward-Looking Statements, before deciding how to vote your shares of common stock.

Risks Relating to the Merger

API stockholders will receive a fixed ratio of 0.31782 shares of Luna common stock for each share of API common stock they own regardless of any changes in market value of API common stock or Luna common stock before the completion of the Merger.

At the Effective Time of the Merger, each share of API common stock will be converted into the right to receive 0.31782 shares of Luna common stock and cash in lieu of any fractional shares of Luna common stock that would be issued. There will be no adjustment to the exchange ratio (except for adjustments to reflect the effect of any stock split, reverse stock split, stock dividend, reorganization, recapitalization, reclassification or other like change with respect to Luna common stock or API common stock), and the parties do not have a right to terminate the Merger Agreement based upon changes in the market price of either Luna common stock or API common stock. Accordingly, the dollar value of Luna common stock that API stockholders will receive upon completion of the Merger will depend upon the market value of Luna common stock at the time of completion of the Merger, which may be different from, and lower or higher than, the closing price of Luna common stock on January 30, 2015, the last full trading day preceding the public announcement of the Merger, on , 2015, the last full trading day prior to the date of this joint proxy statement/prospectus, or May 7, 2015, the last full trading day prior to the date of the stockholder meetings. Moreover, completion of the Merger may occur sometime after the requisite stockholder approvals have been obtained. The market values of Luna common stock and API common stock have varied since Luna and API entered into the Merger Agreement and will continue to vary in the future due to changes in the business, operations or prospects of Luna and API, market assessments of the Merger, regulatory considerations, market and economic considerations, and other factors both within and beyond the control of Luna and API.

The issuance of shares of Luna common stock to API stockholders in the Merger will substantially reduce the percentage interests of Luna stockholders.

If the Merger is completed, Luna and API expect that (i) approximately 11,880,560 shares of Luna common stock would be issued to existing API common stockholders (including holders of shares subject to a repurchase option or obligation, risk of forfeiture or other condition under any applicable restricted stock purchase agreement or other agreement with API) and (ii) upon exercise or settlement of assumed options and warrants, up to approximately 1,081,042 shares will be issued to holders of assumed options and warrants.

Existing Luna common stockholders on the one hand, and former API common stockholders on the other hand, are expected to own approximately 56% and 44%, respectively, of the outstanding shares of Luna common stock

following the completion of the Merger based on each of Luna s and API s outstanding common shares as of January 30, 2015. Upon attributing ownership to the former API stockholders of the shares of common stock that may be issued upon exercise of the options or warrants to purchase Luna common stock issued as a result of the

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Merger, and attributing ownership of the shares of Luna common stock issuable upon exercise of outstanding Luna options and restricted stock units (but excluding, for this purpose, the shares of Luna common stock issuable upon conversion of Luna s outstanding Series A convertible preferred stock and upon payment of accrued dividends thereon), existing Luna securityholders would own approximately 57% of the common stock of Luna on a fully diluted basis and the former API securityholders would own approximately 43% of the common stock of Luna on a fully diluted basis, before giving effect to the potential exercise of put rights by the holders of certain API warrants. The issuance of shares of Luna common stock to API stockholders in the Merger and the assumption by Luna of API options and warrants will cause a significant reduction in the relative percentage interest of current Luna securityholders in earnings, voting, liquidation value and book and market value.

Certain directors and executive officers of Luna and API have interests in the Merger that may be different from, or in addition to, the interests of Luna stockholders and API stockholders.

Executive officers of Luna and API negotiated the terms of the Merger Agreement under the direction of the board of directors of Luna and API, respectively. The board of directors of Luna approved the Merger Agreement and unanimously recommended that Luna stockholders vote in favor of the issuance of shares of Luna common stock in connection with the Merger, and the board of API unanimously approved the Merger Agreement and the transactions contemplated thereby and unanimously recommended that API stockholders vote in favor of the adoption of the Merger Agreement and approval of the transactions contemplated thereby. These directors and executive officers may have interests in the Merger that are different from, or in addition to, or may be deemed to conflict with, yours. These interests include the continued employment of certain executive officers of Luna by Luna, the continued positions of certain directors of Luna and API as directors of the combined company and the indemnification of former Luna and API directors and officers by the combined company. API s president and chief executive officer, Richard D. Kurtz, will not be continuing employment with the combined company and, as a result, will be entitled to severance payments under his employment agreement with API. Additionally, the Luna executive officers will be entitled to receive certain bonuses as a result of the completion of the Merger under the terms of the 2014 senior management incentive plan. Luna stockholders should be aware of these interests when they consider the Luna board of directors recommendation that Luna stockholders vote in favor of the proposal to issue shares of Luna common stock in the Merger, and API stockholders should be aware of these interests when they consider the API board of directors recommendation that they vote in favor of the adoption of the Merger Agreement and approval of the transactions contemplated thereby. For a more detailed discussion of these and other interests of Luna and API directors and executive officers in the Merger, see Interests of Directors, Executive Officers and Affiliates of Luna and Interests of Directors, Executive Officers and Affiliates of API beginning on page 109 of this joint proxy statement/prospectus.

Provisions of the Merger Agreement may deter alternative business combinations and could negatively impact the stock prices of Luna and API if the Merger Agreement is terminated in certain circumstances.

In connection with the execution and delivery of the Merger Agreement, API and Luna agreed to refrain from soliciting, initiating, or knowingly encouraging or facilitating certain acquisition proposals with any third party, subject to exceptions set forth in the Merger Agreement. The Merger Agreement also provides for the payment by Luna or API of a nonrefundable reimbursement fee of up to $250,000 or termination fee of $750,000 if the Merger Agreement is terminated under certain circumstances specified in the Merger Agreement. See the section entitled The Merger Agreement Termination Fee and The Merger Agreement Expenses beginning on page 126 of this joint proxy statement/prospectus. These provisions limit Luna s and API s ability to pursue offers from third parties that could result in greater value to Luna stockholders or API stockholders, as the case may be. The obligation to pay the termination fee or reimbursement fee also may discourage a third party from pursuing an acquisition proposal. If the Merger is terminated and Luna or API determine to seek another business combination, neither Luna nor API can assure its stockholders that they will be able to negotiate a transaction with another company on terms comparable to

the terms of the Merger, or that they will avoid incurrence of any fees associated with the termination of the Merger Agreement.

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In the event the Merger is terminated by Luna or API in circumstances that obligate either party to pay the termination fee or reimbursement fee to the other party, including where either party terminates the Merger Agreement because the other party s board of directors withdraws its support of the Merger, Luna s and/or API s stock prices may decline.

If the proposed Merger is not completed, Luna and API will have incurred substantial costs that may adversely affect Luna s and API s financial results and operations and the market price of Luna and API common stock.

If the Merger is not completed, the prices of Luna common stock and API common stock may decline to the extent that the current market prices of Luna common stock and API common stock reflect a market assumption that the Merger will be completed. In addition, Luna and API have incurred and will incur substantial costs in connection with the proposed Merger. These costs are primarily associated with the fees of attorneys, accountants and Luna s and API s financial advisors. In addition, Luna and API have each diverted significant management resources in an effort to complete the Merger and are each subject to restrictions contained in the Merger Agreement on the conduct of their respective businesses during the pendency of the Merger. If the Merger is not completed, Luna and API will have received little or no benefit in respect of such costs incurred. Also, if the Merger is not completed under certain circumstances specified in the Merger Agreement, Luna or API may be required to pay a termination fee to the other of $750,000 or a reimbursement fee to the other of up to $250,000. See the section entitled The Merger Agreement Termination Fee and The Merger Agreement Expenses beginning on page 126 of this joint proxy statement/prospectus.

Further, if the Merger is not completed, Luna and API may experience negative reactions from the financial markets and Luna s and API s suppliers, customers and employees. Each of these factors may adversely affect the trading price of Luna and/or API common stock and Luna and/or API s financial results and operations.

Risks Relating to the Combined Company

The failure to integrate successfully the businesses of Luna and API in the expected timeframe would adversely affect the combined company s future results and the market price of the combined company s common stock following the completion of the Merger.

The success of the Merger will depend, in large part, on sales of the combined company s products and on the ability of the combined company following the completion of the Merger to realize the anticipated benefits, including annual net operating synergies and cost reductions from combining the businesses of Luna and API. To realize these anticipated benefits, the combined company must successfully integrate Luna s and API s respective businesses. This integration will be complex and time-consuming.

The failure to successfully integrate and manage the challenges presented by the integration process may result in the combined company s failure to achieve some or all of the anticipated benefits of the Merger.

Potential difficulties that may be encountered in the integration process include the following:

- lost sales and customers as a result of customers of either of the two companies deciding not to do business with the combined company;

- complexities associated with managing the larger combined company with distant business locations;

integrating personnel from the two companies while maintaining focus on providing consistent, high quality products;

the loss of key employees;

potential unknown liabilities and unforeseen expenses, delays or regulatory conditions associated with the Merger; and

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performance shortfalls at one or both of the companies as a result of the diversion of management s attention caused by completing the Merger and integrating the companies operations.

If any of these events were to occur, the ability of the combined company to maintain relationships with customers, suppliers and employees or the combined company s ability to achieve the anticipated benefits of the Merger could be adversely affected, or could reduce the combined company s earnings or otherwise adversely affect its business and financial results after the Merger and, as a result, adversely affect the market price of the combined company s common stock.

The market price for shares of the combined company s common stock may be affected by factors different from those affecting the market price for shares of Luna common stock and API common stock prior to the Merger.

The risks associated with the combined company may affect the results of operations of the combined company differently than they could affect the results of operations of each of Luna and API as separate companies. Additionally, the results of operations of the combined company may be affected by additional or different factors than those that currently affect the results of operations of Luna and API, including, but not limited to: complexities associated with managing the larger, more complex, combined business; integrating personnel from the two companies while maintaining focus on providing products and services; and potential performance shortfalls resulting from the diversion of management s attention caused by integrating the companies operations.

Failure to develop, introduce and sell new products or failure to develop and implement new technologies could adversely impact the financial results of the combined company.

Success of the combined company will depend on its ability to develop and introduce new products and software platforms that customers choose to buy. The new products the market requires tend to be increasingly complex, incorporating more functions and operating at faster speeds than old products. If the combined company fails to introduce new product designs or technologies in a timely manner or if customers do not successfully introduce new systems or products incorporating products of the combined company, the business, financial condition and results of operations of the combined company could be materially harmed.

The Merger will result in changes to the Luna board of directors that may affect the combined company s operations.

If the parties complete the Merger, the composition of the Luna board of directors will change in accordance with the Merger Agreement. This new composition of the board of directors may affect the business strategy and operating decisions of the combined company upon completion of the Merger.

If API stockholders sell the shares of Luna common stock received in the Merger, they could cause a decline in the market price of the combined company s common stock.

Luna s issuance of common stock in the Merger will be registered with the SEC. As a result, those shares will be immediately available for resale in the public market following the completion of the Merger. As of February 28, 2015, if the Merger occurred on such date, the number of shares of Luna common stock to be issued to existing API common stockholders, collectively, in connection with the Merger and immediately available for resale would have equaled approximately 44% of the number of outstanding shares of Luna common stock as of such date prior to giving effect to such issuance. API stockholders may sell the stock they receive commencing immediately after the Merger. If this occurs, or if there is a perception in the market that such sales may occur, the market price of the combined company s common stock may decline.

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The unaudited pro forma condensed combined financial information included in this joint proxy statement/prospectus may not be indicative of what the combined company s actual financial position or results of operations would have been.

The unaudited pro forma condensed combined financial information included in this joint proxy statement/prospectus is presented solely for illustrative purposes and is not necessarily indicative of what the combined company s actual financial position or results of operations would have been had the Merger been completed on the dates indicated. This unaudited pro forma condensed combined financial information reflects adjustments that were developed using preliminary estimates based on available information and various assumptions, and may be revised as additional information becomes available. Accordingly, the final acquisition accounting adjustments may differ materially from the pro forma adjustments reflected in this joint proxy statement/prospectus.

Customer uncertainties related to the Merger could adversely affect the businesses, revenues and gross margins of Luna, API and the combined company.

In response to the announcement of the Merger or due to ongoing uncertainty about the Merger, customers of Luna or API may delay or defer purchasing decisions or elect to switch to other suppliers. In particular, prospective customers could be reluctant to purchase the products and services of Luna, API or the combined company due to uncertainty about the direction of the combined company s offerings and willingness to support existing products. To the extent that the Merger creates uncertainty among those persons and organizations contemplating purchases such that customers delay, defer or change purchase decisions in connection with the planned Merger, the revenues of Luna, API or the combined company would be adversely affected. Customer assurances may be made by Luna and API to address their customers uncertainty about the direction of the combined company s product and related support offerings, which may result in additional obligations of Luna, API or the combined company. As a result of any of these actions, quarterly revenues and net earnings of Luna, API or the combined company could be substantially below market expectations and a decline in the companies respective stock prices could result.

The combined company must continue to retain, recruit and motivate executive officers and other key employees, and failure to do so could negatively affect the combined company.

The combined company must be successful at retaining, recruiting, and motivating key employees following the completion of the Merger in order for the benefits of the transaction to be fully realized. Employees of both Luna and API may experience uncertainty about their future roles with the combined company until, or even after, strategies with regard to the combined company are announced and executed. The potential distractions related to the Merger may adversely affect the ability of the combined company to keep executives and other key employees focused on business strategies and goals, to address other important personnel matters and to retain them at all. A failure by the combined company to attract, retain, and motivate executives and other key employees during the period prior to or after the completion of the Merger could have a negative impact on their respective businesses.

Luna and API have been named as parties to securities class action litigation. In the future, the combined company may become involved in securities class action litigation that could divert management s attention and harm the combined company s business and insurance coverage may not be sufficient to cover all costs and damages.

After the announcement of the Merger, three separate putative class action complaints were filed in Michigan and Delaware, alleging claims of breach of fiduciary duty against API and the API board of directors and naming Luna as a defendant for aiding and abetting the alleged breach of fiduciary duty, and seeking injunctive relief and unspecified damages. Although API and Luna have entered into a memorandum of understanding, or MOU, with counsel of each of the plaintiffs in these actions providing for the settlement of this litigation and a release of claims against API, Luna

and the other defendants, the MOU and the settlement are contingent upon, among other things, court approval and consummation of the Merger. It is possible that the MOU may not be approved

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or that other conditions of the settlement are not satisfied, in which case API and Luna would continue to be subject to these claims. An adverse judgment for monetary damages could have a material adverse effect on the operations and liquidity of the combined company. A preliminary injunction could delay or jeopardize the completion of the Merger, and an adverse judgment granting permanent injunctive relief could indefinitely enjoin completion of the Merger. It is also possible that Luna and API could be subject to additional litigation in connection with the Merger.

The combined company may become involved in this type of litigation in the future. Litigation often is expensive and diverts management s attention and resources, which could adversely affect the combined company s business. Moreover, insurance coverage may not be sufficient to cover all costs and damages the combined company incurs in connection with the litigation.

Risks Relating to Luna s Business

Luna s technology is subject to a license from Intuitive Surgical, Inc., which is revocable in certain circumstances. Without this license, Luna cannot continue to market, manufacture or sell Luna s fiber-optic products.

As a part of the sale of Luna s assets to Intuitive Surgical, Inc., or Intuitive, Luna entered into a license agreement with Intuitive pursuant to which Luna received rights to use all of Luna s transferred technology outside the field of medicine and in respect of Luna s existing non-shape sensing products in certain non-robotic medical fields. This license back to Luna is revocable if after notice and certain time periods, Luna were to (i) challenge the validity or enforceability of the transferred patents and patent applications, (ii) commercialize Luna s fiber optical shape sensing and localization technology in the field of medicine (except to perform on a development and supply project for Hansen Medical Inc.), (iii) violate Luna s obligations related Luna s ability to sublicense in the field of medicine or (iv) violate Luna s confidentiality obligations in a manner that advantages a competitor in the field of medicine and not cure such violation. Maintaining this license is necessary for Luna to conduct Luna s fiber-optic products business, both for Luna s telecom products and Luna s ODiSI sensing products. If this license were to be revoked by Intuitive, Luna would no longer be able to market, manufacture or sell these products which would severely limit Luna s ability to continue operations.

If there are substantial sales of Luna s common stock, or the perception that such sales may occur, Luna s stock price could decline.

If any of Luna s stockholders were to sell substantial amounts of Luna s common stock, the market price of Luna s common stock may decline, which might make it more difficult for Luna to sell equity or equity-related securities in the future at a time and price that Luna deems appropriate. Substantial sales of Luna s common stock, or the perception that such sales may occur, may have a material adverse effect on the prevailing market price of Luna s common stock.

Pursuant to an Investor Rights Agreement, Luna filed a Form S-3 registration statement earlier in 2014 registering the potential resale of an aggregate of up to approximately 6.3 million shares of Luna s common stock by Luna s then two largest stockholders, Carilion Clinic, or Carilion and Dr. Kent Murphy. This registration statement has been declared effective by the Securities and Exchange Commission, and Dr. Murphy has sold substantially all of his approximately 2.8 million shares included in the registration statement. Carilion continues to hold its approximately 3.5 million shares covered by the registration statement (including approximately 1.3 million shares issuable to Carilion upon conversion of shares of Series A Convertible Preferred Stock that Carilion holds). Because the registration statement is effective, these shares may be sold freely in the public market. Any sales of these shares, or the perception that future sales of shares may occur by Carilion or any of Luna s other significant stockholders, may have a material adverse effect on the market price of Luna s stock. Any such continuing material adverse effect on the market price of Luna s stock could impair Luna s ability to comply with NASDAQ s continuing listing standards in respect of Luna s

minimum stock price, as further described below.

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Luna s narrowed scope and focus may make it more difficult for Luna to achieve or maintain operating profitability.

Through the recent sales of SCC to Mac-B and of Luna s medical shape sensing business to Intuitive, Luna has reduced Luna s overall size and narrowed Luna s focus to one key growth objective: to become the leading provider of fiber optic strain & temperature sensing solutions and standard test methods for composite, as well as non-composite, materials, structures and systems. There can be no guarantee that Luna will be successful in pursuing this objective. Although Luna anticipates realizing cost savings as a result of the sale of assets to Mac-B and Intuitive, Luna will continue to incur significant operating expenses associated with Luna s public company infrastructure. Accordingly, Luna will need to significantly increase the revenues Luna generates from Luna s remaining operations in order to achieve or maintain operating profitability, and there can be no guarantee that Luna will be able to do so.

Luna depends on third-party vendors for specialized components in Luna s manufacturing operations, making Luna vulnerable to supply shortages and price fluctuations that could harm Luna s business.

Luna primarily relies on third-party vendors for the manufacture of the specialized components used in Luna s products. The highly specialized nature of Luna s supply requirements poses risks that Luna may not be able to locate additional sources of the specialized components required in Luna s business. For example, there are few manufacturers who produce the special lasers used in Luna s optical test equipment. Luna s reliance on these vendors subjects Luna to a number of risks that could negatively affect Luna s ability to manufacture Luna s products and harm Luna s business, including interruption of supply. Although Luna is now manufacturing tunable lasers in low-rate initial production, Luna expects an overall reliance on third-party vendors to continue. Any significant delay or interruption in the supply of components, or Luna s inability to obtain substitute components or materials from alternate sources at acceptable prices and in a timely manner could impair Luna s ability to meet the demand of Luna s customers and could harm Luna s business.

As a provider of contract research to the U.S. government, Luna is subject to federal rules, regulations, audits and investigations, the violation or failure of which could adversely affect Luna s business.

Luna must comply with and is affected by laws and regulations relating to the award, administration and performance of U.S. government contracts. Government contract laws and regulations affect how Luna does business with Luna s government customers and, in some instances, impose added costs on Luna s business. A violation of a specific law or regulation could result in the imposition of fines and penalties, termination of Luna s contracts or debarment from bidding on contracts. In some instances, these laws and regulations impose terms or rights that are more favorable to the government than those typically available to commercial parties in negotiated transactions. For example, the U.S. government may terminate any of Luna s government contracts and, in general, subcontracts, at their convenience, as well as for default based on performance.

In addition, U.S. government agencies, including the Defense Contract Audit Agency and the Department of Labor, routinely audit and investigate government contractors. These agencies review a contractor s performance under its contracts, cost structure and compliance with applicable laws, regulations and standards. The U.S. government also may review the adequacy of, and a contractor s compliance with, its internal control systems and policies, including the contractor s purchasing, property, estimating, compensation and management information systems. Any costs found to be improperly allocated to a specific contract will not be reimbursed, while such costs already reimbursed must be refunded. If an audit uncovers the inclusion of certain claimed costs deemed to be expressly unallowable, as with the preliminary audit report Luna received in September 2014 from the Defense Contract Audit Agency, or improper or illegal activities, Luna may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition

from doing business with the U.S. government. In addition, Luna s reputation could suffer serious harm if allegations of impropriety were made against Luna.

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In addition to the risk of government audits and investigations, U.S. government contracts and grants impose requirements on contractors and grantees relating to ethics and business practices, which carry civil and criminal penalties including monetary fines, assessments, loss of the ability to do business with the U.S. government and certain other criminal penalties.

Luna may also be prohibited from commercially selling certain products that Luna develops under Luna s Technology Development segment or related products based on the same core technologies if the U.S. government determines that the commercial availability of those products could pose a risk to national security. For example, certain of Luna s wireless technologies have been classified as secret by the U.S. government and as a result Luna cannot sell them commercially. Any of these determinations would limit Luna s ability to generate product sales and license revenues.

Luna s failure to attract, train and retain skilled employees or members of Luna s senior management and to obtain necessary security clearances for such persons or maintain a facility security clearance would adversely affect Luna s business and operating results.

The availability of highly trained and skilled technical and professional personnel is critical to Luna s future growth and profitability. Competition for scientists, engineers, technicians and professional personnel is intense and Luna s competitors aggressively recruit key employees. In the past, Luna has experienced difficulties in recruiting and hiring these personnel as a result of the tight labor market in certain fields. Any difficulty in hiring or retaining qualified employees, combined with Luna s growth strategy and future needs for additional experienced personnel, particularly in highly specialized areas such as nanomaterial manufacturing and fiber optic sensing technologies, may make it more difficult to meet all of Luna s needs for these employees in a timely manner. Although Luna intends to continue to devote significant resources to recruit, train and retain qualified employees, Luna may not be able to attract and retain these employees, especially in technical fields in which the supply of experienced qualified candidates is limited, or at the senior management level. Any failure to do so would have an adverse effect on Luna s business. Any loss of key personnel could have a material adverse effect on Luna s ability to meet key operational objectives, such as timely and effective project milestones and product introductions, which in turn could adversely affect Luna s business, results of operations and financial condition.

Luna provides certain services to the U.S. government that require Luna to maintain a facility security clearance and for certain of Luna s employees and Luna s board chairman to hold security clearances. In general, the failure for necessary persons to obtain or retain sufficient security clearances, any loss by Luna of a facility security clearance or any public reprimand related to security matters could result in a U.S. government customer terminating an existing contract or choosing not to renew a contract or prevent Luna from bidding on or winning certain new government contracts.

In addition, Luna s future success depends in a large part upon the continued service of key members of Luna s senior management team. Luna does not maintain any key-person life insurance policies on Luna s officers. The loss of any members of Luna s management team or other key personnel could seriously harm Luna s business.

Luna relies and will continue to rely on contracts and grants awarded under the SBIR program for a significant portion of Luna s revenues. A finding by the SBA that Luna no longer qualifies to receive SBIR awards could adversely affect Luna s business.

Luna competes as a small business for some of Luna s government contracts. Luna s revenues derived from the Small Business Innovation Research, or SBIR, program account for a significant portion of Luna s consolidated total revenues, and contract research, including SBIR contracts, will remain a significant portion of Luna s consolidated total revenues for the foreseeable future. For the year ended December 31, 2013, approximately 54% of Luna s total

revenues were generated under the SBIR program, compared to 47% in 2014.

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Luna may not continue to qualify to participate in the SBIR program or to receive new SBIR awards from federal agencies. In order to qualify for SBIR contracts and grants, Luna must meet certain size and ownership eligibility criteria. These eligibility criteria are applied as of the time of the award of a contract or grant. A company can be declared ineligible for a contract award as a result of a size challenge filed with the SBA by a competitor or a federal agency.

In order to be eligible for SBIR contracts and grants, under current SBA rules Luna must be more than 50% owned and controlled by individuals who are U.S. citizens or permanent resident aliens, and/or other small business concerns (each of which is more than 50% owned and controlled by individuals who are U.S. citizens or permanent resident aliens) or certain qualified investment companies. In the event Luna s institutional ownership significantly increases, either because of increased buying by institutions or selling by individuals, Luna could lose eligibility for new SBIR contracts and grants.

Also, in order to be eligible for SBIR contracts and grants, the number of Luna s employees, including those of any entities that are considered to be affiliated with Luna, cannot exceed 500. As of January 30, 2015, Luna had approximately 117 employees. In determining whether Luna is affiliated with any other entity, the SBA may analyze whether another entity controls or has the power to control Luna. Carilion is Luna s largest institutional stockholder. Since early 2011, a formal size determination by the SBA that focused on whether or not Carilion is or was Luna s affiliate has been outstanding. Although Luna does not believe that Carilion has or had the power to control Luna, it cannot assure you that the SBA will interpret its regulations in Luna s favor on this question. If the SBA were to make a determination that Luna is or was affiliated with Carilion, Luna would exceed the size limitations, as Carilion has over 500 employees. In that case, Luna would lose eligibility for new SBIR contracts and grants and other awards that are set aside for small businesses based on the criterion of number of employees, and the relevant government agency would have the discretion to suspend performance on existing SBIR grants. The loss of Luna s eligibility to receive SBIR awards would have a material adverse impact on Luna s revenues, cash flows and Luna s ability to fund Luna s growth.

Moreover, as Luna s business grows, it is foreseeable that Luna will eventually exceed the SBIR size limitations, in which case Luna may be required to seek alternative sources of revenues or capital.

A decline in government research contract awards or government funding for existing or future government research contracts, including SBIR contracts, could adversely affect Luna s revenues, cash flows and ability to fund Luna s growth.

Technology development revenues, which consist primarily of government-funded research, accounted for approximately 62% and 57% of Luna s consolidated total revenues for the years ended December 31, 2013 and 2014, respectively. As a result, Luna is vulnerable to adverse changes in Luna s revenues and cash flows if a significant number of Luna s research contracts and subcontracts were to be simultaneously delayed or canceled for budgetary, performance or other reasons. For example, the U.S. government may cancel these contracts at any time without cause and without penalty or may change its requirements, programs or contract budget, any of which could reduce Luna s revenues and cash flows from U.S. government research contracts. Luna s revenues and cash flows from U.S. government research contracts and subcontracts could also be reduced by declines or other changes in U.S. defense, homeland security and other federal agency budgets. In addition, Luna competes as a small business for some of these contracts, and in order to maintain Luna s eligibility to compete as a small business, Luna, together with any affiliates, must continue to meet size and revenue limitations established by the U.S. government.

Luna s contract research customer base includes government agencies, corporations and academic institutions. Luna s customers are not obligated to extend their agreements with Luna and may elect not to do so. Also, Luna s customers

priorities regarding funding for certain projects may change and funding resources may no longer be available at previous levels.

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In addition, the Budget Control Act commits the U.S. Government to reduce the federal deficit by $1.2 trillion over ten years through a combination of automatic, across-the-board spending cuts and caps on discretionary spending. This sequestration under the Budget Control Act, which is split equally between defense and non-defense programs, went into effect on March 1, 2013. The appropriate resolution reflecting a budget deal for fiscal years 2014 and 2015 reduces but does not eliminate these sequestration cuts. Any spending cuts required by sequestration could have a material adverse effect on Luna s technology development revenues and, consequently, Luna s results of operations. While the exact manner in which this sequestration may impact Luna s business remains unclear, funding for programs in which Luna participates could be reduced, delayed or canceled. Luna s ability to obtain new contract awards also could be negatively affected.

In addition to contract cancellations and changes in agency budgets, Luna s future financial results may be adversely affected by curtailment of or restrictions on the U.S. government s use of contract research providers, including curtailment due to government budget reductions and related fiscal matters or any legislation or resolution limiting the number or amount of awards Luna may receive. These or other factors could cause U.S. defense and other federal agencies to conduct research internally rather than through commercial research organizations or direct awards to other organizations, to reduce their overall contract research requirements or to exercise their rights to terminate contracts. Alternatively, the U.S. government may discontinue the SBIR program or its funding altogether. Also, SBIR regulations permit increased competition for SBIR awards from companies that may not have previously been eligible, such as those backed by venture capital operating companies, hedge funds and private equity firms. Any of these developments could limit Luna s ability to obtain new contract awards and adversely affect Luna s revenues, cash flows and ability to fund Luna s growth.

The results of Luna s operations could be adversely affected by economic and political conditions and the effects of these conditions on Luna s customers businesses and levels of business activity.

Global economic and political conditions affect Luna s customers businesses and the markets they serve. A severe or prolonged economic downturn or a negative or uncertain political climate could adversely affect Luna s customers financial conditions and the timing or levels of business activity of Luna s customers and the industries Luna serves. This may reduce the demand for Luna s products or depress pricing for Luna s products and have a material adverse effect on Luna s results of operations. Changes in global economic conditions could also shift demand to products or services for which Luna does not have competitive advantages, and this could negatively affect the amount of business Luna is able to obtain. In addition, if Luna is unable to successfully anticipate changing economic and political conditions, Luna may be unable to effectively plan for and respond to those changes, and Luna s business could be negatively affected as a result.

There was a rapid softening of the economy and tightening of the financial markets in 2008 and 2009. This slowing of the economy has reduced the financial capacity of some of Luna s customers and, to the extent that such economic conditions continue in certain industries, it could continue to affect Luna s potential customers, thereby slowing spending on the products and services Luna provides. The outlook for the economy in 2015 and beyond remains uncertain, and until there is a sustained economic recovery Luna s revenues and results of operations could be negatively impacted.

Luna has a history of losses, and because Luna s strategy for expansion may be costly to implement, Luna may experience continuing losses and may never achieve or maintain profitability or positive cash flow.

Luna realized a net loss from continuing operations of $5.5 million and $3.4 million for the years ended December 31, 2013 and 2014, respectively. Luna expects to continue to incur significant expenses as Luna pursues strategic initiatives, including increased expenses for research and development, sales and marketing and manufacturing. Luna s

business may grow in part through acquisitions of additional companies and complementary technologies which could cause Luna to incur greater than anticipated transaction expenses, amortization or write-offs of intangible assets and other acquisition-related expenses. As a result, Luna expects to incur net losses for the foreseeable future, and these losses could be substantial. At a certain level, continued net losses could impair Luna s ability to comply with NASDAQ continued listing standards, as described further below.

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Luna s ability to generate additional revenues and to become profitable will depend on Luna s ability to execute Luna s key growth initiative regarding the development, marketing and sale of sensing products, develop and commercialize innovative technologies, expand Luna s contract research capabilities and sell the products that result from those development initiatives. Luna is unable to predict when or if Luna will be able to achieve profitability. If Luna s revenues do not increase, or if Luna s expenses increase at a greater rate than Luna s revenues, Luna will continue to experience losses. Even if Luna does achieve profitability, Luna may not be able to sustain or increase Luna s profitability on a quarterly or annual basis.

Luna has obtained capital by borrowing money under a term loan and Luna might require additional capital to support and expand Luna s business; Luna s term loan has various loan covenants with which Luna must comply.

Luna intends to continue to make investments to support Luna s business growth, including developing new products, enhancing Luna s existing products, obtaining important regulatory approvals, enhancing Luna s operating infrastructure, completing Luna s development activities and building Luna s commercial scale manufacturing facilities. To the extent that Luna is unable to become or remain profitable and to finance Luna s activities from Luna s continuing operations, Luna may require additional funds to support these initiatives and to grow Luna s business.

If Luna is successful in raising additional funds through issuances of equity or convertible debt securities, Luna s existing stockholders could suffer significant dilution, including as the result of the issuance of warrants in connection with the financing, and any new equity securities Luna issues could have rights, preferences and privileges superior to those of Luna s existing common stock. Furthermore, such financings may jeopardize Luna s ability to apply for SBIR grants or qualify for SBIR contracts or grants, and Luna s dependence on SBIR grants may restrict Luna s ability to raise additional outside capital. If Luna raises additional funds through debt financings, these financings may involve significant cash payment obligations and covenants that restrict Luna s ability to operate Luna s business and make distributions to Luna s stockholders.

Luna has a term loan with Silicon Valley Bank, or SVB, which requires Luna to observe certain financial and operational covenants, including maintenance of a specified cash balance, protection and registration of intellectual property rights, and certain customary negative covenants, as well as other customary events of default. If any event of default occurs SVB may declare due immediately all borrowings under Luna s term loan and foreclose on the collateral. Furthermore, an event of default would result in an increase in the interest rate on any amounts outstanding.

If Luna is unable to obtain adequate financing or financing terms satisfactory to Luna when Luna requires it, Luna s ability to continue to support Luna s business growth and to respond to business challenges could be significantly limited.

Risks Relating to Luna s Operations and Business Strategy

If Luna cannot successfully transition Luna s revenue mix from contract research revenues to product sales and license revenues, Luna may not be able to fully execute Luna s business model or grow Luna s business.

Luna s business model and future growth depend on Luna s ability to transition to a revenue mix that contains significantly larger product sales and revenues from the provision of services or from licensing. Product sales and these revenues potentially offer greater scalability than contract research revenues. Luna s current plan is to increase Luna s sales of commercial products, Luna s licensing revenues and Luna s provision of non-research services to customers so as to represent a larger percentage of Luna s total revenues. If Luna is unable to develop and grow Luna s product sales and revenues from the provision of services or from licensing to augment Luna s contract research revenues, Luna s ability to execute Luna s business model or grow Luna s business could suffer. There can be no

assurance that Luna will be able to achieve increased revenues in this manner.

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If Luna is unable to manage growth effectively, Luna s revenues and net loss could be adversely affected.

Luna may need to expand Luna s personnel resources to grow Luna s business effectively. Luna believes that sustained growth at a higher rate will place a strain on Luna s management as well as on Luna s other human resources. To manage this growth, Luna must continue to attract and retain qualified management, professional, scientific and technical and operating personnel. If Luna is unable to recruit a sufficient number of qualified personnel, Luna may be unable to staff and manage projects adequately, which in turn may slow the rate of growth of Luna s contract research revenues or Luna s product development efforts.

Luna may not be successful in identifying market needs for new technologies or in developing new products.

Part of Luna s business model depends on Luna s ability to correctly identify market needs for new technologies. Luna intends to identify new market needs, but Luna may not always have success in doing so in part because Luna s contract research largely centers on identification and development of unproven technologies, often for new or emerging markets. Furthermore, Luna must identify the most promising technologies from a sizable pool of projects. If Luna s commercialization strategy process fails to identify projects with commercial potential or if management does not ensure that such projects advance to the commercialization stage, Luna may not successfully commercialize new products and grow Luna s revenues.

Luna s growth strategy requires that Luna also develops successful commercial products to address market needs. Luna faces several challenges in developing successful new products. Many of Luna s existing products and those currently under development are technologically innovative and require significant and lengthy product development efforts. These efforts include planning, designing, developing and testing at the technological, product and manufacturing-process levels. These activities require Luna to make significant investments. Although there are many potential applications for Luna s technologies, Luna s resource constraints require Luna to focus on specific products and to forgo other opportunities. Luna expects that one or more of the potential products Luna chooses to develop will not be technologically feasible or will not achieve commercial acceptance, and Luna cannot predict which, if any, of Luna s products Luna will successfully develop or commercialize. The technologies Luna research and develop are new and steadily changing and advancing. The products that are derived from these technologies may not be applicable or compatible with the state of technology or demands in existing markets. Luna s existing products and technologies may become uncompetitive or obsolete if Luna s competitors adapt more quickly than Luna does to new technologies and changes in customers requirements. Furthermore, Luna may not be able to identify if and when new markets will open for Luna s products given that future applications of any given product may not be readily determinable, and Luna cannot reasonably estimate the size of any markets that may develop. If Luna is not able to successfully develop new products, Luna may be unable to increase Luna s product revenues.

Luna faces and will face substantial competition in several different markets that may adversely affect Luna s results of operations.

Luna faces and will face substantial competition from a variety of companies in several different markets. As Luna focuses on developing marketing and selling fiber optic sensing products, Luna may also face substantial and entrenched competition in that market.

Many of Luna s competitors have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, sales and marketing, manufacturing, distribution, technical and other resources than Luna does. These competitors may be able to adapt more quickly to new or emerging technologies and changes in customer requirements. In addition, current and potential competitors have established or may establish financial or strategic relationships among themselves or with existing or potential customers or other third parties. Accordingly,

new competitors or alliances among competitors could emerge and rapidly acquire significant market share. Luna cannot assure you that Luna will be able to compete successfully against current or new competitors, in which case Luna s revenues may fail to increase or may decline.

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Luna has limited experience manufacturing Luna s products in commercial quantities in a cost-effective manner, which could adversely impact Luna s business.

In the past, Luna produced most of Luna s products on a custom order basis rather than pursuant to large contracts that require production on a large volume basis. Accordingly, other than the commercial manufacture of products by Luna s Products and Licensing segment, Luna has no experience manufacturing products in large volumes. Because Luna s experience in large scale manufacturing is limited, Luna may encounter unforeseen difficulties in Luna s efforts to manufacture other products or materials in commercial quantities or have to rely on third-party contractors over which Luna may not have direct control to manufacture Luna s products. Luna may also encounter difficulties and delays in manufacturing Luna s products for any of the following reasons:

Luna may need to expand Luna s manufacturing operations, and Luna s production processes may have to change to accommodate this growth;

to increase Luna s manufacturing output significantly, Luna will have to attract and retain qualified employees, who are in short supply, for the assembly and testing operations;

Luna might have to sub-contract to outside manufacturers which might limit Luna s control of costs and processes; and

Luna s manufacturing operations may have to comply with government or customer-mandated specifications.

If Luna is unable to keep up with demand for Luna s products, Luna s revenues could be impaired, market acceptance of Luna s products could be adversely affected and Luna s customers might instead purchase Luna s competitors products. Moreover, failure to develop and maintain a U.S. market for goods developed with U.S. government-licensed technology may result in the cancellation of the relevant U.S. government licenses. Luna s inability to manufacture Luna s products successfully would have a material adverse effect on Luna s revenues.

Even if Luna is able to manufacture Luna s products on a commercial scale, the cost of manufacturing Luna s products may be higher than Luna expects. If the costs associated with manufacturing are not significantly less than the prices at which Luna can sell Luna s products, Luna may not be able to operate at a profit.

Luna s nanotechnology-enabled products are new and may be, or may be perceived as being, harmful to human health or the environment.

While Luna believes that none of its current products contain chemicals known by Luna to be hazardous or subject to environmental regulation, it is possible that Luna s current or future products, particularly carbon-based nanomaterials, may become subject to environmental or other regulation. Luna intends to develop and sell carbon-based nanomaterials as well as nanotechnology-enabled products, which are products that include nanomaterials as a component to enhance those products performance. Nanomaterials and nanotechnology-enabled products have a limited historical safety record. Because of their size or shape or because they may contain harmful elements, such as gadolinium and other rare-earth metals, Luna s products could pose a safety risk to human health or the environment. These characteristics may also cause countries to adopt regulations in the future prohibiting or limiting the manufacture, distribution or use of nanomaterials or nanotechnology-enabled products.

Such regulations may inhibit Luna s ability to sell some products containing those materials and thereby harm Luna s business or impair Luna s ability to develop commercially viable products.

The subject of nanotechnology has received negative publicity and has aroused public debate. Government authorities could, for social or other purposes, prohibit or regulate the use of nanotechnology. Ethical and other concerns about nanotechnology could adversely affect acceptance of Luna s potential products or lead to government regulation of nanotechnology-enabled products.

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Luna faces risks associated with its international business.

Luna currently conducts business internationally and might considerably expand Luna s international activities in the future. Luna s international business operations are subject to a variety of risks associated with conducting business internationally, including:

- having to comply with U.S. export control regulations and policies that restrict Luna s ability to communicate with non-U.S. employees and supply foreign affiliates and customers;
- changes in or interpretations of foreign regulations that may adversely affect Luna s ability to sell Luna s products, perform services or repatriate profits to the United States;
- the imposition of tariffs;
- hyperinflation or economic or political instability in foreign countries;
- imposition of limitations on, or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries or joint ventures;
- conducting business in places where business practices and customs are unfamiliar and unknown;
- the imposition of restrictive trade policies;
- the imposition of inconsistent laws or regulations;
- the imposition or increase of investment and other restrictions or requirements by foreign governments;
- uncertainties relating to foreign laws and legal proceedings;
- having to comply with a variety of U.S. laws, including the Foreign Corrupt Practices Act; and
- having to comply with licensing requirements.

Luna does not know the impact that these regulatory, geopolitical and other factors may have on Luna s international business in the future.

Luna could be negatively affected by a security breach, either through cyber attack, cyber intrusion or other significant disruption of Luna s IT networks and related systems.

Luna faces the risk, as does any company, of a security breach, whether through cyber attack or cyber intrusion over the internet, malware, computer viruses, attachments to e-mails, persons inside Luna s organization or persons with access to systems inside Luna s organization, or other significant disruption of Luna s IT networks and related systems. The risk of a security breach or disruption, particularly through cyber attack or cyber intrusion, including by computer hackers, foreign governments and cyber terrorists, has increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased.

As a technology company, and particularly as a government contractor, Luna may face a heightened risk of a security breach or disruption from threats to gain unauthorized access to Luna s proprietary, confidential or classified information on Luna s IT networks and related systems. These types of information and IT networks and related systems are critical to the operation of Luna s business and essential to Luna s ability to perform day-to-day operations, and, in some cases, are critical to the operations of certain of Luna s customers. In addition, as certain of Luna s technological capabilities become widely known, it is possible that Luna may be subjected to cyber attack or cyber intrusion as third parties seek to gain improper access to information regarding these capabilities and cyber attacks or cyber intrusion could compromise Luna s confidential information or Luna s IT networks and systems generally, as it is not practical as a business matter to isolate all of Luna s confidential information and trade secrets from email and internet access. There can be no assurance that Luna s security efforts and measures will be effective or that attempted security breaches or disruptions would not be successful or damaging.

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A security breach or other significant disruption involving these types of information and IT networks and related systems could disrupt the proper functioning of these networks and systems and therefore Luna s operations, compromise Luna s confidential information and trade secrets, or damage Luna s reputation among Luna s customers and the public generally. Any of these developments could have a negative impact on Luna s results of operations, financial condition and cash flows.

Risks Relating to Luna s Regulatory Environment

Luna s operations are subject to domestic and foreign laws, regulations and restrictions, and noncompliance with these laws, regulations and restrictions could expose Luna to fines, penalties, suspension or debarment, which could have a material adverse effect on Luna s profitability and overall financial position.

Luna s operations, particularly Luna s international sales, subject Luna to numerous U.S. and foreign laws and regulations, including, without limitation, regulations relating to imports, exports (including the Export Administration Regulations and the International Traffic in Arms Regulations), technology transfer restrictions, anti-boycott provisions, economic sanctions and the Foreign Corrupt Practices Act. The number of Luna s various emerging technologies, the development of many of which has been funded by the Department of Defense, presents Luna with many regulatory challenges. Failure by Luna or Luna s sales representatives or consultants to comply with these laws and regulations could result in administrative, civil, or criminal liabilities and could result in suspension of Luna s export privileges, which could have a material adverse effect on Luna s business. Changes in regulation or political environment may affect Luna s ability to conduct business in foreign markets including investment, procurement and repatriation of earnings.

Luna s healthcare and medical products are and may continue to be subject to a lengthy and uncertain domestic regulatory approval process. If Luna does not obtain and maintain the necessary domestic regulatory approvals or clearances, Luna will not be able to market and sell Luna s products for clinical use in the United States. Complying with applicable regulations is an expensive and time-consuming process and any failure to fully comply with such regulations could subject Luna to enforcement actions.

Certain of Luna s current and potential products could require regulatory clearances or approvals prior to commercialization. For example, any nanomaterial-based MRI contrast agent is likely to be considered a drug under the Federal Food, Drug and Cosmetic Act, or the FDC Act. Drugs and some medical devices are subject to rigorous preclinical testing and other approval requirements by the U.S. Food and Drug Administration, or the FDA, pursuant to the FDC Act, and regulations under the FDC Act, as well as by similar health authorities in foreign countries.

Various federal statutes and regulations also govern or influence the testing, manufacturing, safety, labeling, packaging, advertising, storage, registration, listing and recordkeeping related to marketing of pharmaceuticals. The process of obtaining these clearances or approvals and the subsequent compliance with appropriate federal statutes and regulations require the expenditure of substantial resources, which Luna may not be able to obtain on favorable terms, if at all. Luna cannot be certain that any required FDA or other regulatory approval will be granted or, if granted, will not be withdrawn. Luna s failure to obtain the necessary regulatory approvals, or Luna s failure to obtain them in a timely manner, will prevent or delay Luna s commercialization of new products and Luna s business or Luna s stock price could be adversely affected as a result.

Luna will also become subject to inspection and marketing surveillance by the FDA to determine Luna s compliance with regulatory requirements. If the FDA determines that Luna has failed to comply, it can institute a wide variety of enforcement actions ranging from a regulatory letter to a public warning letter to more severe civil and criminal sanctions. Luna s failure to comply with applicable requirements could lead to an enforcement action that may have an

adverse effect on Luna s financial condition and results of operations.

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If Luna s manufacturing facilities do not meet Federal, state or foreign country manufacturing standards, Luna may be required to temporarily cease all or part of its manufacturing operations, which would result in product delivery delays and negatively impact revenues.

Luna s manufacturing facilities are subject to periodic inspection by regulatory authorities and Luna s operations will continue to be regulated by the FDA for compliance with Good Manufacturing Practice requirements contained in the quality systems regulations. Luna is also required to comply with International Organization for Standardization, or ISO, quality system standards in order to produce products for sale in Europe. If Luna fails to continue to comply with Good Manufacturing Practice requirements or ISO standards, Luna may be required to cease all or part of Luna s operations until Luna complies with these regulations. Obtaining and maintaining such compliance is difficult and costly. Luna cannot be certain that Luna s facilities will be found to comply with Good Manufacturing Practice requirements or ISO standards in future inspections and audits by regulatory authorities. In addition, if Luna cannot maintain or establish manufacturing facilities or operations that comply with such standards or do not meet the expectations of its customers, Luna may not be able to realize certain economic opportunities in Luna s current or future supply arrangements.

Medical products are subject to various international regulatory processes and approval requirements. If Luna does not obtain and maintain the necessary international regulatory approvals for any such potential products, Luna may not be able to market and sell Luna s medical products in foreign countries.

To be able to market and sell medical products in other countries, Luna must obtain regulatory approvals and comply with the regulations of those countries. These regulations, including the requirements for approvals and the time required for regulatory review, vary from country to country. Obtaining and maintaining foreign regulatory approvals are expensive, and Luna cannot be certain that it will have the resources to be able to pursue such approvals or whether Luna would receive regulatory approvals in any foreign country in which Luna plans to market its products. For example, the European Union requires that manufacturers of medical products obtain the right to affix the CE mark to their products before selling them in member countries of the European Union, which Luna has not yet obtained and may never obtain. If Luna fails to obtain regulatory approval in any foreign country in which Luna plans to market its products, Luna s ability to generate revenues will be harmed.

Luna is subject to additional significant foreign and domestic government regulations, including environmental and health and safety regulations, and failure to comply with these regulations could harm Luna s business.

Luna s facilities and current and proposed activities involve the use of a broad range of materials that are considered hazardous under applicable laws and regulations. Accordingly, Luna is subject to a number of foreign, federal, state and local laws and regulations relating to health and safety, protection of the environment and the storage, use, disposal of, and exposure to, hazardous materials and wastes. Luna could incur costs, fines and civil and criminal penalties, personal injury and third party property damage claims, or could be required to incur substantial investigation or remediation costs, if Luna was to violate or become liable under environmental, health and safety laws. Moreover, a failure to comply with environmental laws could result in fines and the revocation of environmental permits, which could prevent Luna from conducting Luna s business. Liability under environmental laws can be joint and several and without regard to fault. There can be no assurance that violations of environmental and health and safety laws will not occur in the future as a result of the inability to obtain permits, human error, equipment failure or other causes. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could harm Luna s business. Accordingly, violations of present and future environmental laws could restrict Luna s ability to expand facilities, pursue certain technologies, and could require Luna to acquire costly equipment or incur potentially significant costs to comply with environmental regulations.

Compliance with foreign, federal, state and local environmental laws and regulations represents a small part of Luna s present budget. If Luna fails to comply with any such laws or regulations, however, a government entity

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may levy a fine on Luna or require Luna to take costly measures to ensure compliance. Any such fine or expenditure may adversely affect Luna s development. Luna cannot predict the extent to which future legislation and regulation could cause Luna to incur additional operating expenses, capital expenditures or restrictions and delays in the development of Luna s products and properties.

Risks Relating to Luna s Intellectual Property

Luna s proprietary rights may not adequately protect Luna s technologies.

Luna s commercial success will depend in part on Luna s obtaining and maintaining patent, trade secret, copyright and trademark protection of Luna s technologies in the United States and other jurisdictions as well as successfully enforcing this intellectual property and defending it against third-party challenges. Luna will only be able to protect its technologies from unauthorized use by third parties to the extent that valid and enforceable intellectual property protections, such as patents or trade secrets, cover them. In particular, Luna places considerable emphasis on obtaining patent and trade secret protection for significant new technologies, products and processes. The degree of future protection of Luna s proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect Luna s rights or permit Luna to gain or keep Luna s competitive advantage. The degree of future protection of Luna s proprietary rights is also uncertain for products that are currently in the early stages of development because Luna cannot predict which of these products will ultimately reach the commercial market or whether the commercial versions of these products will incorporate proprietary technologies.

Luna s patent position is highly uncertain and involves complex legal and factual questions. Accordingly, Luna cannot predict the breadth of claims that may be allowed or enforced in Luna s patents or in third-party patents. For example:

- Luna or its licensors might not have been the first to make the inventions covered by each of Luna s pending patent applications and issued patents;
- Luna or its licensors might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of Luna s technologies;
- it is possible that none of Luna s pending patent applications or the pending patent applications of Luna s licensors will result in issued patents;
- patents may issue to third parties that cover how Luna might practice its technology;
- Luna s issued patents and issued patents of Luna s licensors may not provide a basis for commercially viable technologies, may not provide Luna with any competitive advantages, or may be challenged and invalidated by third parties; and

Luna may not develop additional proprietary technologies that are patentable.

Patents may not be issued for any pending or future pending patent applications owned by or licensed to Luna, and claims allowed under any issued patent or future issued patent owned or licensed by Luna may not be valid or sufficiently broad to protect Luna s technologies. Moreover, protection of certain of Luna s intellectual property may be unavailable or limited in the United States or in foreign countries, and Luna has not sought to obtain foreign patent protection for certain of Luna s products or technologies due to cost, concerns about enforceability or other reasons. Any issued patents owned by or licensed to Luna now or in the future may be challenged, invalidated, or circumvented, and the rights under such patents may not provide Luna with competitive advantages. In addition, competitors may design around Luna s technology or develop competing technologies. Intellectual property rights may also be unavailable or limited in some foreign countries, and in the case of certain products no foreign patents were filed or can be filed. This could make it easier for competitors to

capture or increase their market share with respect to related technologies. Luna could incur substantial costs to bring suits in which Luna may assert Luna s patent rights against others or defend Luna in suits brought against Luna. An unfavorable outcome of any litigation could have a material adverse effect on Luna s business and results of operations.

Luna also relies on trade secrets to protect its technology, especially where Luna believes patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. Luna regularly attempts to obtain confidentiality agreements and contractual provisions with Luna s collaborators, employees and consultants to protect Luna s trade secrets and proprietary know-how. These agreements may be breached or may not have adequate remedies for such breach. While Luna uses reasonable efforts to protect Luna s trade secrets, Luna s employees, consultants, contractors or scientific and other advisors, or those of Luna s strategic partners, may unintentionally or willfully disclose Luna s information to competitors. If Luna was to enforce a claim that a third party had illegally obtained and was using Luna s trade secrets, Luna s enforcement efforts would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States are sometimes unwilling to protect trade secrets. Moreover, if Luna s competitors independently develop equivalent knowledge, methods and know-how, it will be more difficult for Luna to enforce Luna s rights and Luna s business could be harmed.

If Luna is not able to defend the patent or trade secret protection position of Luna s technologies, then Luna will not be able to exclude competitors from developing or marketing competing technologies and Luna may not generate enough revenues from product sales to justify the cost of developing Luna s technologies and to achieve or maintain profitability.

Luna also relies on trademarks to establish a market identity for it and its products. To maintain the value of Luna s trademarks, Luna might have to file lawsuits against third parties to prevent them from using trademarks confusingly similar to or dilutive of Luna s registered or unregistered trademarks. Also, Luna might not obtain registrations for Luna s pending trademark applications, and Luna might have to defend its registered trademark and pending trademark applications from challenge by third parties. Enforcing or defending Luna s registered and unregistered trademarks might result in significant litigation costs and damages, including the inability to continue using certain trademarks.

Third parties may claim that Luna infringes their intellectual property, and Luna could suffer significant litigation or licensing expense as a result.

Various U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in Luna s technology areas. Such third parties may claim that Luna infringes their patents. Because patent applications can take several years to result in a patent issuance, there may be currently pending applications, unknown to Luna, which may later result in issued patents that Luna s technologies may infringe. For example, Luna is aware of competitors with patents in technology areas applicable to Luna s optical test equipment products. Such competitors may allege that Luna infringes these patents. There could also be existing patents of which Luna is not aware that Luna s technologies may inadvertently infringe. Luna has from time to time, and may in the future, be contacted by third parties, including patent assertion entities or intellectual property advisors, about licensing opportunities that also contain claims that Luna is infringing on third party patent rights. If third parties assert these claims against Luna, Luna could incur extremely substantial costs and diversion of management resources in defending these claims, and the defense of these claims could have a material adverse effect on Luna s business, financial condition and results of operations. Even if Luna believes it has not infringed on a third party s patent rights, Luna may have to settle a claim on unfavorable terms because Luna cannot afford to litigate the claim. In addition, if third parties assert claims against Luna and Luna is unsuccessful in defending against these claims, these third parties may be awarded substantial damages as well as injunctive or other equitable relief against Luna, which could effectively block Luna s ability to make, use, sell, distribute or market Luna s products and services in the United States or abroad.

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Commercial application of nanotechnologies in particular, or technologies involving nanomaterials, is new and the scope and breadth of patent protection is uncertain. Consequently, the patent positions of companies involved in nanotechnologies have not been tested, and there are complex legal and factual questions for which important legal principles will be developed or may remain unresolved. In addition, it is not clear whether such patents will be subject to interpretations or legal doctrines that differ from conventional patent law principles. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of Luna s nanotechnology-related intellectual property. Accordingly, Luna cannot predict the breadth of claims that may be allowed or enforced in Luna s nanotechnology-related patents or in third party patents. In the event that a claim relating to intellectual property is asserted against Luna, or third parties not affiliated with Luna hold pending or issued patents that relate to Luna s products or technology, Luna may seek licenses to such intellectual property or challenge those patents. However, Luna may be unable to obtain these licenses on commercially reasonable terms, if at all, and Luna s challenge of the patents may be unsuccessful. Luna s failure to obtain the necessary licenses or other rights could prevent the sale, manufacture or distribution of Luna s products and, therefore, could have a material adverse effect on Luna s business, financial condition and results of operations.

A substantial portion of Luna s technology is subject to retained rights of Luna s licensors, and Luna may not be able to prevent the loss of those rights or the grant of similar rights to third parties.

A substantial portion of Luna s technology is licensed from academic institutions, corporations and government agencies. Under these licensing arrangements, a licensor may obtain rights over the technology, including the right to require Luna to grant a license to one or more third parties selected by the licensor or that Luna provides licensed technology or material to third parties for non-commercial research. The grant of a license for any of Luna s core technologies to a third party could have a material and adverse effect on Luna s business. In addition, some of Luna s licensors retain certain rights under the licenses, including the right to grant additional licenses to a substantial portion of Luna s core technology to third parties for non-commercial academic and research use. It is difficult to monitor and enforce such non-commercial academic and research uses, and Luna cannot predict whether the third-party licensees would comply with the use restrictions of such licenses. Luna has incurred and could incur substantial expenses to enforce Luna s rights against them. Luna also may not fully control the ability to assert or defend those patents or other intellectual property which Luna has licensed from other entities, or which Luna has licensed to other entities.

In addition, some of Luna s licenses with academic institutions give Luna the right to use certain technology previously developed by researchers at these institutions. In certain cases Luna also has the right to practice improvements on the licensed technology to the extent they are encompassed by the licensed patents and are within Luna s field of use. Luna s licensors may currently own and may in the future obtain additional patents and patent applications that are necessary for the development, manufacture and commercial sale of Luna s anticipated products. Luna may be unable to agree with one or more academic institutions from which Luna has obtained licenses whether certain intellectual property developed by researchers at these academic institutions is covered by Luna s existing licenses. In the event that the new intellectual property is not covered by Luna s existing licenses, Luna would be required to negotiate a new license agreement. Luna may not be able to reach agreement with current or future licensors on commercially reasonable terms, if at all, or the terms may not permit Luna to sell Luna s products at a profit after payment of royalties, which could harm Luna s business.

Some of Luna s patents may cover inventions that were conceived or first reduced to practice under, or in connection with, U.S. government contracts or other federal funding agreements. With respect to inventions conceived or first reduced to practice under a federal funding agreement, the U.S. government may retain a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the invention throughout the world. Luna may not succeed in Luna s efforts to retain title in patents, maintain ownership of intellectual property or in limiting the U.S. government s rights in Luna s proprietary technologies and intellectual

property when an issue exists as to whether such intellectual property was developed in the performance of a federal funding agreement or developed at private expense.

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Risks Relating to Luna s Common Stock

Luna may become involved in securities class action litigation that could divert management s attention and harm Luna s business and Luna s insurance coverage may not be sufficient to cover all costs and damages.

The stock market has from time to time experienced significant price and volume fluctuations that have affected the market prices for the common stock of technology companies. These broad market fluctuations may cause the market price of Luna s common stock to decline. In the past, following periods of volatility in the market price of a particular company s securities, securities class action litigation has often been brought against that company. Securities class litigation also often follows certain significant business transactions, such as the sale of a business division or a change in control transaction. Luna may become involved in this type of litigation in the future. Litigation often is expensive and diverts management s attention and resources, which could adversely affect Luna s business.

Luna may not be able to comply with all applicable listing requirements or standards of The NASDAQ Capital Market and NASDAQ could delist Luna s common stock.

Luna s common stock is listed on The NASDAQ Capital Market. In order to maintain that listing, Luna must satisfy minimum financial and other continued listing requirements and standards. There can be no assurances that Luna will be able to comply with applicable listing standards. In the event that Luna s common stock is not eligible for quotation on another market or exchange, trading of Luna s common stock could be conducted in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for, Luna s common stock, and there would likely also be a reduction in Luna s coverage by security analysts and the news media, which could cause the price of Luna s common stock to decline further. Also, it may be difficult for Luna to raise additional capital if Luna is not listed on a major exchange.

Luna s common stock price has been volatile and Luna expects that the price of its common stock will fluctuate substantially in the future, which could cause you to lose all or a substantial part of your investment.

The public trading price for Luna s common stock is volatile and may fluctuate significantly. Since January 1, 2009, Luna s common stock has traded between a high of $5.00 per share and a low of $0.26 per share. Among the factors, many of which Luna cannot control, that could cause material fluctuations in the market price for Luna s common stock are:

- sales of Luna s common stock by Luna s significant stockholders, or the perception that such sales may occur, including sales pursuant to the Form S-3 registration statement described above;
- changes in earnings estimates, investors perceptions, recommendations by securities analysts or Luna s failure to achieve analysts earnings estimates;
- changes in Luna s status as an entity eligible to receive SBIR contracts and grants;
- quarterly variations in Luna s or Luna s competitors results of operations;

general market conditions and other factors unrelated to Luna s operating performance or the operating performance of Luna s competitors;

announcements by Luna, or by Luna s competitors, of acquisitions, new products, significant contracts, commercial relationships or capital commitments;

pending or threatened litigation;

any major change in Luna s board of directors or management or any competing proxy solicitations for director nominees;

changes in governmental regulations or in the status of Luna s regulatory approvals;

announcements related to patents issued to Luna or Luna s competitors;

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a lack of, limited or negative industry or securities analyst coverage;

discussions of Luna or stock price by the financial and scientific press and online investor communities such as chat rooms; and

general developments in Luna s industry.

In addition, the stock prices of many technology companies have experienced wide fluctuations that have often been unrelated to the operating performance of those companies. These factors may materially and adversely affect the market price of API s common stock.

If Luna s internal control over financial reporting is found not to be effective or if Luna makes disclosure of existing or potential significant deficiencies or material weaknesses in those controls, investors could lose confidence in Luna s financial reports, and Luna s stock price may be adversely affected.

Section 404 of the Sarbanes-Oxley Act of 2002 requires Luna to include an internal control report with Luna s Annual Report on Form 10-K. That report must include management s assessment of the effectiveness of Luna s internal control over financial reporting as of the end of the fiscal year.

Luna evaluates its existing internal control over financial reporting based on the framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. During the course of Luna s ongoing evaluation of the internal controls, Luna may identify areas requiring improvement, and may have to design enhanced processes and controls to address issues identified through this review. Remedying any deficiencies, significant deficiencies or material weaknesses that Luna identifies may require Luna to incur significant costs and expend significant time and management resources. Luna cannot assure you that any of the measures Luna implements to remedy any such deficiencies will effectively mitigate or remedy such deficiencies. Investors could lose confidence in Luna s financial reports, and Luna s stock price may be adversely affected, if Luna s internal controls over financial reporting are found not to be effective by management or if Luna makes disclosure of existing or potential significant deficiencies or material weaknesses in those controls.

Anti-takeover provisions in Luna s amended and restated certificate of incorporation and bylaws and Delaware law could discourage or prevent a change in control, even if an acquisition would be beneficial to Luna s stockholders, which could affect Luna s stock price adversely and prevent attempts by Luna s stockholders to replace or remove Luna s current management.

Luna s amended and restated certificate of incorporation and bylaws and Delaware law contain provisions that might delay or prevent a change in control, discourage bids at a premium over the market price of Luna s common stock and adversely affect the market price of Luna s common stock and the voting and other rights of the holders of Luna s common stock. These provisions include:

a classified board of directors serving staggered terms;

advance notice requirements to stockholders for matters to be brought at stockholder meetings;

a supermajority stockholder vote requirement for amending certain provisions of Luna s amended and restated certificate of incorporation and bylaws; and

the right to issue preferred stock without stockholder approval, which could be used to dilute the stock ownership of a potential hostile acquirer.

Luna is also subject to provisions of the Delaware General Corporation Law that, in general, prohibit any business combination with a beneficial owner of 15% or more of Luna s common stock for three years unless the holder s acquisition of Luna s stock was approved in advance by Luna s board of directors or certain other conditions are satisfied.

The existence of these provisions could adversely affect the voting power of holders of common stock and limit the price that investors might be willing to pay in the future for shares of Luna s common stock.

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Risks Relating to API s Business

Risks Relating to API s Financial Condition and Performance

API s substantial debt obligations could impair API s financial flexibility and restrict API s business significantly.

API now has, and will continue to have if the Merger is not consummated, significant debt obligations, which are summarized in the table below:

	SVB Term Loan Agreement	SVB Revolving Loan Agreement	SVG Ex-Im Revolving Loan Agreement	PFG Loan Agreement	MSF & MEDC Loan Agreement
Interest Rate as of February 5, 2015	6.50%	8.25%	8.25%	11.75%	6.00%
Principal Outstanding at February 5, 2015	$ 55,556	$ 1,773,104	$ 946,905	$ 1,130,952	$ 654,000
Maturity Date (based on amendments through February 5, 2015)	March 2015	June 2016	June 2016	August 2016	Payable in 12 equal monthly installments starting November 1, 2015

On January 31, 2012, API entered into a Loan and Security Agreement with Silicon Valley Bank (SVB, such agreement as amended from time to time, the SVB Loan Agreement) and a related Loan and Security Agreement (Ex-IM Loan Facility) with SVB (as amended from time to time, the SVB Ex-Im Loan Agreement , and together with the SVB Loan Agreement, the SVB Loan Agreements) that provided for a three-year $1 million term loan that expires in March 2015, and a $5 million line of credit with a $3 million export-import facility sublimit that currently expires in June 2016. Subsequent to the execution of the original SVB Loan Agreements, there have been ten amendments that have modified the financial covenants, allowed for the acquisition of substantially all of the operating assets of Silonex, Inc. (Silonex), allowed API to enter into the PFG Loan Agreement (as described below), and extended the maturity date of the line of credit from January 2014 to June 2016.

On February 8, 2013, API entered into a $2.5 million secured Loan and Security Agreement with Partners for Growth III, L.P. (PFG, such agreement, as amended, the PFG Loan Agreement) that is subordinated to the SVB Loan Agreements and expires in August 2016. The interest rate on the loan is 11.75%. As part of the consideration for and as a closing condition to the PFG Loan Agreement, API agreed to grant PFG and certain of its affiliates warrants to purchase up to 1,195,000 shares of API s Class A Stock (the Warrants) in a private placement pursuant to Section 4(a)(2) of the Securities Act. 995,000 of the shares issuable under the Warrants have an initial exercise price of $0.50 per share (the Tier 1 Warrants), and the remaining 200,000 shares issuable under the Warrants have an exercise price of $1.00 per share ($1.00 Warrants).

The Warrants contain full-ratchet anti-dilution provisions that will result in proportional adjustments to the exercise price and the number of shares issuable under the PFG Warrant Agreements in the event that API conducts a stock split, subdivision, stock dividend or combination, or similar transaction. The PFG Warrant Agreements also include a net exercise provision pursuant to which warrant holders will receive the number of shares equal to (x) the product of (A) the number of Warrants exercised multiplied by (B) the difference between (1) the fair market value of a share of Class A Stock (with fair value generally being equal to the highest closing price of API s Class A Stock during the 45 consecutive trading days prior to the date of exercise) and (2) the strike price of the Warrant, (y) divided by the fair market value of a share of Class A Stock. In addition, in specified events, including the closing of the Merger, each warrant holder will have the right to put its Warrants to API in exchange for a per share cash payment that varies with the number of shares issuable under each Warrant, but in the aggregate will not exceed $250,000.

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In fiscal years 2005 and 2006, API entered into two unsecured loan agreements that are currently held by the Michigan Economic Development Corporation (MEDC and such agreement the MEDC Loan Agreement) and a MEDC affiliate, the Michigan Strategic Fund (MSF and such agreement the MSF Loan Agreement) pursuant to which API borrowed an aggregate of amount of $2.2 million. As amended, payments on the approximately $327,000 in principal outstanding under each of the MEDC Loan Agreement and MSF Loan Agreement are deferred and payable monthly in equal installments plus accrued interest for the 12 months beginning November 1, 2015.

The obligations and restrictions under the SVB Loan Agreements, the PFG Loan Agreement, the MEDC Loan Agreement, the MSF Loan Agreement, and API s other debt obligations could have important consequences for API, including:

- limiting API s ability to obtain necessary financing in the future; and
- requiring API to dedicate a substantial portion of API s cash flow to payments on API s debt obligations, thereby reducing the availability of API s cash flow to fund working capital, capital expenditures and other corporate requirements or expansion of API s business.

If API is unable to meet API s debt obligations, API could be forced to restructure or refinance API s obligations, to seek additional equity financing or to sell assets, which API may not be able to do on satisfactory terms or at all. As a result, API could default on those obligations and in the event of such default, API s lenders could accelerate API s debt or take other actions that could restrict API s operations. The foregoing risks would be intensified to the extent API borrows additional money or incurs additional debt.

API has previously violated certain covenants under the SVB Loan Agreements and the PFG Loan Agreement.

The SVB Loan Agreements and PFG Loan Agreement, each as amended, contained financial covenants through December 2013 and January 2014 that required API to maintain a minimum liquidity ratio of 2.25 to 1.00 and a minimum trailing three month adjusted EBITDA, measured monthly of (1) a negative $300,000 for each fiscal month during the period July through October 2013; and (2) $1 for each fiscal month during the period November 2013 through February 2014.

As of December 27, 2013 and January 24, 2014, API was not in compliance with then existing minimum adjusted EBITDA covenant of $1 for the three months ended December 27, 2013 and January 24, 2014, respectively, and as of January 24, 2014, API was also not in compliance with the then existing minimum liquidity ratio of 2.25 to 1.00. In addition, the foregoing defaults triggered the cross-default provisions under each of the SVB Loan Agreements and PFG Loan Agreement. Consequently, under the terms of each agreement, SVB and PFG were both entitled to proceed against the collateral provided as security for the loans issued thereunder upon an event of default subject, in PFG s case, to any rights that SVB may have in that same collateral.

On February 10, 2014, API entered into separate Forbearance Agreements with SVB and PFG pursuant to which and subject to certain exceptions, each of SVB and PFG agreed not to proceed against the collateral securing their respective loans until February 28, 2014. On March 5, 2014, API entered into separate amendment agreements with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of API s $5 million line of credit to May 31, 2014; (ii) the minimum trailing three month adjusted EBITDA covenant was reset to a negative $1.2 million for the fiscal month ended February 28, 2014, a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014 and a positive $1 for the fiscal month ending May 31,

2014; (iii) the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of February 28, 2014, and 2.25 to 1.00 for each month thereafter through May 2014; and (iv) each of SVB and PFG waived the existing defaults. In addition to the payment of an amendment fee, API agreed to pay each of SVB and PFG additional fees of up to $50,000 and $75,000, respectively, no later than May 31, 2014 (the Tail Fees).

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On April 30, 2014, API entered into separate amendment agreements with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of API s $5 million line of credit to July 31, 2014; (ii) the minimum trailing three month adjusted EBITDA covenant was reset to a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014, a negative $250,000 for the fiscal months ending May 31, 2014 and June 30, 2014 and a positive $1 for the fiscal month ending July 31, 2014; and (iii) the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of March 31, 2014 through May 31, 2014, and 2.00 to 1.00 for each month thereafter through July 2014. In addition to the payment of an amendment fee, API agreed to pay each of SVB and PFG their respective Tail Fee and, commencing with the month ended May 31, 2014, an additional fee of $15,000 for SVB and $20,000 for PFG (the Leverage Ratio Fees), for each month that the liquidity ratio is less than 2.00 to 1.00 as of the last day of the month under measurement.

On November 10, 2014, API signed separate amendments to the Loan Agreements with SVB and PFG where, among other things, (i) all parties agreed to a six month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $800,000 through March 2015, negative $300,000 for April through June 2015, and $100,000 each month thereafter, (ii) all parties agreed to adjust the minimum liquidity ratio, as defined, to be 2.00 to 1.00 through February 2015 with a reduction to 1.50 to 1.00 for each month thereafter and (iii) all parties agreed to continue the existing interest rate matrix. The amendments provided for a reimbursement of legal expenses and a modification fee of $10,000 with an additional $10,000 payable if API s March 2015 quarterly adjusted EBITDA is less than one dollar.

As of December 26, 2014, API was in compliance with the November 10, 2014 revisions to the liquidity and adjusted EBITDA covenants with PFG and SVB. API experienced a $2.1 million reduction in HSOR revenues in the third quarter relative to the second quarter which was more than anticipated in the November 2014 covenant reset. As a result, API obtained further covenant relief on February 5, 2015 from PFG and SVB by reducing the rolling six month adjusted EBITDA requirement for January through June 2015 to a negative $1,250,000, $1 of adjusted EBITDA required in July 2015 and $100,000 each month thereafter until maturity with up to $150,000 in merger transaction costs carved out of the calculation. The parties also agreed to reduce the minimum liquidity ratio to 1.30 to 1.00 for January 2015 until the maturity of the line of credit. Pursuant to the amendments, the interest rate with SVB was changed to prime plus 5%, or 8.25% per annum for the line of credit while the interest rate with PFG remained at 11.75% per annum. API is required to pay each lender a $10,000 fee plus associated legal costs for the amendment with an added $15,000 payable to each lender upon the maturity or payoff of the term loan. Should API experience a reduction in revenue or an increase in expenses from its most recent forecast, which was the basis for the February 5, 2015 covenants, the loan would be callable, creating a liquidity issue for API.

While API believes API has good relations with SVB and PFG, API can provide no assurance that API will be able to obtain waivers or amendments if future covenant violations occur under the SVB Loan Agreements and/or the PFG Loan Agreement. Failure to obtain such waivers or amendments, if necessary, could materially affect API s business, financial condition and results of operations.

API has incurred significant losses in prior periods and may incur losses in the future.

API has incurred significant losses in prior periods. API recorded a net loss of $1,337,000 for the nine months ended December 26, 2014 and ended the period with an accumulated deficit of $49.8 million. In addition, API recorded net losses of $4.3 million and $4.4 million for the years ended March 31, 2014 and 2013, respectively. There can be no assurance that API will have sufficient revenue growth to offset expenses or to achieve profitability in future periods.

API must continue to increase API s revenues in order to become profitable. API cannot reliably predict when, or if, API will become profitable. Even if API achieves profitability, API may not be able to sustain it. If API cannot generate operating income or positive cash flows in the future, API will be unable to meet API s working capital

requirements.

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API may not be able to generate the amount of cash needed to fund API s existing indebtedness and future operations.

API s ability either to make payments on or to refinance API s indebtedness, or to fund planned capital expenditures and research and development efforts, will depend on API s ability to generate cash in the future. API s ability to generate cash is in part subject to general economic, financial, competitive, regulatory and other factors that are beyond API s control, and as such has fluctuated significantly as indicted in the table below:

Net Cash Provided by (used in) Operating Activities

FY 2011	FY 2012	FY 2013	FY 2014	Nine months ended December 26, 2014
($473,000)	$ 130,000	($ 2,221,000)	($ 845,000)	($ 1,197,000)

If the Merger is not approved by stockholders or does not proceed to a timely closing, then API may need to seek additional funding sources to meet its obligations through fiscal 2016. Consequently, the trading price of API s Class A Stock may be adversely affected and API s ability to raise additional financing may be impaired. In addition, API will be forced to adopt an alternative strategy that may include actions such as:

reducing capital expenditures;

further reducing research and development efforts;

selling assets such as existing product lines or technology developments;

restructuring or refinancing API s remaining indebtedness; and

seeking additional funding.

In light of API s historical performance, API cannot assure you that API s business will generate sufficient cash flow from operations, or that API will be able to make future borrowings in amounts sufficient to enable API to pay the principal and interest on API s current indebtedness or to fund API s other liquidity needs. API may need to refinance all or a portion of its indebtedness on or before maturity.

If API raises additional funds through the issuance of equity or convertible debt securities, the percentage ownership of API s stockholders could be significantly diluted, and these newly-issued securities may have rights, preferences or privileges senior to those of existing stockholders. API cannot assure you that additional financing will be available on terms favorable to API, or at all. If, when required, adequate funds are unavailable, or are not available on acceptable terms, API s ability to fund API s operations, take advantage of unanticipated opportunities, develop or enhance API s products, or otherwise respond to competitive pressures could be significantly limited.

API may dispose of or discontinue existing product lines and technology developments, which may adversely impact API s future results.

On an ongoing basis, API evaluates API s various product offerings and technology developments in order to determine whether any should be discontinued or, to the extent possible, divested. In addition, if API is unable to generate the amount of cash needed to fund API s existing indebtedness and future operations, API may be forced to sell one or more of API s product lines or technology developments.

API cannot guarantee that it has correctly forecasted, or will correctly forecast in the future, the right product lines and technology developments to dispose or discontinue or that API s decision to dispose of or discontinue various investments, products lines and technology developments is prudent if market conditions change. In addition, there are no assurances that the discontinuance of various product lines will reduce API s operating expenses or will not cause API to incur material charges associated with such decision. Furthermore, the discontinuance of existing product lines entails various risks, including the risk that API will not be able to find a purchaser for a product line or the purchase price obtained will not be equal to at least the book value of the net assets for the product line. Other risks include managing the expectations of, and maintaining good relations

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with, API s customers who previously purchased products from API s disposed or discontinued product lines, which could prevent API from selling other products to them in the future. API may also incur other significant liabilities and costs associated with API s disposal or discontinuance of product lines, including employee severance costs and excess facilities costs.

API s cost saving initiatives may not be effective, and API s ability to develop products could be adversely affected by reduced research and development and capital expenditures.

To conserve cash and more closely align API s spending towards API s strategic objectives, API has implemented a number of cost reduction initiatives over the past several years, including a workforce reduction in API s administrative, research and development and sales and marketing staffs and, a refocusing of API s research and development plans, and a reduction in capital expenditures. API cannot assure you that the assumptions underlying API s decisions as to which reductions to make as part of these cost reduction initiatives will prove to be correct and, accordingly, API may determine that API has reduced or eliminated resources that are necessary to, or desirable for, API s business. In particular, the reductions that API has made to API s research and development staff and, research and development expenses and capital expenditures could hinder API s ability to update or introduce new products.

Any impairment of goodwill and other intangible assets, could negatively impact API s results of operations.

As of December 26, 2014, March 31, 2014 and March 31, 2013, API s consolidated balance sheet included $4.6 million in goodwill. Goodwill represents the excess purchase price over amounts assigned to tangible or identifiable intangible assets acquired and liabilities assumed from API s business acquisitions. API s goodwill is subject to an impairment test on an annual basis and is also tested whenever events and circumstances indicate that goodwill may be impaired. Any goodwill value in excess of fair value as determined in an impairment test must be written off in the period of determination.

Intangible assets (other than goodwill) are generally amortized over the useful life of such assets. The carrying value of the intangible assets aggregated to $2.7 million as of December 26, 2014. From time to time, API may acquire, or make an investment in, a business which may require API to record goodwill based on the purchase price and the value of the acquired tangible and intangible assets. API may subsequently experience unforeseen issues with such business which adversely affect the anticipated returns of the business or value of the intangible assets and trigger an evaluation of the recoverability of the recorded goodwill and intangible assets for such business. Future determinations of significant write-offs of goodwill or intangible assets as a result of an impairment test or any accelerated amortization of other intangible assets could have a negative impact on API s results of operations.

API is subject to the cyclical nature of the markets in which API competes and any future downturn may reduce demand for API s products and revenue.

Many factors beyond API s control affect API s industry, including consumer confidence in the economy, interest rates, fuel prices and the general availability of credit. The overall economic climate and changes in Gross National Product growth has a direct impact on API s customers and the demand for API s products. API cannot be sure that its business will not be adversely affected as a result of an industry or general economic downturn.

API s customers may reduce capital expenditures and have difficulty satisfying liquidity needs because of continued turbulence in the U.S. and global economies, resulting in reduced sales of API s products and harm to API s financial condition and results of operations.

In particular, API s historical results of operations have been subject to substantial fluctuations, and API may experience substantial period-to-period fluctuations in future results of operations. Any future downturn in the markets in which API competes could significantly reduce the demand for API s products and therefore may

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result in a significant reduction in revenue. It may also increase the volatility of the price of API s common stock. API s revenue and results of operations may be materially and adversely affected in the future due to changes in demand from customers or cyclical changes in the markets utilizing API s products.

In addition, the telecommunications industry, has, from time to time, experienced, and may again experience, a pronounced downturn. To respond to a downturn, many service providers may slow their capital expenditures, cancel or delay new developments, reduce their workforces and inventories and take a cautious approach to acquiring new equipment and technologies from original equipment manufacturers like API, which would have a negative impact on API s business. Weakness in the global economy or a future downturn in the telecommunications industry may cause API s results of operations to fluctuate from quarter-to-quarter and year-to-year, harm API s business, and may increase the volatility of the price of API s common stock.

Customer acceptance of API s products is dependent on API s ability to meet changing requirements, and any decrease in acceptance could adversely affect API s revenue.

Customer acceptance of API s products is significantly dependent on API s ability to offer products that meet the changing requirements of API s customers, including telecommunication, military, medical and industrial corporations, as well as government agencies. Any decrease in the level of customer acceptance of API s products could have a material adverse effect on API s business.

API s products must meet exacting specifications, and defects and failures may occur, which may cause customers to return or stop buying API s products.

API s customers generally establish demanding specifications for quality, performance and reliability that API s products must meet. However, API s products are highly complex and may contain defects and failures when they are first introduced or as new versions are released. API s products are also subject to rough environments as they are integrated into API s customer products for use by the end customers. If defects and failures occur in API s products, API could experience lost revenue, increased costs, including warranty expense and costs associated with customer support, delays in or cancellations or rescheduling of orders or shipments, product returns or discounts, diversion of management resources or damage to API s reputation and brand equity, and in some cases consequential damages, any of which would harm API s operating results. In addition, delays in API s ability to fill product orders as a result of quality control issues may negatively impact API s relationship with API s customers. API cannot assure you that it will have sufficient resources, including any available insurance, to satisfy any asserted claims.

Rapidly changing standards and regulations could make API s products obsolete, which would cause API s revenue and results of operations to suffer.

API designs products to conform to API s customer s requirements and API s customer s systems may be subject to regulations established by governments or industry standards bodies worldwide. Because certain of API s products are designed to conform to current specific industry standards, if competing or new standards emerge that are preferred by API s customers, API would have to make significant expenditures to develop new products. If API s customers adopt new or competing industry standards with which API s products are not compatible, or the industry groups adopt standards or governments issue regulations with which API s products are not compatible, API s existing products would become less desirable to API s customers and API s revenue and results of operations would suffer.

The markets for many of API s products are characterized by changing technology which could cause obsolescence of API s products, and API may incur substantial costs in delivering new products.

The markets for many of API s products are characterized by changing technology, new product introductions and product enhancements, and evolving industry standards. The introduction or enhancement of products embodying new technology or the emergence of new industry standards could render existing products obsolete,

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and result in a write down to the value of API s inventory, or result in shortened product life cycles. Accordingly, API s ability to compete is in part dependent on API s ability to continually offer enhanced and improved products.

The success of API s new product offerings will depend upon several factors, including API s ability to:

- accurately anticipate customer needs;
- innovate and develop new technologies and applications;
- successfully commercialize new technologies in a timely manner;
- price API s products competitively and manufacture and deliver API s products in sufficient volumes and on time; and
- differentiate API s offerings from API s competitors offerings.

Some of API s products are used by API s customers to develop, test and manufacture their products. API therefore must anticipate industry trends and develop products in advance of the commercialization of API s customers products. In developing any new product, API may be required to make a substantial investment before API can determine the commercial viability of the new product. If API fails to accurately foresee API s customers needs and future activities, API may invest heavily in research and development of products that do not lead to significant revenues.

If any of API s products are found to have, or are suspected to have, security vulnerabilities, API could incur significant costs and irreparable damage to API s reputation.

If any of API s products are found to have significant security vulnerabilities, then API may need to dedicate engineering and other resources to eliminating such vulnerabilities and to repairing or replacing products already sold or licensed to API s customers. In addition, API s customers and potential customers could perceive API s products as unreliable, making it more difficult for API to sell API s products.

API s inability to find new customers or retain existing customers could have a material adverse effect on API s business.

Customers normally purchase API s products and incorporate them into products that they, in turn, sell in their own markets on an ongoing basis. As a result, API s sales are dependent upon the success of API s customers products and API s future performance is dependent upon API s success in finding new customers and receiving new orders from existing customers.

In several of API s markets, quality and/or reliability of API s products are a major concern for API s customers, not only upon the initial manufacture of the product, but for the life of the product. Many of API s products are used in remote locations for higher value assembly, making servicing of API s products unfeasible. Any failure of the quality and/or reliability of API s products could have an adverse effect on API s business.

If API s customers do not qualify API s products or if their customers do not qualify their products, API s results of operations may suffer.

Most of API s customers do not purchase API s products prior to qualification of API s products and satisfactory completion of factory audits and vendor evaluation. API s existing products, as well as each new product, must pass through varying levels of qualification with API s customers. In addition, because of the rapid technological changes in API s market, a customer may cancel or modify a design project before API begins large-scale manufacturing and receives revenues from the customer. It is unlikely that API would be able to recover the expenses for cancelled or unutilized custom design projects. It is difficult to predict with any certainty whether

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API s customers will delay or terminate product qualification or the frequency with which customers will cancel or modify their projects. Any such delay, cancellation or modification could have a negative effect on API s results of operations.

In addition, once a customer qualifies a particular supplier s product or component, these potential customers design the product into their system, which is known as a design-in win. Suppliers whose products or components are not designed in are unlikely to make sales to that customer until at least the adoption of a future redesigned system. Even then, many customers may be reluctant to incorporate entirely new products into their new systems, as doing so could involve significant additional redesign efforts and increased costs. If API fails to achieve design-in wins in API s potential customers qualification processes, API will likely lose the opportunity for significant sales to those customers for a lengthy period of time.

If the end user customers that purchase systems from API s customers fail to qualify or delay qualifications of any products sold by API s customers that contain API s products, API s business could be harmed. The qualification and field testing of API s customers systems by end user customers is long and unpredictable. This process is not under API s control or that of API s customers; and, as a result, the timing of API s sales is unpredictable. Any unanticipated delay in qualification of one of API s customers products could result in the delay or cancellation of orders from API s customers for products included in their equipment, which could harm API s results of operations.

API s sales to overseas markets expose API to additional, unpredictable risks which could have a material adverse effect on API s business and expose API to liability under the Foreign Corrupt Practices Act.

A portion of API s sales are being derived from overseas markets. These international sales are primarily focused in Asia, Europe and the Middle East. These operations are subject to unpredictable risks that are inherent in operating in foreign countries and which could have a material adverse effect on API s business, including the following:

- foreign countries could change regulations or impose currency restrictions and other restraints;
- changes in foreign currency exchange rates and hyperinflation or deflation in the foreign countries in which API operates;
- exchange controls;
- some countries impose burdensome tariffs and quotas;
- political changes and economic crises may lead to changes in the business environment in which API operates;
- international conflict, including terrorist acts, could significantly impact API s financial condition and results of operations; and

economic downturns, political instability and war or civil disturbances may disrupt distribution logistics or limit sales in individual markets.

In addition, API utilizes third-party distributors to act as API s representative for the geographic region that they have been assigned as well as value added resellers that have territorial restrictions. Sales through these channels represent approximately 19% of total revenue for the nine months ended December 26, 2014. Significant terms and conditions of distributor agreements include FOB source, net 30 days payment terms, with no return or exchange rights, and no price protection. Since the product title transfers to the distributor at the time of shipment, the products are not considered inventory on consignment. API s success is dependent on these distributors finding new customers and receiving new orders from existing customers.

API is subject to the Foreign Corrupt Practice Act (FCPA) and other laws that prohibit improper payments to foreign governments and their officials for the purpose of obtaining or retaining business. API s activities in

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API s overseas markets create the risk of unauthorized payments or offers of payments by one of API s employees, consultants, sales agents or distributors, because these parties are not always subject to API s control. While it is API s policy to implement safeguards to discourage these practices, API s existing safeguards and any future improvements may prove to be less than effective, and API s employees, consultants, sales agents or distributors may engage in conduct for which API might be held responsible. Violations of the FCPA may result in severe criminal or civil sanctions, and API may be subject to other liabilities, which could negatively affect API s business, operating results and financial condition. In addition, certain governmental authorities may seek to hold API liable for successor liability FCPA violations committed by companies in which API invests or that API acquires.

Customer demand is difficult to accurately forecast and, as a result, API may be unable to optimally match production with customer demand, which could adversely affect API s business and financial results.

API makes planning and spending decisions, including determining the levels of business that API will seek and accept, production schedules, and inventory levels, component procurement commitments, personnel needs and other resource requirements, based on API s estimates of customer requirements. The short-term nature of commitments by many of API s customers and the possibility of unexpected changes in demand for their products reduce API s ability to accurately estimate future customer requirements. On occasion, customers may require rapid increases in production, which can strain API s resources, cause API s manufacturing to be negatively impacted by materials shortages, necessitate higher or more restrictive procurement commitments, increase API s manufacturing yield loss and scrapping of excess materials, and reduce API s gross margin. API may not have sufficient capacity at any given time to meet the volume demands of API s customers, or one or more of API s suppliers may not have sufficient capacity at any given time to meet API s volume demands. Conversely, a downturn in the markets in which API s customers compete can cause, and in the past have caused, API s customers to significantly reduce or delay the amount of products ordered from API or to cancel existing orders, leading to lower utilization of API s facilities. Because many of API s costs and operating expenses are relatively fixed, reduction in customer demand due to market downturns or other reasons would have a material adverse effect on API s gross margin, operating income and cash flow.

Customer orders and forecasts are subject to cancellation or modification at any time which could result in higher manufacturing costs.

API s sales are made primarily pursuant to standard purchase orders for delivery of products. However, by industry practice, orders may be canceled or modified at any time. When a customer cancels an order, they are responsible for all finished goods, all costs, direct and indirect, incurred by API, as well as a reasonable allowance for anticipated profits. No assurance can be given that API will receive these amounts after cancellation. Furthermore, uncertainty in customer forecasts of their demands and other factors may lead to delays and disruptions in manufacturing, which could result in delays in product shipments to customers and could adversely affect API s business.

Fluctuations and changes in API s customers demand are common in API s industry. Such fluctuations, as well as quality control problems experienced in API s manufacturing operations may cause API to experience delays and disruptions in API s manufacturing process and overall operations and reduce API s output capacity. As a result, product shipments could be delayed beyond the shipment schedules requested by API s customers or could be cancelled, which would negatively affect API s sales, operating income, strategic position at customers, market share and reputation. In addition, disruptions, delays or cancellations could cause inefficient production which in turn could result in higher manufacturing costs, lower yields and potential excess and obsolete inventory or manufacturing equipment. In the past, API has experienced such delays, disruptions and cancellations.

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API depends upon an outside contract manufacturer for a portion of the manufacturing process for some of API s products. API s operations and revenue related to these products could be adversely affected if API encounters problems with this contract manufacturer.

Many of API s products are manufactured internally. However API also relies upon a contract manufacturer in China to produce the finished portion of some of API s optoelectronic components. API s reliance on a contract manufacturer for these products makes API vulnerable to possible capacity constraints and reduced control over delivery schedules, manufacturing yields, manufacturing quality/controls and costs. If the contract manufacturer for API s products were unable or unwilling to manufacture API s products in required volumes and at high quality levels or to continue API s existing supply arrangement, API would have to identify, qualify and select an acceptable alternative contract manufacturer or move these manufacturing operations to API s internal manufacturing facilities. An alternative contract manufacturer may not be available to API when needed or may not be in a position to satisfy API s quality or production requirements on commercially reasonable terms, including price. Any significant interruption in manufacturing API s products would require API to reduce API s supply products to API s customers, which in turn would reduce API s revenue, harm API s relationships with the customers of these products and cause API to forego potential revenue opportunities.

API depends on key in-house manufacturing capabilities and a loss of these capabilities could have an adverse effect on API s existing operations and new business growth.

API depends on key in-house manufacturing equipment and assembly processes. API believes that these key manufacturing and assembly processes give API the flexibility and responsiveness to meet API s customer delivery schedule and performance specification with a custom product. This value proposition is an important component of API s offering to API s customers. A loss of these capabilities could have an adverse effect on API s existing operations and new business growth.

Changes in the spending priorities of the federal government can materially adversely affect API s business.

For API s fiscal 2014, approximately 14% of API s sales were related to products and services purchased by the federal government directly or indirectly. API s business relies upon continued federal government expenditures on defense, intelligence, homeland security, aerospace and other programs that API supports. For fiscal 2013, API s sales to federal government contractors totaled 25% of sales. In addition, foreign military sales are affected by U.S. government regulations, regulations by purchasing foreign governments and political uncertainties in the U.S. and abroad. There can be no assurance that the federal government budget (including defense and military) will continue to grow or that sales of defense related items to foreign governments will continue at present levels. The terms of defense contracts with the U.S. government generally permit the government to terminate such contracts, with or without cause, at any time. Any unexpected termination of a significant U.S. government contract with a military contractor to which API sells API s products could have a material adverse effect on API s business.

API faces intense competition which could negatively impact API s results of operations and market share.

API competes with a range of companies in API s target markets, some of which have greater financial and marketing resources, and greater manufacturing capacity, as well as better-established relationships with customers, than API does. Because API specializes in custom high performance devices requiring a high degree of engineering expertise to meet the requirements of specific applications, API generally does not compete to any significant degree with other large United States, European or Pacific Rim high volume manufacturers of standard off the shelf optoelectronic components. API cannot assure you that API will be able to compete successfully in API s markets against these or any future competitors.

API also faces competition from some of its customers who evaluate API s capabilities against the merits of manufacturing products internally. Due to the fact that such customers are not seeking to make a profit directly from the manufacture of these products, they may have the ability to manufacture competitive products at a lower

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cost than API would charge such customers. As a result, these customers may purchase less of API s products and there would be additional pressure to lower API s selling prices which, accordingly, would negatively impact API s revenue and gross margin.

Intense competition in API s markets could result in aggressive business tactics by API s competitors, including aggressively pricing their products or selling older inventory at a discount. If API s current or future competitors utilize aggressive business tactics, including those described above, demand for API s products could decline, API could experience delays or cancellations of customer orders, or API could be required to reduce API s sales prices.

Acquisition and alliance activities by API s competitors could disrupt API s ongoing business.

From time to time, API s competitors acquire or enter into exclusive arrangements with companies with whom API does business or may do business in the future. Reductions in the number of partners with whom API may do business in a particular context may reduce API s ability to enter into critical alliances on attractive terms or at all, and the termination of an existing alliance by a business partner may disrupt API s operations.

Decreases in average selling prices of API s products may increase operating losses and net losses, particularly if API is not able to reduce API s expenses commensurately.

The market for optical components and subsystems continues to be characterized by declining average selling prices resulting from factors such as increased price competition among optical component and subsystem manufacturers, excess capacity, the introduction of new products and increased unit volumes as manufacturers continue to deploy network and storage systems. In the last two years, API has observed a significant decline of average selling prices, primarily in the telecommunications market. API anticipates that average selling prices will continue to decrease in the future in response to product introductions by API s competitors or API, or in response to other factors, including price pressures from significant customers. In order to sustain profitable operations, API must, therefore, reduce the cost of API s current designs or continue to develop and introduce new products on a timely basis that incorporate features that can be sold at higher average selling prices. Failure to do so could cause API s sales to decline and operating losses to increase.

API s cost reduction efforts may not keep pace with competitive pricing pressures. To remain competitive, API must continually reduce the cost of manufacturing API s products through design and engineering changes. API may not be successful in redesigning its products or delivering API s products to market in a timely manner. API cannot assure you that any redesign will result in sufficient cost reductions enabling API to reduce the price of API s products to remain competitive or positively contribute to operating results.

Shifts in API s product mix may result in declines in gross profit.

API s gross profit margins vary among API s product platforms, and are generally highest on API s Terahertz products. API s overall gross profit has fluctuated from period to period as a result of shifts in product mix, the introduction of new products, decreases in average selling prices for older products and API s ability to reduce product costs, and these fluctuations are expected to continue in the future. If API s customers decide to buy more of API s products with low gross profit margins and fewer of API s products with high gross profit margins, API s total gross profits could be adversely affected.

Environmental regulations could increase operating costs and additional capital expenditures and delay or interrupt operations.

The photonics industry, as well as the semiconductor industry in general, is subject to governmental regulations for the protection of the environment, including those relating to air and water quality, solid and hazardous waste handling, and the promotion of occupational safety. Various federal, state and local laws and regulations require

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that API maintains certain environmental permits. While API believes that API has obtained all necessary environmental permits required to conduct API s manufacturing processes, if API was found to be in violation of these laws, API could be subject to governmental fines and liability for damages resulting from such violations.

Changes in the aforementioned laws and regulations or the enactment of new laws, regulations or policies could require increases in operating costs and additional capital expenditures and could possibly entail delays or interruptions of API s operations.

If API has insufficient proprietary rights or if API fails to protect those proprietary rights API has, API s business would be materially harmed.

API s success and ability to compete is dependent in part on API s proprietary technology. API relies on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality agreements and internal procedures, to establish and protect API s proprietary rights. For example, API utilizes proprietary design rules and processing steps in, among other things, the development and fabrication of API s PIN photodiodes, APD photodiodes and API s THz systems and sensors. In addition, API s products rely upon over 200 patents or patents pending. There can be no assurance that any issued patents will provide API with significant competitive advantages, or that challenges will not be instituted against the validity or enforceability of any patent utilized by API, or, if instituted, that such challenges will not be successful. The cost of litigation to uphold the validity and to prevent the infringement of a patent could be substantial and could have a material adverse effect on API s operating results. Furthermore, there can be no assurance that API s technology, which API is constantly developing, will not infringe on patents or rights owned by others, licenses to which might not be available to API. While API has conducted limited due diligence and has conferred with experts with respect to, among other things, API s proprietary materials which API incorporates into API s PIN photodiodes, APD photodiodes and API s THz systems and sensors, there can be no assurance that API has not overlooked or misinterpreted the status of the proprietary rights and intellectual property of others with respect to these products.

The steps API has taken to protect API s intellectual property may not adequately prevent misappropriation or ensure that others will not develop competitive technologies or products. Other companies may be investigating or developing other technologies that are similar to API s own. It is possible that patents may not be issued from any of API s pending applications or those API may file in the future and, if patents are issued, the claims allowed may not be sufficiently broad to deter or prohibit others from making, using or selling products that are similar to API s. API does not own patents in every country in which API sell or distribute API s products, and thus others may be able to offer identical products in countries where API does not have intellectual property protection. In addition, the laws of some territories in which API s products are or may be developed, manufactured or sold, including Europe, Asia-Pacific or Latin America, may not protect API s products and intellectual property rights to the same extent as the laws of the United States.

In some cases, API may rely on trade secrets to protect API s innovations. There can be no assurance that trade secrets will be established, that secrecy obligations will be honored or that others will not independently develop similar or superior technology. To the extent that consultants, key employees or other third parties apply technological information independently developed by them or by others to API s projects, disputes might arise as to the proprietary rights to such information which may not be resolved in API s favor.

Pursuing infringers of API s intellectual property rights can be difficult and costly.

Policing unauthorized use of API s technology is difficult and API cannot be certain that the steps API has taken will prevent the misappropriation, unauthorized use or other infringement of API s intellectual property rights. Pursuing

infringers of API s proprietary rights could result in significant litigation costs, and any failure to pursue infringers could result in API s competitors utilizing API s technology and offering similar products, potentially resulting in loss of a competitive advantage and decreased sales.

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Despite API s efforts to protect API s proprietary rights, existing patent, copyright, trademark and trade secret laws afford only limited protection. Further, API may not be able to effectively protect API s intellectual property rights from misappropriation or other infringement in foreign countries where API has not applied for patent protections, and where effective patent, trademark, trade secret and other intellectual property laws may be unavailable, or may not protect API s proprietary rights as fully as U.S. law. API seeks to secure, to the extent possible, comparable intellectual property protections in China and other areas in which API operates. Moreover, the level of protection afforded by patent and other laws in countries such as China may not be comparable to that afforded in the U.S.

Protecting API s intellectual property is difficult especially after API s employees or API s third-party contractors end their employment or engagement. API may have employees leave API and go to work for competitors. Attempts may be made to copy or reverse-engineer aspects of API s products or to obtain and use information that API regards as proprietary. Accordingly, API may not be able to prevent misappropriation of API s technology or prevent others from developing similar technology.

API may be involved in intellectual property disputes in the future, which could divert management s attention, cause API to incur significant costs and prevent API from selling or using the challenged technology.

Participants in the markets in which API sells products have experienced litigation regarding patent and other intellectual property rights. Numerous patents in these industries are held by others, including API s competitors. In addition, third parties may claim that API, or API s products, operations or any products or technology API obtains from other parties are infringing their intellectual property rights, and API may be unaware of intellectual property rights of others that may cover some of API s assets, technology and products.

Regardless of their merit, responding to such claims can be time consuming, divert management s attention and resources and may cause API to incur significant expenses. While API believes that API s products do not infringe in any material respect upon the intellectual property rights of other parties and/or believes that a meritorious defense would exist with respect to any assertions to the contrary, API cannot be certain that API s products would not be found to infringe upon the rights of others. Intellectual property claims against API could invalidate API s proprietary rights and force API to do one or more of the following:

- obtain from a third party claiming infringement a license to sell or use the relevant technology, which may not be available on reasonable terms, or at all;
- stop manufacturing, selling, incorporating or using API s products that use the challenged intellectual property;
- pay substantial monetary damages; or
- expend significant resources to redesign the products that use the technology and to develop non-infringing technology.

Any of these actions could result in a substantial reduction in API s revenue and could result in losses over an extended period of time.

If API fails to obtain the right to use the intellectual property rights of others which are necessary to operate API s business, and to protect their intellectual property, API s business and results of operations will be adversely affected.

In the past, API have licensed certain Terahertz technology for use in API s products. In the future, API may choose, or be required, to license technology or intellectual property from third parties in connection with the development of API s products. API cannot assure you that third-party licenses will be available to API on commercially reasonable terms, if at all. API s competitors may be able to obtain licenses, or cross-license their

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technology, on better terms than API can, which could put API at a competitive disadvantage. Also, API typically enters into confidentiality agreements with such third parties in which API agrees to protect and maintain their proprietary and confidential information, including requiring API s employees to enter into agreements protecting such information. There can be no assurance that the confidentiality agreements will not be breached by any of API s employees or that such third parties will not make claims that their proprietary information has been disclosed.

API faces strong competition for skilled workers which could result in API s inability to attract and retain necessary personnel.

API s success depends in large part on API s ability to attract and retain highly qualified scientific, technical, management, and marketing personnel. Competition for such personnel is intense and there can be no assurance that API will be able to attract and retain the personnel necessary for the development and operation of API s business.

API may not be able to successfully integrate future acquisitions, which could result in API s not achieving the expected benefits of the acquisition, the disruption of API s business and an increase in API s costs.

API s ability to continue to grow may depend upon identifying and successfully acquiring attractive companies, effectively integrating these companies, achieving cost efficiencies and managing these businesses as part of API s company.

API may not be able to effectively integrate the acquired companies and successfully implement appropriate operational, financial and management systems and controls to achieve the benefits expected to result from these acquisitions. API s efforts to integrate these businesses could be affected by a number of factors beyond API s control, such as regulatory developments, general economic conditions and increased competition. In addition, the process of integrating these businesses could cause the interruption of, or loss of momentum in, the activities of API s existing business. The diversion of management s attention and any delays or difficulties encountered in connection with the integration of these businesses could negatively impact API s business and results of operations. Further, the benefits that API anticipates from these acquisitions may not develop.

Future acquisitions could require API to issue additional indebtedness or equity.

If API was to undertake a substantial acquisition for cash, the acquisition would likely need to be financed in part through bank borrowings or the issuance of public or private debt. This acquisition financing would likely increase API s ratio of debt to equity and adversely affect other leverage criteria. Under API s existing SVB Loan Agreement and PFG Loan Agreement, API is required to obtain consent prior to incurring additional indebtedness beyond a certain dollar amount. API cannot assure you that the necessary acquisition financing would be available on acceptable terms if and when required. If API was to undertake an acquisition for equity, the acquisition may have a dilutive effect on the interests of the holders of API s Common Stock.

API may be liable for damages based on product liability claims relating to defects in API s products which might be brought against API directly, or against API s customers in their end-use markets. Such claims could result in a loss of customers in addition to substantial liability in damages.

API s products are complex and undergo quality testing as well as formal qualification, both by API s customers and by API. However, defects may occur from time to time. API s customers testing procedures are limited to evaluating API s products under likely and foreseeable failure scenarios and over varying amounts of time. For various reasons, such as the occurrence of performance problems that are unforeseeable in testing or that are detected only when products age or are operated under peak stress conditions, API s products may fail to perform as expected long after customer

acceptance. Failures could result from faulty components or design, problems in manufacturing or other unforeseen reasons. As a result, API could incur significant costs to repair or replace

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defective products under warranty, particularly when such failures occur in installed systems. In addition, API may in certain circumstances honor warranty claims after the warranty has expired or for problems not covered by warranty in order to maintain customer relationships. Any significant product failure could result in lost future sales of the affected product and other products, as well as customer relations problems, litigation and damage to API s reputation.

In addition, API s products are typically embedded in, or deployed in conjunction with, API s customers products, which incorporate a variety of components, modules and subsystems and may be expected to interoperate with modules produced by third parties. As a result, not all defects are immediately detectable, and, when problems occur, it may be difficult to identify the source of the problem. These problems may cause API to incur significant damages or warranty and repair costs, divert the attention of API s engineering personnel from API s product development efforts and cause significant customer relations problems or loss of customers, all of which would harm API s business.

Furthermore, many of API s products may provide critical performance attributes to API s customers products that will be sold to end users who could potentially bring product liability suits in which API could be named as a defendant. The sale of these products involves the risk of product liability claims. If a person were to bring a product liability suit against one of API s customers, this customer may attempt to seek contribution from API. A person may also bring a product liability claim directly against API. A successful product liability claim or series of claims against API in excess of API s insurance coverage for payments, for which API is not otherwise indemnified, could have a material adverse effect on API s financial condition or results of operations. API has acquired product liability coverage of up to $2 million.

API s current and planned systems, procedures and controls may not be adequate to support API s future operations.

The laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Dodd-Frank Act) and the rules adopted or proposed by the SEC, will result in increased costs to API as API evaluates the implications of any new rules and respond to their requirements. New rules could make it more difficult or more costly for API to comply with regulatory requirements, including API s reporting obligations under the Securities Exchange Act of 1934 (the Exchange Act), and obtain certain types of insurance, including director and officer liability insurance, and API may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. API cannot predict or estimate the amount of the additional costs API may incur or the timing of such costs to comply with any new rules and regulations, or if compliance can be achieved.

Additionally, in August 2012 the SEC adopted the conflict mineral rules under Section 1502 of the Dodd-Frank Act. The conflict mineral rules require issuers that manufacture products that contain certain minerals and metals (tantalum, tin, gold or tungsten), known as conflict minerals, to perform due diligence and to report annually to the SEC whether such minerals originated in the Democratic Republic of Congo or an adjoining country. The implementation of these new requirements could adversely affect the sourcing, availability and pricing of minerals API uses in the manufacture of API s products. In addition, API has incurred and will incur additional costs to comply with the disclosure requirements, including costs related to determining the source of any of the relevant minerals used in API s products. On June 2, 2014, API filed API s conflict minerals report with the SEC indicating API was conflict free undetermined because API did not receive 100% of the surveys back from API s suppliers to confirm that they used conflict free materials in the production of API s parts. API intends to continue to develop more transparency into API s supply chain as required by the SEC pursuant to the Dodd-Frank Act but significant efforts remain in order to achieve 100% certainty.

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API is increasingly dependent on information technology systems and infrastructure.

API relies to a large extent on sophisticated information technology systems and infrastructure. The size and complexity of these systems make them potentially vulnerable to breakdown, malicious intrusion, and random attack. Likewise, confidentiality or data privacy breaches by employees or others with permitted access to API s systems may pose a risk that trade secrets, personal information, or other sensitive data may be exposed to unauthorized persons or to the public. While API has invested in the protection of data and information technology, there can be no assurance that API s efforts will prevent breakdowns or breaches in API s systems that could adversely affect API s business.

API may be unable to utilize its net operating loss carryforwards to reduce API s income taxes, which could adversely affect API s future financial results.

As of March 31, 2014, API had net operating loss, or NOL, carryforwards for U.S. federal and state tax purposes of $25.4 million and $6.5 million, respectively. As these net operating losses have not been utilized, a portion has begun to expire in the current year. The utilization of the NOL and tax credit carryforwards are subject to a substantial limitation imposed by Section 382 of the Code, and similar state provisions. API recorded deferred tax assets, net of valuation allowance, for the NOL carryforwards currently available after considering any existing Section 382 limitation. If API incurs an additional limitation under Section 382, then the NOL carryforwards, as disclosed, could be reduced by the impact of any future limitation that would result in existing NOL carryforwards and tax credit carryforwards expiring unutilized.

Risks Relating to API s Common Stock

API s stock price has been volatile in the past and may decline in the future.

API s common stock has experienced significant market price and volume fluctuations in the past and may experience significant market price and volume fluctuations in the future in response to factors such as the following, some of which are beyond API s control:

- quarterly variations in API s operating results;
- operating results that vary from the expectations of securities analysts and investors;
- changes in expectations as to API s future financial performance, including financial estimates by securities analysts and investors;
- announcements of technological innovations or new products by API or API s competitors;
- announcements by API or API s competitors of significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;

changes in the status of API s intellectual property rights;

announcements by third parties of significant claims or proceedings against API;

additions or departures of key personnel;

future sales of API s Class A Stock or securities exercisable or convertible into shares of Class A Stock;

stock market price and volume fluctuations; and

general economic conditions.

Stock markets often experience extreme price and volume fluctuations. Market fluctuations, as well as general political and economic conditions, such as a recession or interest rate or currency rate fluctuations or political events or hostilities in or surrounding the United States, could adversely affect the market price of API s Class A Stock.

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In the past, securities class action litigation has often been brought against companies following periods of volatility in the market price of its securities. API may in the future be the target of similar litigation. Securities litigation could result in substantial costs and divert management s attention and resources both of which could have a material adverse effect on API s business and results of operations.

A limited public trading market may cause volatility in the price of API s Class A Stock.

The quotation of API s Class A Stock on the NYSE MKT does not assure that a meaningful, consistent and liquid trading market currently exists, and in recent years such market has experienced extreme price and volume fluctuations that have particularly affected the market prices of many smaller companies like API. API s Class A Stock is subject to this volatility. In particular, although over 31 million shares of API s Class A Stock were outstanding through the end of fiscal year 2014, the average daily trading volume over the 12 month period ended March 31, 2014 was approximately 78,000, or less than 0.3% of the number of shares outstanding. Consequently, sales of substantial amounts of Class A Stock, or the perception that such sales might occur, could adversely affect prevailing market prices of API s Class A Stock and API s stock price may decline substantially in a short time and API s stockholders could suffer losses or be unable to liquidate their holdings.

Future sales of API s Class A Stock in the public market could lower API s stock price, and conversion of API s warrants or stock options and any additional capital raised by API may dilute your ownership.

API may sell additional shares of Class A Stock in the future. In addition, holders of warrants or stock options may exercise their warrants or stock options to purchase shares of API s Class A Stock. API cannot predict the size of future issuances of API s Class A Stock or the effect, if any, that future issuances and sales of shares of API s Class A Stock will have on the market price of API s Class A Stock. Sales of substantial amounts of API s Class A Stock, including shares issued in connection with the exercise of the warrants or stock options, or the perception that such sales could occur, may adversely affect prevailing market prices for API s Class A Stock.

Shares eligible for public sale in the future could decrease the price of API s Class A Stock and reduce API s future ability to raise capital.

Future sales of substantial amounts of API s Class A Stock in the public market could decrease the prevailing market price of API s Class A Stock, which would have an adverse effect on API s ability to raise equity capital in the future.

API s issuance of Preferred Stock could adversely affect holders of Class A Stock.

API s board of directors is authorized to issue series of Preferred Stock without any action on the part of API s holders of Class A Stock. API s board of directors also has the power, without stockholder approval, to set the terms of any such series of Preferred Stock that may be issued, including voting rights, dividend rights, and preferences over the Class A Stock with respect to dividends or if API liquidates, dissolves or winds up API s business and other terms. If API issues Preferred Stock in the future that has preference over the Class A Stock with respect to the payment of dividends or upon API s liquidation, dissolution or winding up, or if API issues Preferred Stock with voting rights that dilute the voting power of the Class A Stock, the rights of holders of the Class A Stock or the price of the Class A Stock could be adversely affected.

API does not intend to pay dividends and is precluded from doing so while API s SVB and PFG Loan Agreements are outstanding.

API has never declared or paid any cash dividends on its common stock and API is currently precluded from doing so while the SVB and PFG Loan Agreements are outstanding. Even in the event the SVB and PFG Loan Agreements are terminated, API intends to retain future earnings, if any, to finance operations and expand API s business and, therefore, do not expect to pay any dividends in the foreseeable future.

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Provisions in API s organizational documents and Delaware law may delay or prevent a third party from acquiring API, which could decrease the value of API s stock.

API s board of directors has the authority to issue preferred stock and to determine the price, rights, powers, preferences, privileges and restrictions, including voting and conversion rights, of those shares without any further vote or action by the stockholders. The issuance of API s preferred stock could have the effect of making it more difficult for a third party to acquire API. In addition, API is subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which could also have the effect of delaying or preventing API s acquisition by a third party. Further, certain provisions of API s Certificate of Incorporation, as amended, and amended bylaws could delay or make more difficult a merger, tender offer or proxy contest, which could adversely affect the market price of API s common stock, including:

not providing for cumulative voting in the election of directors;

limiting the persons who may call special meetings of stockholders; and

requiring advance notification of stockholder nominations and proposals.

These and other provisions in API s certificate of incorporation, as amended, API s amended bylaws and under Delaware law could discourage potential takeover attempts, reduce the price that investors might be willing to pay for shares of API s common stock in the future and result in the market price being lower than it would be without these provisions.

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CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This joint proxy statement/prospectus contains forward-looking statements made pursuant to the safe harbor provision of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties, as well as assumptions, that could cause the results of Luna and API to differ materially from those expressed or implied by such forward-looking statements. Forward-looking statements generally are identified by the words may, will, project, might, expects, anticipates, believes, intends, estimates, should, could, would, strategy, plan, negative of these words or other words or expressions of similar meaning. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements. These statements include expectations regarding the completion of the Merger, the prospects of the combined company and the companies future growth, as well as the potential synergies from the proposed merger and the future profitability of the combined company. Management of Luna and API caution the reader that these forward-looking statements are only predictions and are subject to a number of both known and unknown risks and uncertainties, and actual results, performance, and/or achievements of the companies may differ materially from the future results, performance and/or achievements expressed or implied by these forward-looking statements as a result of a number of factors. These factors include, but are not limited to: the approval of the Merger and related matters by the companies respective stockholders and satisfaction of other closing conditions of the Merger; the uniqueness and advantages of Luna s or API s technology and intellectual property; potential costs savings and synergies from the Merger; potential for greater profitability; potential for future commercialization of their technologies; the competitive advantage afforded by Luna s or API s technology; the potential efficacy of Luna s or API s technology; and growth potential of certain markets. Statements that describe the companies business strategies, goals, prospects, opportunities, outlook, plans or intentions are also forward-looking statements.

For a discussion of risks associated with the ability of Luna and API to complete the Merger and the effect of the Merger on the present businesses of Luna and API and the business of the combined company after the Merger, see the section entitled Risk Factors, beginning on page 21.

If any of these risks or uncertainties materializes or any of these assumptions proves incorrect, the results of Luna or API, or of the combined company after the Merger, could differ materially from the forward-looking statements. All forward-looking statements in this joint proxy statement/prospectus are current only as of the date on which the statements were made. Luna and API do not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any statement is made or to reflect the occurrence of unanticipated events.

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SUMMARY UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL DATA

The following summary unaudited pro forma condensed combined financial data is intended to show how the Merger might have affected Luna s historical financial statements if the Merger had been completed as of January 1, 2014 with respect to the pro forma results of operations for the year ended December 31, 2014, and completed as of December 31, 2014 with respect to the pro forma balance sheet as of December 31, 2014. The summary unaudited pro forma condensed combined financial data was prepared based on the historical financial results reported by Luna and API. The following should be read in connection with the section entitled Unaudited Pro Forma Condensed Combined Financial Statements beginning on page F-68, and the audited and unaudited consolidated financial statements of Luna and API beginning on pages F-2 and F-25, respectively.

The Merger will be accounted for as a business combination under the acquisition method of accounting, with Luna as the identified acquirer. The unaudited pro forma condensed combined financial statements were prepared in accordance with the regulations of the SEC. The pro forma adjustments reflecting the completion of the Merger are based upon the acquisition method of accounting in accordance with U.S. GAAP, and upon the assumptions set forth in the notes to the unaudited pro forma condensed combined financial statements.

The fiscal year-ends of Luna and API are December 31st and March 31st, respectively, prior to the Merger. The Unaudited Pro Forma Condensed Combined Statement of Operations (the pro forma statement of operations) for the year ended December 31, 2014 combines the historical consolidated statement of operations of Luna for the year ended December 31, 2014 and the historical consolidated statement of operations of API for the twelve months ended December 26, 2014, and gives pro forma effect to the Merger as if it had been completed on January 1, 2014. The Unaudited Pro Forma Condensed Combined Balance Sheet (the pro forma balance sheet) as of December 31, 2014 combines the historical consolidated balance sheets of Luna and API as of December 31, 2014 and December 26, 2014, respectively, and gives pro forma effect to the Merger as if it had been completed on December 31, 2014.

The historical consolidated financial data has been adjusted to give pro forma effect to events that are (i) directly attributable to the Merger, (ii) factually supportable and (iii) with respect to the statements of operations, expected to have a continuing impact on the combined results. Costs of severance expected to be paid to API s president and chief executive officer of approximately $647,000 are not included in the pro forma accrued liabilities due to the uncertainty of timing of the related payments. The pro forma adjustments are preliminary and based on management s estimates of the fair value and useful lives of the assets acquired and liabilities assumed and have been prepared to illustrate the estimated effect of the Merger and certain other adjustments.

The unaudited pro forma condensed combined financial data is presented for illustrative purposes only and is not necessarily indicative of the financial condition or results of operations of future periods or the financial condition or results of operations that actually would have been realized had the entities been combined during the period presented. The unaudited pro forma condensed combined financial statements do not give effect to the potential impact of current financial conditions, regulatory matters or any anticipated synergies, operating efficiencies or cost savings that may be associated with the Merger. These financial statements also do not include any integration costs, dissynergies or estimated future transaction costs, except for fixed contractual transaction costs, that the companies may incur as a result of the Merger. In addition, as explained in more detail in the accompanying notes to the unaudited pro forma condensed combined financial statements (see the section entitled Unaudited Pro Forma Condensed Combined Financial Statements beginning on page F-68), the preliminary acquisition date fair value of the identifiable assets acquired and liabilities assumed reflected in the unaudited pro forma condensed combined financial statements is subject to adjustment and may vary significantly from the actual amounts that will be recorded upon completion of the Merger.

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	Year Ended December 31, 2014
Pro Forma Condensed Combined Statement of Operations Data (in thousands, except per share amounts)	
Revenues	$ 49,494
Operating loss	$ (6,815)
Loss from continuing operations	$ (6,921)
Loss per share from continuing operations basic and diluted	$ (0.26)

	December 31, 2014
Pro Forma Condensed Combined Balance Sheet Data (in thousands)	
Total current assets	$ 33,148
Total assets	$ 50,115
Long term debt, including current portion	$ 4,000
Total stockholders equity	$ 31,857

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COMPARATIVE HISTORICAL AND UNAUDITED PRO FORMA PER SHARE DATA

The following table sets forth certain historical, unaudited pro forma combined and pro forma equivalent financial information. The pro forma combined and pro forma equivalent loss and dividend per share data for the year ended December 31, 2014 assumes that the Merger was completed as of January 1, 2014. The API pro forma equivalent data was calculated by multiplying the corresponding combined company pro forma data by the Exchange Ratio.

The unaudited pro forma combined and pro forma equivalent loss and dividend per share data for the year ended December 31, 2014 was prepared based on the audited consolidated financial statements for Luna for the year ended December 31, 2014 and the unaudited consolidated financial statements of API for the twelve months ended December 26, 2014. The pro forma combined and pro forma equivalent net book value per share data as of December 31, 2014 was prepared based on the audited consolidated balance sheet of Luna as of December 31, 2014 and the unaudited consolidated balance sheet of API as of December 26, 2014.

The information below should be read in conjunction with the audited and unaudited consolidated financial statements of Luna and API referenced above and the accompanying notes to such financial statements. See the section entitled Where You Can Find More Information beginning on page 250. You are urged to also read the section entitled Unaudited Pro Forma Condensed Combined Financial Statements beginning on page F-68.

	As of and for the year ended December 31, 2014			
	Luna	API (2)	Pro Forma (3)	API Pro Forma Equivalent (4)
Net loss per share from continuing operations:				
Basic and Diluted	$ (0.23)	$ (0.07)	$ (0.26)	$ (0.08)
Dividends per share:	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Book value per common share (1):	$ 0.94	$ 0.32	$ 1.00	$ 0.32

(1) Book value per common share as of December 31, 2014 (December 26, 2014, in the case of API) was computed using common stockholders equity attributable to Luna and API, as applicable, divided by the number of shares of common stock outstanding of 15,065,474 and 37,381,413, respectively. Pro forma book value per common share for the combined company as of December 31, 2014 was computed using pro forma stockholders equity, excluding preferred equity divided by the pro forma number of shares of common stock outstanding of 26,946,035.

(2) Net loss per share from continuing operations for API is presented for the twelve months ended December 26, 2014.

(3) Pro forma combined basic and diluted net loss per share from continuing operations is computed by dividing pro forma combined net loss from continuing operations by the weighted average pro forma number of shares outstanding during the year ended December 31, 2014. Shares issuable upon the exercise of outstanding stock options and the vesting of restricted stock units are excluded from the computation due to their anti-dilutive effect on pro forma combined net loss per share from continuing operations.

(4) API pro forma equivalent amounts are calculated by multiplying the pro forma combined per share amounts by the Exchange Ratio of 0.31782.

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COMPARATIVE MARKET PRICE DATA AND DIVIDEND INFORMATION

Stock Prices

The tables below set forth, for the calendar quarters indicated, the high and low sales prices per share of Luna common stock, which trades on the NASDAQ Capital Market under the symbol LUNA, and API common stock, which trades on the NYSE MKT under the symbol API.

Luna s fiscal year ends on December 31st and API s fiscal year ends on March 31st.

	Luna Common Stock	
	High	**Low**
Fiscal Year 2013		
First Quarter	$ 1.40	$ 1.11
Second Quarter	$ 1.35	$ 1.09
Third Quarter	$ 2.40	$ 1.13
Fourth Quarter	$ 1.74	$ 1.15
Fiscal Year 2014		
First Quarter	$ 3.36	$ 1.28
Second Quarter	$ 1.68	$ 1.30
Third Quarter	$ 2.70	$ 1.20
Fourth Quarter	$ 1.56	$ 1.22
Fiscal Year 2015		
First Quarter (through March , 2015)	$	$

	API Common Stock	
	High	**Low**
Fiscal Year 2013		
First Quarter	$ 0.79	$ 0.50
Second Quarter	$ 0.80	$ 0.48
Third Quarter	$ 0.72	$ 0.38
Fourth Quarter	$ 0.84	$ 0.40
Fiscal Year 2014		
First Quarter	$ 0.74	$ 0.42
Second Quarter	$ 0.68	$ 0.47
Third Quarter	$ 0.88	$ 0.55
Fourth Quarter	$ 0.85	$ 0.57
Fiscal Year 2015		
First Quarter	$ 0.72	$ 0.40
Second Quarter	$ 0.65	$ 0.46
Third Quarter	$ 0.57	$ 0.25
Fourth Quarter (through March , 2015)	$	$

Dividends

Luna has never paid cash dividends on its common stock. Luna currently intends to retain earnings, if any, for use in its business and does not anticipate paying any cash dividends in the foreseeable future.

API has never paid cash dividends on its common stock. API currently intends to retain earnings, if any, for use in its business and does not anticipate paying any cash dividends in the foreseeable future.

Comparative Per Share Market Value Data

The following table presents the closing per share price of Luna common stock and API common stock as reported on the NASDAQ Capital Market and the NYSE MKT, respectively, on (i) January 30, 2015, the last

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trading day preceding public announcement that Luna and API had entered into the Merger Agreement and (ii) , 2015, the latest practicable date before the printing of this joint proxy statement/prospectus.

The table also includes the equivalent closing per share price of API common stock on those dates. These equivalent closing per share prices reflect the fluctuating value of the Luna common stock that API stockholders would receive in exchange for each share of API common stock if the Merger had been completed on either of these dates, applying the exchange ratio of 0.31782 shares of Luna common stock for each share of API common stock.

	Luna Common Stock	API Common Stock	Equivalent API Price Per Share
January 30, 2015	$ 1.68	$ 0.33	$ 0.53
, 2015	$	$	$

The above table shows only historical comparisons. These comparisons may not provide meaningful information to API stockholders in determining whether to approve the Merger Agreement. API stockholders are urged to obtain current market quotations for Luna common stock and API common stock and to review carefully the other information contained in this joint proxy statement/prospectus. Historical stock prices are not indicative of future stock prices.

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THE MERGER

This section of the joint proxy statement/prospectus describes material aspects of the Merger. While Luna and API believe that the description covers the material terms of the Merger Agreement and the transactions contemplated thereby, this summary does not contain all of the information that may be important to you. You should carefully read this entire joint proxy statement/prospectus, the attached annexes, and the other documents to which this joint proxy statement/prospectus refers, for a more complete understanding of the Merger.

General Description of the Merger

At the Effective Time, API Merger Sub, Inc., a wholly owned subsidiary of Luna, will merge with and into API. Upon completion of the Merger, the separate corporate existence of API Merger Sub, Inc. will cease and API will continue as the surviving entity and a wholly owned subsidiary of Luna.

As a result of the Merger, each share of API common stock outstanding at the Effective Time will be converted automatically into the right to receive 0.31782 shares of Luna common stock. The merger consideration is more fully described in the sections entitled The Merger Agreement Merger Consideration on page 116 of this joint proxy statement/prospectus and in the Merger Agreement, which is attached to this joint proxy statement/ prospectus as Annex A.

The exchange ratio is subject to adjustment to reflect the effects of any stock split, division or subdivision of shares, stock dividend, reverse stock split, combination of shares, reclassification, recapitalization or other like change in the outstanding common stock of Luna or API.

The merger is expected to qualify for U.S. federal income tax purposes as a reorganization within the meaning in Section 368(a) of the Internal Revenue Code of 1986, as amended. See the section entitled Material U.S. Federal Income Tax Consequences of the Merger beginning on page 112 of this joint proxy statement/prospectus.

Background of the Merger

Luna develops, manufactures and markets fiber optic sensing and test & measurement products. In addition, Luna also provides applied research services, typically under research programs funded by the United States government. Luna s board and leadership have consistently evaluated partnership and other strategic opportunities in order to commercialize and advance Luna s products, reduce costs, establish strategic partnerships, and deliver value to Luna s stockholders.

Prior to 2013, Luna s operations also included a number of other businesses, including fiber optic shape sensing technology that it was developing for robotic and minimally invasive surgical systems and Luna s secure computing and communications group, or SCC, which developed technology to ensure the integrity of integrated circuits used in defense systems. Over the past two years, Luna narrowed its strategic focus by selling SCC in early 2013 and its medical fiber optic shape sensing business in early 2014. With its narrowed strategic focus and a stronger balance sheet as a result of these transactions, Luna began exploring other opportunities that were complementary to its core test and measurement business.

API is a leading test and measurement company with three product lines: High-Speed Optical Receiver (HSOR) devices that are used in the telecommunication market by both telecommunication equipment manufacturers and in test and measurement equipment utilized in the manufacturing of telecommunications equipment; Optoelectronic solutions which enables manufacturers to measure physical properties, including temperature, particular counting,

color, and fluorescence for medical and process control applications; and Terahertz sensor products targeted at the industrial process control and quality control nondestructive testing markets for the

measurement of subsurface physical properties, like multi-layers thicknesses, density, moisture content and anomaly detection. The API board of directors, together with management, reviews API s strategic alternatives from time to time.

In the spring of 2013, API retained B. Riley & Co., LLC, or B. Riley, to assist in a comprehensive review of strategic alternatives focused on the sale of one or more of API s principal product lines and the strengthening of API s balance sheet. In mid to late 2013, B. Riley approached 18 third parties to determine their level of interest in acquiring API s HSOR business. API received two preliminary indicative offers of interest but none of them exceeded $8 million in value and none of them was deemed worthy of pursuing by the API board of directors, and no meaningful sale negotiations ensued. Thereafter, in late 2013 and early 2014, API directly approached several potential acquirers of API s Optoelectronics business. Based on preliminary negotiations with those parties (in one case, including the negotiation of a proposed term sheet providing for an $11 million purchase price), the API board of directors determined that the realistically achievable sale price would not be adequate.

API was first introduced to Luna in September 2013 by an unrelated third party. The initial introduction was followed by a meeting at API headquarters in October 2013 between My Chung, Luna s president and chief executive officer, and Richard Kurtz, API s president and chief executive officer, at which the parties exchanged overviews of their respective businesses and prospects. Following that meeting, the parties executed a mutual non-disclosure agreement, or NDA, and held a follow-up meeting at Luna s headquarters on December 5, 2013, at which meeting the members of each company s management teams presented more detailed reviews of their respective businesses and prospects and discussed, in general terms, the benefits of a potential business combination between Luna and API. However, neither party made any immediate effort to follow up on these initial conversations and these discussions ceased.

In February 2014, Mr. Chung received an unsolicited inquiry from a third-party public company, referred to as Party A, regarding a potential acquisition of Luna. Luna and Party A executed an NDA for the purpose of evaluating a potential strategic transaction between Luna and Party A. Following the execution of the NDA, in early March 2014, Luna management gave a presentation to Party A regarding Luna s business and Party A management gave a presentation to Luna regarding Party A s business. On March 13, 2014, Luna received a non-binding letter of intent from Party A regarding a potential stock-for-stock acquisition of Luna by Party A.

On March 18, 2014, the Luna board of directors met to discuss the proposed offer. The board directed Luna management to request that Party A improve the economic terms of its proposed offer. The board also determined to engage an investment banking firm to assist the company in respect of the potential transaction, as well as to conduct a market check. Later, on March 18, 2014, Party A provided a revised non-binding letter of intent to Luna reflecting an increased purchase price.

Thereafter, Luna interviewed potential investment bankers, and on March 25, 2014, Luna engaged Mooreland Partners, LLC, or Mooreland, to assist it in evaluating potential strategic opportunities, including the potential transaction with Party A. At a meeting of the Luna board of directors on March 27, 2014, Luna s board of directors and management discussed the potential transaction, as well as, with the input from Mooreland, the stand-alone value and business prospects of Luna. Following the meeting, Luna management requested that Party A further increase the proposed offer price. Luna and Party A continued negotiating the terms of a non-binding letter of intent. Additionally, Mooreland contacted, and Luna management engaged in preliminary discussions with another third-party public company, referred to as Party B, to explore whether Party B would be interested in a strategic transaction.

Following further negotiations, Party A ultimately provided Luna with a non-binding letter of intent reflecting a stock-for-stock acquisition of Luna. On April 1, 2014, the Luna board authorized management to execute this non-binding letter of intent, and following the board meeting, Luna provided Party A with a counter-signed letter of

intent. Because the letter of intent included an exclusivity period, Luna suspended discussions with Party B at that time.

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During April and May 2014, Party A engaged in continued due diligence on Luna, including document review and in person meetings with Luna management. However, on May 30, 2014, Party A s chief executive officer notified Mr. Chung that Party A was not going to proceed with a proposed transaction because there was not a sufficient strategic fit with Luna to warrant an acquisition.

During late 2013 and early 2014, API continued to explore potential strategic transactions with third parties including the potential sale of its Terahertz technology (or the exclusive licensing of limited rights to its technology) and potential acquisition/merger transactions involving the entire company. None of those discussions resulted in any meaningful negotiations. Throughout this period, management and the API board continued to develop and to execute a business plan under which API would continue to operate independently and without divesting any of its major product lines. In furtherance of that plan, in June 2014, API completed a public offering of its common stock underwritten by B. Riley, which raised approximately $2.9 million, after payment of commissions and expenses.

Following Party A s decision not to proceed with a potential acquisition of Luna, Luna management began an extensive evaluation of potential strategic opportunities with the assistance of Mooreland. Opportunities were analyzed, reviewed and discussed over the course of several months. The Luna board of directors authorized Mooreland and Luna management to contact eleven potential transaction parties, including API. Of these eleven, six participated in introductory phone calls or meetings. Of these six parties, two parties API and Party B would eventually engage in substantial discussions and due diligence with Luna.

On June 10, 2014, Mooreland initially contacted Mr. Kurtz of API and reported that Luna was interested in buying or merging with another public company with whom it might realize potential operational synergies and in order to benefit from a larger revenue base and achieve efficiencies in the cost of complying with the regulations governing public companies. On July 15, 2014, Mooreland representatives again spoke with Mr. Kurtz about a potential strategic transaction with Luna, including product fit and cost synergies. Mr. Kurtz indicated that API had deferred active consideration of its strategic alternatives pending the results of its second and third fiscal quarters. The parties agreed to stay in touch.

On June 18, 2014, Luna signed an NDA with Party B for the purpose of evaluating a potential strategic transaction with Party B, and over the ensuing three months, Luna and Party B engaged in discussions regarding a potential transaction.

On September 29, 2014, Mr. Chung contacted Donald Pastor, API s chairman, regarding the potential for a business combination. Both parties expressed an interest in exploring a potential transaction and scheduled a meeting in Durham, North Carolina the following week. On October 1, 2014, Luna and API entered into an NDA.

On October 2, 2014, Luna management, representatives of Mooreland, Mr. Kurtz and Mr. Pastor met in Durham, North Carolina, and exchanged business information and discussed a potential merger transaction. Luna and API generally discussed some of the synergies that might be achieved by a combination of the two companies. During the course of the discussion, Mr. Kurtz indicated that he understood that his continued services would not be required in the event a merger between the two parties was consummated. The parties agreed to meet again to discuss potential benefits of a business combination in greater detail.

During late September and early October 2014, representatives of Mooreland and Luna management continued engaging in discussions with Party B to explore a potential strategic transaction. Additionally, Richard Roedel, Luna s chairman, had an introductory call with the chairman of Party B. In the course of these discussions, Party B expressed its position that any potential transaction would require a commitment that the surviving company invest substantial funds in Party B s subsidiary, which although presently unprofitable, Party B believed had great potential value. Party

B also expressed, as a condition of any transaction with Luna, Carilion Clinic would be required to modify its rights under to the terms of the Series A Preferred Stock.

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On October 17, 2014, Luna management, Mooreland and API s management met again in Raleigh, North Carolina to exchange views on how the businesses, if combined, might be perceived in the market place and the financial community and potential operational and financial synergies that might be realized in a Merger. This meeting was followed by the exchange and analysis of financial forecasts of API and Luna.

At a series of meetings of the Luna board of directors in late October 2014, Mooreland and Luna management apprised the Luna board of directors of the status of the company s efforts to explore a potential strategic transaction with a third party. Mooreland advised the board of directors that it had approached eleven prospective merger candidates and that, for various reasons, nine of them had decided to pass. Mooreland provided detailed information about Party B and API, including potential synergies and cost savings, and presentations regarding Mooreland s efforts toward a strategic transaction with Party B or API. The Luna board of directors discussed the potential benefits of a transaction with Party B or API, including potential cost savings, synergies and positive effects on stockholder value. The board also discussed the risks of a potential transaction, including Party B s desire for a commitment from the surviving company to fund its unprofitable subsidiary. In light of this, the Luna board expressed its belief that Luna should engage in substantial additional due diligence on Party B before any further discussions with Party B. Luna s board of directors also discussed the merits of Luna pursuing its business plan on a stand-alone basis and pursuing other potential strategic alternatives.

In late October and early November 2014, Luna management and Mooreland representatives continued to engage in discussions with Party B and API concerning their businesses and the potential merits of a merger with Luna. Additionally, Luna engaged in additional due diligence on Party B s business plan and its products and technology, including the engagement of a consultant to evaluate Party B s subsidiary.

On November 4, 2014, Mr. Chung, Dale Messick, Luna s chief financial officer, and Scott Graeff, Luna s chief strategy officer, met with API s senior operating officers in Ann Arbor, Michigan and received an in depth briefing as to the API business. On November 12 and 13, 2014, Messrs. Chung and Graeff visited the headquarters of API s Optosolutions business in Camarillo, California, where they toured the facility and met with the general manager, along with Mr. Kurtz.

On November 18, 2014, Mr. Roedel met with Mr. Pastor in Charlotte, North Carolina to discuss API s business, the potential merits of a merger between API and Luna and the specific terms of a potential transaction.

At a meeting of the Luna board of directors on November 19, 2014, Mr. Roedel briefed the Luna board of directors on his discussions with the respective chairmen of Party B and API. Luna management also updated the board on the potential risks and benefits of a strategic transaction with each of Party B and API, including the results of the consultants analysis of Party B and its subsidiary. Following a discussion, the board of directors decided Luna should focus on a transaction with API, rather than Party B, given API s better strategic fit with Luna s fiber optic technologies and telecom presence and, relatedly, prospects for integration, as well as the risks associated with a transaction with Party B, including the likely need for an agreement from Carilion Clinic to modify the terms of its Series A Preferred Stock. Accordingly, the board of directors directed management to proceed towards a letter of intent for a merger with API on terms to be recommended by management, Mooreland and outside legal counsel**.**

Following the meeting, representatives of Mooreland contacted Mr. Pastor, indicating that Luna s board of directors decided to continue discussing a strategic transaction with API, and informed Party B that Luna was no longer interested in exploring a strategic transaction with Party B at that time.

On November 20, 2014, Luna delivered to API a letter of intent proposing a reverse triangular merger in which API would be merged with a wholly owned subsidiary of Luna and the stockholders of API would receive 0.34466 shares

of Luna common stock for each share of API common stock owned by them. Prior to the delivery of such letter, Messrs. Kurtz, Pastor and Chung had several conversations concerning the proposed exchange ratio. The letter of intent as proposed by Luna also provided that the board of directors of the combined

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businesses would be composed of three current directors of API, three current directors of Luna, and the chief executive officer of Luna. On November 21, 2014, at the suggestion of Mr. Pastor, Luna modified this provision to permit the API board designees to be persons who were not current API directors.

During October and November 2014, Mr. Kurtz and Mr. Pastor kept each board member contemporaneously apprised of the meetings and discussions that had been taking place with Luna. Accordingly, a consensus was reached to move forward with the proposed transaction with Luna, and on November 21, 2014 Mr. Kurtz executed the Letter of Intent on behalf of API.

On November 23, 2014, the API board of directors met to discuss the proposed letter of intent from Luna. At that meeting it was determined to defer action on the matter pending further discussion and consideration by the directors. At the meeting, Mr. Kurtz, Jeff Anderson, API s chief financial officer, and Robin Risser, API s chief operating officer, briefed the directors on the continued slowdown of capital expenditures in the telecommunications industry and the potential effect of those developments on API s business. It was noted that current internal forecasts indicated that API might not be able to meet its covenants under its existing credit facilities (specifically covenants requiring API to maintain a minimum liquidity ratio and to achieve certain EBITDA targets) in the fourth quarter if these trends did not improve. On February 5, 2015, API gained covenant relief by entering into that certain Eighth Amendment to Loan and Security Agreement (Ex-IM Loan Facility) and that certain Tenth Amendment to Loan and Security Agreement, each with Silicon Valley Bank, and that certain Modification No. 5 to Land and Security Agreement with Partners for Growth III, L.P., wherein the adjusted EBITDA requirement and the minimum liquidity ratio were reduced. For a more detailed discussion of API s covenants under its existing credit facilities and the consequences of API s failure to comply with the terms of such covenants, see Risks Relating to API s Financial Condition and Performance API has previously violated certain covenants under the SVB Loan Agreements and the PFG Loan Agreement.

At a meeting of Luna s board of directors on November 26, 2014, Mr. Graeff provided an update on the potential strategic transaction with API, noting a letter of intent had been sent to API.

On December 3, 2014 and December 4, 2014, Messrs. Pastor, Kurtz and Risser and Steven Williamson, API s chief technology officer, met with representatives of Luna in Charlottesville, Virginia, where several of Luna s Technology Development Division groups are located, and on December 5, 2014, Messrs. Pastor, Risser and Williamson met with representatives of Luna s Lightwave Division in Blacksburg, Virginia. Mr. Pastor and API s executive officers periodically discussed these and their other meetings with representatives of Luna (including their discussions as to expected synergies, the exchange ratio and the composition of the Board of the combined businesses) with the individual directors of API and were encouraged by them to continue to pursue such discussions.

At a meeting of the Luna board of directors on December 8, 2014, Mr. Graeff gave a status update on discussions with API. A full discussion ensued regarding the potential composition of the board of directors of the combined company. Following this discussion, Luna s board of directors confirmed that the combined company s board of directors should include three directors designated by API, three directors from Luna and Luna s chief executive officer.

On December 9, 2015, Messrs. Risser and Williamson met with Mr. Chung at the Detroit Airport and discussed the governance practices at their respective companies, potential synergies that might be derived from a business combination, and the status of Luna s efforts to achieve the $8 million technical specification milestone payment provided for in connection with the sale of its medical shape sensing business.

On December 11, 2014, API s chief executive officer provided an executed letter of intent and term sheet to Luna.

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On December 12, 2014, Talfourd Kemper, Jr., Luna s general counsel, and representatives of Luna s outside counsel, Cooley LLP, or Cooley, spoke with Mr. Kurtz and representatives of API s outside counsel, Tarter Krinsky & Drogin LLP, or Tarter Krinsky. This conversation included discussions regarding API s severance payment obligations for certain API employees. The parties also briefly discussed API s fiscal third quarter outlook, which Mr. Kemper later relayed to Luna management.

On December 15, 2014, Mr. Roedel met with Messrs. Risser and Williamson and discussed the potential board composition of the combined company.

On December 16, 2014 and December 17, 2014, respectively, each of Luna and API opened access to their respective electronic data rooms to the other party to begin the formal due diligence process. Thereafter and continuing through January 2015, management of Luna and API and their respective consultants and advisors conducted detailed due diligence on each other s respective businesses, and during that time members of Luna and API senior management continued to participate in discussions regarding the businesses of both companies and the preparation of financial projections and cost synergies analyses.

On December 17, 2014, API retained B. Riley as its financial advisor in connection with the proposed transaction. The nature of B. Riley s engagement was to provide an opinion to the API board of directors that the exchange ratio contemplated in the Merger was fair from a financial point of view to the stockholders of API.

Later on December 19, 2014, at a meeting of the Luna board of directors, Luna management provided an update on the status and ongoing due diligence with respect of the potential merger with API, noting that API s fiscal third quarter appeared to be weaker than previously forecast and discussing API s severance obligations under existing employment agreements with members of API senior management, if their employment were to be terminated without cause.

On December 22, 2014, Luna provided API and Tarter Krinsky with an initial draft of the Merger Agreement and form of voting agreement that Luna expected would be signed by the directors and executive officers of each of Luna and API. Both documents were generally consistent with the terms of the transaction as outlined in the letter of intent signed by the parties.

At a meeting of the API board of directors on December 22, 2014, API s board of directors, along with the Board s advisors and API management reviewed the reasons for and the risks and benefits of the proposed transaction, including, among other things (i) that the two companies would expect to realize significant savings from consolidating their public company reporting and other compliance obligations; (ii) Luna had favorable gross margins on its products and substantial revenue from research contracts that appeared to be recurring and self-sustaining; (iii) that there were synergies that could be expected to be derived from combining the two businesses, including integration of the two companies sales forces and significant potential synergies with respect to manufacturing activities; (iv) Luna s 2009 bankruptcy had no lasting effect on the technology or business operations of Luna; (v) API was projecting a very weak third and fourth quarter for the 2014 fiscal year which would strain its cash resources and potentially cause it to be in breach of the financial covenants contained in its outstanding loan agreements; (vi) that Luna s strong balance sheet and large cash reserves could help API secure better financing terms and support it through temporary business setbacks, particularly those that API was encountering in the telecommunications segment of its business. After a full discussion, which included the foregoing risks and benefits, the API Board formally ratified and approved the execution and delivery of the letter of intent, dated November 21, 2014, with Luna and the retention of B. Riley as API s financial advisor.

On December 26, 2014, API delivered to Luna updated financial forecasts for the fiscal years ending March 2015 and 2016. The forecasts included a projected slowdown in API sales that extended for a longer period than had been anticipated in the original forecast provided to Luna by API. Following the receipt of the updated financial forecasts, Mr. Graeff spoke with API management and Mooreland representatives on multiple occasions on December 27, 2014 and December 28, 2014. A subsequent meeting was held in Orlando, Florida on December 30, 2014, attended by Messrs. Chung, Graeff, Messick, Kurtz and Risser, to review the API forecasts in depth.

Following that meeting, a representative of Mooreland called Mr. Pastor to advise him that, in light of the changes to API s forecasts, Luna was considering proposing a change in the exchange ratio reflected in the non-binding letter of intent.

At a meeting of the Luna board of directors on January 2, 2015, Mr. Chung provided an update on the status of the potential Merger with API, noting that API signed and returned the non-binding letter of intent. He discussed the expected revenue shortfalls in API s fiscal third quarter and how he and Messrs. Messick and Graeff had visited with API s executives in Florida to better understand the situation. A representative of Mooreland said he believed that API s fiscal third quarter shortfalls and the change in API forecasts would necessitate a change to the exchange ratio reflected in the original non-binding letter of intent, based on further financial analysis.

From January 6, 2015 to January 7, 2015, Mr. Messick met with Messrs. Kurtz, Risser and Anderson in Ann Arbor, Michigan. On those same dates, Luna s auditors, Grant Thornton LLP, assisted in conducting certain onsite due diligence procedures in Ann Arbor, Michigan.

On January 7, 2015, API provided a revised draft of the Merger Agreement and form of voting agreement to Luna and Cooley.

At a meeting of the Luna board of directors on January 9, 2015, Luna management presented its due diligence findings from their meeting with API management on December 30, 2014. Mooreland advised that the results of this further due diligence would be included in Mooreland s financial analysis and its recommendation to the Board on a revised exchange ratio.

Also on January 9, 2015, a representative of Mooreland informed Mr. Pastor, that in light of the revised API financial forecast, Luna proposed to lower the exchange ratio in the proposed merger to a level that would give the API stockholders a 38% ownership interest in the combined business on a fully diluted basis. On January 10, 2015, Mooreland emailed B. Riley and API s chairman regarding a revised exchange ratio. On January 13, 2015, the B. Riley engagement letter was amended to provide analyses of the new, proposed exchange ratio and to advise API with respect to the development of a counter proposal. Between January 9, 2015 and January 15, 2015, the parties, in consultation with their respective financial advisors, continued to discuss the appropriate exchange ratio, and on January 15, 2015, Messrs. Pastor and Chung agreed to recommend to their respective boards of directors an exchange ratio of 0.31782, whereby API s stockholders would own 43% of the common stock of the combined company on a fully diluted basis.

At a meeting of the Luna board of directors on January 16, 2015, Mr. Chung provided an update on the status of the potential merger with API, including, among other things, the revised exchange ratio and the anticipated support of API s board of directors and management in favor of the transaction. Mr. Chung noted that Luna management had concluded its business due diligence of API, noting that API s explanations for its weak fiscal third quarter appeared credible. A representative of Mooreland led the Board through a detailed presentation of API and the respective valuations of API and Luna, as well as the potential cost savings and potential market perception of the combined company. Mr. Kemper summarized the terms of the proposed Merger Agreement, a draft of which had been distributed to Luna s directors. A representative of Cooley discussed the potential timeline for completion of the transaction, in view of SEC filing requirements and the necessity of receiving approvals from both companies stockholders.

On January 16, 2015, Luna provided revised drafts of the Merger Agreement and form of voting agreement to API and Tarter Krinsky. From January 16, 2015 through January 18, 2015 representatives of Luna and API, in consultation with their respective financial and legal advisors, continued to negotiate the terms of the Merger Agreement and the

form of voting agreement and discuss the exchange ratio.

On January 18, 2015, Mooreland provided B. Riley and API with an updated exchange ratio proposal, along with the underlying calculations, of 0.31782 shares of Luna common stock for each share of API common stock, based on the closing prices of the companies respective shares of common stock on January 16, 2015, and Mr. Graeff spoke with API management regarding the updated exchange ratio.

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The Luna board of directors met on January 23, 2015 to discuss the status of the potential merger with API. On January 26, 2015 and January 29, 2015, Mr. Roedel spoke with API s chairman regarding governance matters of the combined company.

At a meeting of the board of directors of API held on January 28, 2015, B. Riley discussed with API s board of directors its analysis of the proposed transaction and on January 29, 2015, B. Riley delivered to API s board of directors its formal opinion that the exchange ratio contemplated in the Merger is fair from a financial point of view to the stockholders of API as of January 29, 2015. See the section entitled The Merger Opinion of B. Riley & Co., LLC to the Board of Directors of API beginning on page 91. The Board also discussed the candidates, that API s Nominating Committee unanimously recommended, to serve as API s designees on the Board of Directors of the combined company. After discussion of the professional backgrounds of Gary Spiegel and Ed Coringrato Jr. and the reasons underlying the Nominating Committee s recommendation, the API Board unanimously agreed (with Mr. Pastor abstaining) that Messrs. Spiegel and Coringrato should be named as two of API s three designees to the Board of Directors of the combined company and that Mr. Pastor should be named as API s third designee with Mr. Pastor being named to the class with a term expiring at the annual meeting of Luna to be held in 2018.

The API board of directors met again on the morning of January 30, 2015 to consider the potential business combination transaction with Luna. The API board of directors received an update regarding the status of the potential transaction, and reviewed the terms of the proposed Merger Agreement and related agreements. Representatives of Tarter Krinsky and the law firm of Morris, Nichols, Arsht and Tunnell LLP, special Delaware counsel to API, reviewed the API board s fiduciary duties with respect to the transaction and the provisions of the Merger Agreement and voting agreements and responded to questions from the directors with respect thereto. After deliberation, including an active discussion among the directors with respect to the risks and benefits of the proposed transactions, including the liquidity issues that API was facing, its ongoing discussions with its lenders with respect to the modification of existing loan covenants, the prospects for Luna to attain certain milestone payments that it could earn in connection with its sale of its medical sense shaping business, and other factors, the API board of directors unanimously adopted the resolutions declaring the Merger Agreement to be advisable and in the best interest of the stockholders and determined to recommend that the stockholders vote in favor of adoption of the Merger Agreement. In addition, the API board of directors approved the related voting agreements.

That same morning, the Luna board of directors held a meeting with representatives of Mooreland and Cooley present. During this meeting, Cooley reviewed the board s fiduciary duties with respect to the proposed transaction with API. The Luna board of directors also engaged in a thorough review with representatives of Cooley of key provisions of the Merger Agreement and voting agreements, and representatives of Cooley and Mr. Kemper responded to questions from directors regarding these agreements. Mooreland presented its financial analysis of the exchange ratio and delivered an oral opinion, subsequently confirmed in writing, that, as of January 30, 2015 and based upon and subject to the assumptions, factors and qualifications set forth in the written opinion, the exchange ratio of 0.31782 shares of Luna common stock for each outstanding share of API common stock pursuant to the Merger Agreement was fair from a financial point of view to Luna s common stockholders. See the section entitled The Merger Opinion of Mooreland Partners LLC to the Board of Directors of Luna beginning on page 79. After further discussion, the Luna board of directors unanimously determined that the Merger Agreement, the Merger and the other transactions contemplated by the Merger Agreement were advisable and fair to and in the best interest of Luna and its common stockholders and approved the Merger Agreement and voting agreements. The Luna board of directors also resolved unanimously to recommend to the Luna stockholders that they vote to approve the issuance of shares of Luna s common stock pursuant to the Merger Agreement.

Following the approval of the transaction by the Luna and API board of directors, the Merger Agreement was executed by the parties, and voting agreements were delivered by each of Luna s and API s executive officers and

directors, on the night of January 30, 2015. On the morning of February 2, 2015, Luna and API each issued a

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press release announcing the Merger. Copies of these press releases, along with the Merger Agreement and form of voting agreements, were filed as exhibits to Current Reports on Form 8-K, filed by each of Luna and API with the SEC on February 2, 2015.

Recommendation of the Luna Board of Directors and its Reasons for the Merger

At a meeting held on January 30, 2015, among other things, the Luna board of directors unanimously:

- determined that the Merger Agreement, the Merger, and the other transactions contemplated by the Merger Agreement are advisable and in the best interests of Luna and its stockholders;
- approved the Merger Agreement and authorized and directed the officers of Luna to execute and deliver the Merger Agreement for and on behalf of Luna;
- authorized and directed the officers of Luna, for and on behalf of Luna, to take all actions necessary to list the shares of Luna common stock to be issued in the Merger pursuant to the Merger Agreement on the NASDAQ Capital Market in order to proceed with the Merger and the other transactions contemplated by the Merger Agreement; and
- authorized and directed the officers of Luna to submit the issuance of shares of Luna common stock in accordance with the terms of the Merger Agreement for approval by the Company s stockholders at a meeting of the holders of Luna s common stock.

Accordingly, the Luna board of directors unanimously recommends that Luna stockholders vote FOR the proposal of the issuance of Luna common stock in the Merger pursuant to the terms of the Merger Agreement.

In connection with the Merger, Luna s financial advisor, Mooreland, delivered a written fairness opinion to the Luna board of directors regarding the fairness, from a financial point of view, of the Exchange Ratio to the Luna stockholders. The full text of Mooreland s written opinion, dated January 30, 2015, is attached to this joint proxy statement/prospectus as Annex B. Luna encourages you to read this opinion carefully in its entirety for a description of the procedures followed, assumptions made, matters considered and limitations on the review undertaken. The opinion is addressed to Luna s board of directors and does not constitute a recommendation to any stockholder as to how such stockholder should vote or act on any matter relating to the Merger.

In reaching its decision to approve the Merger, the Luna board of directors consulted with Luna s management regarding the strategic aspects of the Merger, Luna s legal counsel regarding the legal terms of the Merger and Luna s financial advisors regarding the financial aspects of the Merger and the fairness, from a financial point of view, of the Exchange Ratio to Luna s stockholders. In evaluating the Merger, Luna also considered a number of factors in reaching its decision to take the foregoing actions, including, but not limited to the following:

- management s belief that the Merger would more than double Luna s revenue base;

annual cost savings derived from a single public company infrastructure and management, including only one board, chief executive officer and chief financial officer;

the belief that the combined company, in addition to Luna and API calling on many of the same customers today in Luna s test and measurement and API s HSOR businesses, will be able to benefit from API s existing customer relationships, especially through API s deep and long-standing relationships with some of the largest telecommunications companies;

the use of Luna common stock as the sole consideration in the Merger, which will allow Luna to proceed with the Merger while retaining existing cash resources, net of transaction expenses, that will fund the combined company s operations;

other potential operating synergies between Luna and API, including, among other things, greater manufacturing expertise;

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the belief that the Merger represents a strengthened position in optical products and technologies industries, with increased test and measurement capabilities to address the needs of a broader market base;

the longstanding history of revenues from Luna s core telecommunications test and measurement products, and API s High Speed Optical Receivers and API s Optoelectronic components and subsystems, which will enable continued investment in the combined company s expected growth areas, such as Luna s strain and temperature sensing business and API s next generation of optical receiver and detector products;

the expectation the combined company will be able to continue to develop a pipeline of technologies for future commercialization in Luna s Technology Development Division and API s Terahertz operations;

the belief that Luna s longstanding history of contract research, and recent history of improved success in obtaining contract awards, may enable API s Terahertz operations to obtain additional government funding and decrease reliance on internal funding;

the belief that the increased capitalization of the combined company, with approximately 27 million shares of common stock outstanding after the Merger, may attract more attention from institutional investors and coverage by securities analysts;

the belief that API s core business and enterprise value may have been discounted by its liquidity position and potential need for additional capital resources in the future, which could be overcome through the Merger;

the belief that the larger size of the combined company may attract and make it easier to obtain business opportunities;

the fact that the combined company will have significant intellectual property protection for the many technologies in its combined product portfolio, with over 200 patents and patent applications and many more in-licensed patents and patent applications;

the fact that the combined company would initially retain Luna s chief executive officer and a senior management team that possess the extensive industry knowledge and experience necessary to manage and operate the combined company;

the fact that the board of directors of the combined company would be composed initially of four of the current directors of Luna, including Luna s chairman of the board and Luna s president and chief executive officer, API s current chairman of the board, and two additional directors designated by API;

the belief that the terms and conditions of the Merger Agreement, including the parties mutual representations and warranties, covenants, deal protection provisions and closing conditions, are reasonable for a transaction of this nature;

the fact that the Merger Agreement allows the Luna board of directors, subject to the payment of the termination fee, to terminate the Merger Agreement in the event that Luna receives a superior offer from a third party, subject to specified exceptions;

the fact that the Exchange Ratio is fixed and will not fluctuate based upon changes in the stock prices of API or Luna prior to the completion of the Merger; and

the opinion letter of Mooreland, dated January 30, 2015, to the Luna board of directors as to the fairness, from a financial point of view and as of the date of the opinion, of the Exchange Ratio to Luna (see section entitled Opinion of Mooreland Partners LLC to the board of directors of Luna beginning on page 79 and Annex B).

There can be no assurance that the anticipated strategic and financial benefits of the Merger will be achieved, including that the anticipated synergies resulting from the Merger will be achieved or reflected in the trading price of Luna common stock following the completion of the Merger.

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In addition, Luna s board of directors identified and considered a variety of risks and other countervailing factors in its deliberations concerning whether to recommend the proposal regarding the issuance of Luna common stock in connection with the Merger to Luna s stockholders, including, but not limited to, the following:

- the risks described under the section entitled Risk Factors beginning on page 21;
- the fact that both companies forecast significant growth in product revenue, which may be difficult to achieve;
- the risk that if API s weak fiscal third quarter 2015 represents a trend, rather than an anomaly due to temporarily delayed customer orders and government funding, the combined company s business could be weaker than expected;
- the substantial transaction costs to be incurred by Luna in connection with the Merger, even if the Merger is not completed in a timely manner or at all;
- the potential challenges associated with integrating two companies with distant company headquarters in Ann Arbor, Michigan and Roanoke, Virginia, respectively, particularly if any key personnel were to unexpectedly resign;
- the possibility that integration of operations and administrative and management functions may prove more difficult than expected and could distract the combined company s leadership from focusing on achievement of strategic growth initiatives;
- the risk that operating synergies, both in terms of greater revenue opportunities or costs savings beyond direct public company infrastructure, may not be realized;
- the general challenges associated with successfully integrating two companies that may have different corporate cultures; and
- the risk that conditions to the completion of the Merger will not be satisfied and that the Merger may not be completed in a timely manner or at all.

The Luna board of directors concluded, however, that these negative factors could be managed or mitigated by Luna or by the combined company or were unlikely to have a material impact on the Merger or the combined company, and that, overall, the potentially negative factors associated with the Merger were outweighed by the potential benefits of the Merger.

In considering the recommendation of the Luna board of directors with respect to the proposal to adopt the Merger Agreement and approve the transactions contemplated thereby, you should be aware that some of Luna s directors and executive officers may have interests in the Merger that are different from, or in addition to, yours. The Luna board of directors was aware of and considered these interests, among other matters, in evaluating the Merger Agreement and the transactions contemplated by the Merger Agreement, and in recommending that the Merger Agreement be adopted by Luna stockholders. See the section entitled Interests of Directors, Executive Officers and Affiliates of Luna beginning on page 109 of this joint proxy statement/prospectus.

The above discussion of the material factors considered by the Luna board of directors is not intended to be exhaustive, but does set forth the principal factors considered by it. The Luna board of directors collectively reached the unanimous conclusion to approve the Merger Agreement, the Merger and the transactions contemplated thereby in light of the various factors described above and other factors that each member of the Luna board of directors felt were appropriate. In view of the wide variety of factors considered by it in connection with its evaluation of the Merger and the complexity of these matters, the Luna board of directors did not consider it practical, and did not attempt, to quantify, rank or otherwise assign relative weights to the specific factors it considered in reaching its decision. Rather, the Luna board of directors made its recommendation based on the totality of information presented to and the investigation it conducted. In considering the factors discussed above and in making their determinations, individual directors may have given different weights to different factors.

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Recommendation of the API Board of Directors and its Reasons for the Merger

At a meeting held on January 30, 2015, the API board of directors unanimously (1) approved the Merger Agreement and the transactions contemplated by the Merger Agreement, upon the terms and subject to the conditions set forth in the Merger Agreement, (2) authorized management to submit the Merger Agreement to the API stockholders for adoption at the API stockholder meeting and (3) recommended that API s stockholders adopt the Merger Agreement and approve the transactions contemplated by the Merger Agreement.

In connection with the Merger, API s financial advisor, B. Riley, delivered a written fairness opinion to the API board of directors concerning the fairness, from a financial point of view, of the Exchange Ratio being used in connection with the Merger, to API stockholders. The full text of B. Riley s written opinion, dated January 29, 2015, is attached to this joint proxy statement/prospectus as Annex C. API encourages you to read this opinion carefully in its entirety for a description of the procedures followed, assumptions made, matters considered and limitations on the review undertaken. The opinion is addressed to API s board of directors and does not constitute a recommendation to any stockholder as to how such stockholder should vote or act on any matter relating to the Merger.

Accordingly, the API board of directors unanimously recommends that API stockholders vote FOR the proposal to adopt the Merger Agreement and approve the transactions contemplated thereby at the API stockholder meeting.

The API board of directors believes that the Merger presents a strategic opportunity to create value for API s stockholders. In reaching its decision to approve the Merger Agreement and recommend the adoption of the Merger Agreement to its stockholders, the API board of directors consulted with management, as well as its legal advisors and financial advisors, and considered a number of factors, including, among others, the following:

the API board s evaluation of the significant strategic opportunities and benefits of the Merger, including, among others, the following:

(1) the expectation based on estimates by API and Luna management prior to the execution of the Merger Agreement that the Merger will result in significant cost savings on an annualized basis;

(2) the value of the consideration to be received by API stockholders as a result of the transaction and the relationship between the current and historical market values of API common stock and Luna common stock;

(3) the fact that the exchange ratio represented a premium to the trading price of API common stock at the time the Merger Agreement was signed that was significant for a merger of equals transaction;

(4) its conclusion that the businesses of API and Luna are a complementary fit and that the Merger will provide expanded product offerings, greater opportunities for innovation, synergy opportunities, scale advantages and enhanced opportunities for growth, including in the test and measurement markets; and

(5) the potential to increase revenue through cross-selling to shared strategic customer accounts; and

the API board s knowledge of API s business, financial and competitive position, and of API s operating plan for 2015 and its strategic plans for subsequent years;

the API board s understanding of Luna s business, financial and competitive position, and of Luna s operating plan for 2015 and its strategic plans for subsequent years;

the access to additional capital for product development that could be derived from the proposed business combination by reason of Luna s comparatively strong balance sheet;

the governance provisions of the Merger Agreement, the credentials of those persons designated as the initial members of the board of directors of the combined business, and the dissatisfaction previously expressed by stockholders with the composition of the API board of directors;

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current financial market conditions and historical market prices, volatility and trading information with respect to API s common stock and Luna s common stock;

current industry, economic and market conditions and the various alternatives to the Merger, including API continuing to operate as an independent enterprise or completing a business combination with another party and the benefits and risks associated with those alternatives;

the perceived similarity in corporate cultures, which would facilitate integration and implementation of the Merger;

the ability and likelihood of API and Luna to complete the Merger, including their ability to obtain necessary stockholder approvals and the obligations to attempt to obtain those approvals, and measures taken by API and Luna to provide reasonable assurance to each other that the Merger will occur, including the provisions of the Merger Agreement that require API or Luna to compensate the other in some circumstances if the Merger does not occur;

the fact that the Merger is not subject to any financing condition;

the expectation that the transaction will be treated as a tax-free reorganization to API and Luna and their respective stockholders for U.S. federal income tax purposes;

the fact that the Luna common stock that API stockholders will receive pursuant to the Merger will be registered and freely tradable following the Merger;

its review and discussions with API management concerning the due diligence examination of Luna s business, operations, financial condition and prospects;

in connection with the Merger, API s financial advisor, B. Riley, delivered a written fairness opinion to the API board of directors concerning the fairness, from a financial point of view, of the Exchange Ratio being used in connection with the Merger, to API stockholders. The full text of B. Riley s written opinion, dated January 29, 2015, is attached to this joint proxy statement/prospectus as Annex C. API encourages you to read this opinion carefully in its entirety for a description of the procedures followed, assumptions made, matters considered and limitations on the review undertaken. The opinion is addressed to API s board of directors and does not constitute a recommendation to any stockholder as to how such stockholder should vote or act on any matter relating to the Merger;

the terms and conditions of the Merger Agreement and the course of negotiations of the Merger Agreement, including, among other things, the ability of the API board, if there is a superior offer or other specified intervening event, to withdraw or modify its recommendation to API stockholders concerning the

transactions contemplated by the Merger Agreement; and

other terms of the Merger Agreement, including the mutual representations, warranties and covenants, and the conditions to each party s obligations to complete the Merger.

The API board of directors also weighed the factors described above against certain factors and potential risks associated with entering into the Merger Agreement, including, among others, the following:

the difficulty inherent in integrating the businesses, assets and workforces of the two companies and the risk that the anticipated synergies and other benefits expected from the Merger might not be fully realized;

the risk that the cultures of the two companies may not be as compatible as anticipated;

the fact that the Exchange Ratio is fixed, indicating that API stockholders could be adversely affected by a decrease in the trading price of Luna common stock during the pendency of the Merger and the fact that the Merger Agreement does not provide API with a price-based termination right or other similar protection;

the fact that the termination fee or reimbursement fee to be paid to Luna under the circumstances specified in the Merger Agreement may discourage other parties that might otherwise have an interest

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in a business combination with, or an acquisition of, API (see the section entitled The Merger Agreement Termination Fee beginning on page 126 of this joint proxy statement/prospectus);

the amount of time it could take to complete the Merger, including the fact that completion of the Merger depends on factors that are outside API s control;

the fact that if the proposed Merger is not completed, API will have expended significant human and financial resources on a failed transaction, and may also be required to pay a termination fee or reimbursement fee in various circumstances, as described under The Merger Agreement Termination Fee beginning on page 126; and

the risks associated with the Merger and the business of API and the combined company in the section entitled Risk Factors Risks Relating to the Merger beginning on page 21 of this joint proxy statement/prospectus.

In considering the recommendation of the API board of directors with respect to the proposal to adopt the Merger Agreement and approve the transactions contemplated by the Merger Agreement, you should be aware that some of API s directors and executive officers may have interests in the Merger that are different from, or in addition to, yours. The API board of directors was aware of and considered these interests, among other matters, in evaluating the Merger Agreement and the transactions contemplated by the Merger Agreement, and in recommending that the Merger Agreement be adopted by API stockholders. See the section entitled Interests of Directors, Executive Officers and Affiliates of API beginning on page 109 of this joint proxy statement/prospectus.

The foregoing discussion of the information and factors considered by the API board of directors in reaching its conclusions and recommendations is not intended to be exhaustive, but includes the material factors considered by the API board of directors. In view of the wide variety of factors considered in connection with its evaluation of the Merger Agreement and the transactions contemplated by the Merger Agreement, and the complexity of these matters, the API board of directors did not find it practicable to, and did not attempt to, quantify, rank or assign any relative or specific weights to the various factors considered in reaching its determination and making its recommendation. In addition, individual directors may have given different weights to different factors. The API board of directors considered all of the foregoing factors as a whole and based its recommendation on the totality of the information presented.

Opinion of Mooreland Partners LLC to the Board of Directors of Luna

Luna retained Mooreland Partners LLC (Mooreland) to act as its financial advisor in connection with the Merger and to render an opinion as to the fairness, from a financial point of view, to the holders of Luna common stock of the exchange ratio pursuant to the Merger Agreement.

Mooreland, founded in 2002, is a leading independent investment bank providing M&A and private capital advisory services to the global technology industry, serving clients from its offices in Silicon Valley, Greenwich (CT), and London. Mooreland provides industry domain and transaction expertise across all major technology sectors including communications technology, mobile and digital media, enterprise software and services, as well as industrial technology and electronics.

On January 30, 2015, Mooreland delivered its oral opinion, which it subsequently confirmed in writing, to the Luna Board of Directors that, as of that date and based upon and subject to the assumptions and other matters described in the written opinion, the exchange ratio of 0.31782 pursuant to the Merger Agreement was fair, from a financial point of view, to the holders of Luna common stock.

Mooreland provided its opinion for the information and assistance of the Luna board of directors in connection with and for the purpose of the Luna board of directors evaluation of the transactions contemplated by the Merger Agreement.

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Mooreland s opinion relates only to the fairness, from a financial point of view, to the holders of Luna common stock of the Exchange Ratio, which was determined through arm s length negotiations between Luna and API. While Mooreland provided independent financial advice to the Luna board of directors during the course of negotiations between Luna and API, the decision to approve and recommend the Merger was made independently by the Luna board of directors. Mooreland s opinion does not address any other aspect of the Merger, or any related transaction, and does not constitute a recommendation to any stockholder of Luna as to how that stockholder should vote or act on any matter relating to the Merger.

The complete text of Mooreland s opinion, which sets forth the assumptions made, procedures followed, matters considered, and qualifications and limitations on and scope of the review undertaken by Mooreland, is attached to this joint proxy statement/prospectus as Annex B and is incorporated by reference in this joint proxy statement/prospectus. The summary of Mooreland s opinion set forth below is qualified in its entirety by reference to the full text of the opinion. **Luna stockholders should read this opinion carefully and in its entirety.**

In connection with its opinion, Mooreland made such reviews, analyses and inquiries as it deemed necessary and appropriate under the circumstances. Mooreland also took into account its assessment of general economic, market and financial conditions, as well as its experience in business valuation matters. For purposes of its opinion, Mooreland, among other things:

- reviewed certain publicly available financial statements and other business and financial information of both API and Luna;
- reviewed certain internal financial statements and other financial and operating data concerning both API and Luna, furnished to Mooreland by Luna; and treated the accrued, unissued dividends on Luna s Series A Preferred Stock consistent with Luna s Series A Preferred Stock;
- reviewed certain financial projections prepared by the management teams of API and Luna and provided to Mooreland by Luna;
- discussed with senior executives of both API and Luna the past and current operations, financial condition and future prospects and financial projections of API and Luna, respectively;
- reviewed the reported prices and trading activity for both API common stock and Luna common stock;
- compared the financial performance of API and Luna and the prices and trading activity of the API common stock and Luna common stock with that of certain other publicly-traded companies and their securities that Mooreland deemed relevant for purposes of its opinion;
- compared the financial terms of the proposed Merger with the financial terms, to the extent publicly available, of certain merger transactions that Mooreland deemed relevant for purposes of its opinion;

considered information obtained by Mooreland during discussions with other potential transaction parties approached by Mooreland on behalf of Luna;

participated in discussions and negotiations among representatives of API and Luna and their respective financial and legal advisors;

reviewed a draft of the Merger Agreement, dated January 30, 2015; and

performed such other analyses and considered such other factors as Mooreland deemed appropriate in connection with its engagement.

In connection with its review and in arriving at its opinion, Mooreland assumed and relied on the accuracy and completeness of all of the financial, accounting, legal, tax and other information discussed with or reviewed by it for purposes of its opinion and did not independently verify, nor did Mooreland assume responsibility for independent verification of, any of that information. Mooreland assumed the accuracy of the representations and warranties contained in the Merger Agreement and all agreements related thereto relevant to its analysis. In

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addition, Mooreland assumed that the Merger will qualify as a reorganization within the meaning of Section 368(a) of the Internal Revenue Code of 1986 and will be consummated on the terms and subject to the conditions set forth in the draft Merger Agreement furnished to Mooreland without waiver, modification or amendment of any material term, condition or agreement thereof and that, in the course of obtaining the necessary regulatory or third party approvals, consents and releases for the Merger, no delay, limitation, restriction or condition will be imposed that would have an adverse effect on Luna, API or the contemplated benefits of the Merger. In addition, Mooreland assumed that the financial forecasts for Luna and API provided to Mooreland by Luna management were reasonably prepared on bases reflecting the best currently available estimates and judgments of management, at the time of preparation, of the future operating and financial performance of Luna and API and the combined companies, and Mooreland relied, without independent verification, upon the estimates of Luna and API management of the potential cost savings and other synergies, including the amount and timing thereof, that may be achieved as a result of the Merger. Mooreland expressed no opinion with respect to any of those forecasts, including those costs savings and other synergies, or the assumptions on which they were based.

Mooreland did not assume any responsibility for or make or obtain any independent evaluation, appraisal or physical inspection of the assets or liabilities of API, Luna or any of their respective subsidiaries nor did Mooreland evaluate the solvency or fair value of API, Luna or any of their respective subsidiaries under any state or federal laws relating to bankruptcy, insolvency or similar matters. Mooreland s opinion states that it was based on economic, monetary and market conditions as they existed and could be evaluated as of its date, and Mooreland assumed no responsibility to update or revise its opinion based upon circumstances and events occurring after its date. Mooreland s opinion is limited to the fairness, from a financial point of view, to the holders of Luna common stock of the Exchange Ratio pursuant to the Merger Agreement and Mooreland expressed no opinion as to the fairness of the Merger to, or any consideration received in connection therewith by, the holders of any other class of securities, creditors or other constituencies of Luna, or as to Luna s underlying business decision to engage in the Merger or the relative merits of the Merger as compared to other business strategies that might be available to Luna. In addition, Mooreland expressed no opinion with respect to the amount or nature or any other aspect of any compensation payable to or to be received by any officers, directors or employees of any party to the Merger, or any class of those persons, relative to the Exchange Ratio pursuant to the Merger Agreement or with respect to the fairness of any such compensation. Mooreland did not express any opinion as to what the value of Luna common stock will be when issued pursuant to the Merger or the prices at which API common stock or Luna common stock will actually trade at any time.

Luna imposed no limitations on Mooreland with respect to the investigations made or procedures followed by Mooreland in rendering its opinion.

In preparing its opinion, Mooreland performed a variety of financial and comparative analyses. The following paragraphs summarize the material financial analyses performed by Mooreland in arriving at its opinion. The order of analyses described does not represent relative importance or weight given to those analyses by Mooreland. Some of the summaries of the financial analyses include information presented in tabular format. The tables are not intended to stand alone, and in order to more fully understand the financial analyses used by Mooreland, the tables must be read together with the full text of each summary. The following quantitative information, to the extent it is based on market data, is, except as otherwise indicated, based on market data as it existed on or prior to January 29, 2015, and is not necessarily indicative of current or future market conditions.

Historical Trading Range

Mooreland presented to the Luna board of directors the trading range of API s common shares for the 52-week period ended January 29, 2015, with closing prices ranging from a low of $0.29 per share to a high of $0.81 per share, and compared that to the closing price of API s common shares on January 29, 2015 of $0.34 per share. Mooreland also

reviewed with the Luna board of directors the Volume Weighted Average Price (VWAP) of API s common stock for the 52-week period ended January 29, 2015, which was $0.51 per share, and compared

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that to the implied per share equity value of the Merger Consideration of $0.52, calculated as of January 29, 2015. Over the 52-week period ended January 29, 2015, the closing price of API s common shares was at or above the Implied Offer Price per Share of $0.52 for 133 days out of 253 trading days.

Mooreland also presented to the Luna board of directors the trading range of Luna s common shares for the 2-year period ended January 29, 2015, with closing prices ranging from a low of $1.13 per share to a high of $2.50 per share, and compared that to the closing price of Luna s common shares on January 29, 2015 of $1.64 per share. Over the 2-year period ending January 29, 2015, the closing price of Luna s common shares was at or above the January 29, 2015 closing price of $1.64 for 23 days out of 505 trading days.

Mooreland noted that the historical trading range analysis is not a valuation methodology and that such analysis was presented merely for reference purposes only and not as a component of the determination as to the fairness of the transaction.

Historical Stock Trading Ratio Analysis

Mooreland reviewed the historical trading prices of API common stock and Luna common stock as of and for various periods ended January 29, 2015, the last full trading day prior to the date of Mooreland Partner s opinion, in order to determine the various stock price ratios that existed for those periods and to compare those average stock price ratios to the Exchange Ratio in the Merger of 0.31782. The following table presents the average stock price ratios for January 29, 2015, and the three month, six month, one year, and two year periods ending on January 29, 2015. Average stock price ratio data represents the daily closing price of API common stock divided by the daily closing price of Luna common stock averaged over the respective periods.

Date or Period	Average Stock Price Ratio
January 29, 2015	0.20537
Three month	0.25139
Six month	0.31756
One year	0.35860
Two year	0.40527

Relative Contribution Analysis

Mooreland reviewed and analyzed the implied percentage contribution of each of Luna and API to pro forma projected combined operating results. In calculating the pro forma projected combined operating results, Mooreland used API management s financial forecasts of API s projected calendar years 2014 through 2015 operating results and Luna management s stand-alone company financial forecasts of projected calendar years 2014 through 2015 operating results. Mooreland reviewed, among other things, the implied percentage contributions to pro forma combined revenues and gross profit. Mooreland also reviewed contributions to earnings before interest, taxes, depreciation, amortization, or EBITDA, but determined that the results were not meaningful because of both companies negative last twelve months (LTM) EBITDA. Mooreland also reviewed the implied percentage contributions to pro forma combined net cash using API and Luna s forecasted balance sheets as of March 31, 2015. The following tables present the results of this analysis and the estimated percentage ownership of the combined company on a pro forma basis by the API stockholders and the Luna stockholders and estimated pro forma equity value contributions of API and Luna, based on the Exchange Ratio of 0.31782.

	Implied Actual/Estimated Percentage Contribution	
	API	**LUNA**
Pro forma combined revenues		
calendar year 2014E	57.0%	43.0%
calendar year 2015E	55.3%	44.7%
Pro forma combined gross profit		
calendar year 2014E	54.6%	45.4%
calendar year 2015E	49.4%	50.6%
Mean Relative Contribution from Operations	54.1%	45.9%

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Mooreland also reviewed and factored both API management and Luna management s forecasted balance sheet ending March 31, 2015 to adjust the relative contribution. API s management forecast for net cash (debt) position was $0.1 million in cash minus total debt of $4.1 million. Luna s management forecast for net cash position was computed by adding Luna s forecasted cash position of $12.9 million, minus $0.3 million of debt minus $8.0 million which represents the $4.69159 per share liquidity preference associated with the 1,321,514 outstanding shares of Series A Preferred Stock and the related 393,277 shares of unregistered, unpaid accrued dividends on the Series A Preferred Stock.

	Forecasted Balance Sheet Adjustments ($ in millions)	
	API	LUNA
Forecasted Pro forma net cash (debt) at March 31, 2015	($ 4.0)	$ 4.6

Mooreland calculated an implied Luna enterprise value and divided Luna s implied enterprise value by the Mean of Luna s Implied Relative Contributions from Operations of 45.9% to derive an implied enterprise value, which Mooreland defines as fully-diluted equity value using the treasury stock method, plus debt, preferred stock and minority interests, less cash and cash equivalents (EV), for API. Mooreland then adjusted the respective implied enterprise values for the Forecasted Balance Sheet Adjustments in order to compute the Pro forma equity ownership. Mooreland also performed these calculations assuming that Luna receives the $8 million payment from Intuitive upon Intuitive s accomplishment of certain technical specifications with respect to the medical shape sensing technology Luna sold to Intuitive in 2014 (the Technical Specification Payment).

	Estimated Pro Forma Percentage Equity Ownership	
	API	LUNA
Pro forma equity ownership	44.9%	55.1%
Pro forma equity ownership (assuming Technical Specifications Payment)	38.0%	62.0%

The results of the equity ownership analysis are not necessarily indicative of the contributions that the respective businesses may have in the future, and may not rely on the exact same approximations as in other places in this joint proxy statement/prospectus.

Selected Public Company Analysis for API

Using publicly available information, Mooreland compared selected financial data of API with data for publicly traded companies engaged in similar businesses that also had financial parameters that Mooreland judged to be analogous to API s business or aspects thereof. The companies were as follows:

Electro-Sensors Inc.

Giga-tronics, Inc.

GigOptix, Inc.

LightPath Technologies, Inc.

NeoPhotonics Corporation

Optical Cable Corporation

For each company listed above, Mooreland calculated and compared various financial multiples and ratios based on publicly available financial data as of January 29, 2015. Among other calculations, Mooreland calculated, for each of the companies, the multiples of EV to historical and estimated revenue and gross profit projections of API, as well as API s estimated December 26, 2014 tangible book value.

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The following table sets forth information concerning the following multiples for the selected companies and for API:

EV as a multiple of projected calendar year 2014 revenues;

EV as a multiple of projected calendar year 2015 revenues;

EV as a multiple of projected calendar year 2014 gross profit;

EV as a multiple of projected calendar year 2015 gross profit; and

price as a multiple of tangible book value per share.

Mooreland calculated the Implied Offer Multiples based on the closing stock price for Luna of $1.64 on January 29, 2015 and the exchange ratio of 0.31782 and using API s forecasted December 26, 2014 balance sheet as a means to calculate EV. All financial information in this analysis excludes the impact of non-recurring items. Projected calendar year 2014E and 2015E results for API were based on API management s stand-alone company financial forecasts.

	Selected Companies				Implied Offer Multiples
	25th Percentile	75th Percentile	Mean	Median	
EV to projected calendar year 2014 revenues	0.6x	1.0x	0.8x	0.8x	0.8x
EV to projected calendar year 2015 revenues	0.4x	0.9x	0.7x	0.6x	0.7x
EV to projected calendar year 2014 gross profit	1.4x	2.5x	2.0x	1.9x	2.4x
EV to projected calendar year 2015 gross profit	1.1x	2.0x	1.7x	1.3x	2.0x
Price to tangible book value per share	1.2x	1.5x	1.4x	1.4x	4.2x

Selected Public Company Analysis for Luna

Using publicly available information, Mooreland compared selected financial data of Luna with data for publicly traded companies engaged in similar businesses that also had financial parameters that Mooreland judged to be analogous to Luna s business or aspects thereof. The companies were as follows:

Dynasil Corporation of America

Electro-Sensors Inc.

Giga-tronics, Inc.

GigOptix, Inc.

LightPath Technologies, Inc.

NeoPhotonics Corporation

Optical Cable Corporation

For each company listed above, Mooreland calculated and compared various financial multiples and ratios based on publicly available financial data as of January 29, 2015. Among other calculations, Mooreland calculated for each of the companies the multiples of EV to historical and estimated revenue and gross profit projections of Luna, as well as Luna s estimated December 31, 2014 tangible book value. Projected calendar year 2014E and 2015E results for Luna were based on Luna management s stand-alone company financial forecasts.

Based on this information, Mooreland calculated and compared the following multiples for Luna and the selected companies:

EV as a multiple of projected calendar year 2014 revenues;

EV as a multiple of projected calendar year 2015 revenues;

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EV as a multiple of projected calendar year 2014 gross profit;

EV as a multiple of projected calendar year 2015 gross profit; and

price as a multiple of tangible book value per share.

Mooreland calculated the Luna Multiples based on the closing stock price for Luna of $1.64 on January 29, 2015 and using Luna s forecasted December 31, 2014 balance sheet as a means to calculate enterprise value. Mooreland calculated the Luna Multiples Assuming Technical Specifications Payment by adjusting the enterprise value to reflect the impact on enterprise value in the event the Technical Specifications Payment was to be collected.

	25th Percentile	75th Percentile	Mean	Median	Luna Multiples	Luna Multiples Assuming Technical Specifications Payment
EV to projected calendar year 2014 revenues	0.6x	1.0x	0.8x	0.8x	1.0x	0.6x
EV to projected calendar year 2015 revenues	0.4x	0.9x	0.7x	0.6x	0.8x	0.5x
EV to projected calendar year 2014 gross profit	1.4x	2.5x	2.0x	1.9x	2.6x	1.6x
EV to projected calendar year 2015 gross profit	1.1x	2.0x	1.7x	1.3x	1.8x	1.1x
Price to tangible book value per share	1.2x	2.2x	1.7x	1.4x	2.6x	1.5x

None of the selected companies reviewed is identical to API or Luna, as applicable, and certain of these companies may have characteristics that are materially different from those of API and Luna, as applicable. These companies were selected, among other reasons, because they are publicly traded companies with operations and businesses that, for purposes of Mooreland s analysis, may be considered similar to those of API and Luna, as applicable, based on sector participation, financial metrics and form of operations. The analyses necessarily involve complex considerations and judgments concerning differences in financial and operational characteristics of the companies involved and other factors that could affect the companies differently than would affect API and Luna, as applicable.

Mooreland also reviewed for the selected public companies EV as a multiple of EBITDA, but determined that the results were not meaningful because of both API s and Luna s negative LTM EBITDA.

Selected Transactions Analysis

Mooreland analyzed publicly available financial information for the following selected merger and acquisition transactions, which represent transactions completed since January 1, 2010 that involved target companies that were involved in lines of business that may be considered similar to or have similar characteristics with API s lines of business and with EV of less than $150 million (based on the reported transaction value):

Acquirer	Target

NeoPhotonics Corporation	EMCORE Corporation (Tunable Laser and Transceiver Product Lines)
Finisar Corporation	u²t Photonics AG
Murata Electronics North America, Inc.	RF Monolithics Inc.
Oclaro, Inc.	Opnext, Inc.
NeoPhotonics Corporation	Santur Corporation
II-VI Incorporated	Aegis Lightwave, Inc.
Francisco Partners Management LLC	Source Photonics, Inc.
Oclaro, Inc.	Mintera Corporation

In reviewing the selected transactions, Mooreland calculated, for the selected transactions EV as a multiple of LTM revenues. Mooreland also reviewed, for the selected transactions, EV as a multiple of LTM EBITDA, but

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determined that the results were not meaningful because of API s negative LTM EBITDA. Mooreland calculated the API Implied Multiple by Merger as an enterprise value as a multiple of LTM revenue multiple using API management s December 26, 2014 forecast, Luna s closing stock price on January 29, 2015 and the Exchange Ratio of 0.31782.

The following table sets forth information concerning the multiples described above for the selected transactions and the same multiple implied by the Merger.

	Selected Transactions				API Implied Multiple by Merger
	25th Percentile	75th Percentile	Mean	Median	
EV to LTM revenues	0.6x	0.8x	0.8x	0.7x	0.8x

Premiums Paid Analysis

Mooreland analyzed publicly available financial information for 12 merger and acquisition transactions, which represent transactions announced and closed between January 1, 2009 and January 29, 2015 that involved all stock consideration, acquired companies that were publicly-traded on U.S. listed exchanges, and had an equity value between $10 and $100 million. In reviewing these transactions, Mooreland analyzed the premium of consideration offered to the acquired company s stock price one trading day prior and 30 calendar days prior to the announcement of the transaction.

Mooreland calculated premiums for API based on the Implied Offer Price per Share and the API closing stock price of $0.34 on January 29, 2015. The following table sets forth information concerning the stock price premiums in the selected transactions and the stock price premiums implied by the Merger.

	Median Premium	Implied Merger Premium
One trading day prior stock price premium	35.2%	54.8%
30 calendar days prior stock price premium	28.9%	64.4%

Present Value of Future Share Price Analysis for API

Mooreland performed an analysis of the present value of the implied future price per share of API common stock, which is designed to provide an indication of the present value of a theoretical future value of a company s equity per share as a function of the company s estimated future revenue and gross profit and its assumed EV to LTM revenue and EV to LTM gross profit multiples. Mooreland applied the median multiples of 0.8x EV / LTM revenue and 1.5x EV / LTM gross profit, respectively, to estimated revenues and gross profits of API for each of the calendar years 2015, 2016, and 2017 as provided by API s management. These selected medians of revenues and gross profit were based upon the median multiples from the Selected Public Company Analysis for API. Mooreland then discounted the 2015, 2016, and 2017 values back to present by using a discount rate of 14.0%, reflecting an estimate of Selected Public Company Analysis for API weighted average cost of capital (WACC), which takes into account certain company-specific metrics, including a company s equity value, as well as certain financial metrics for the United States financial markets generally. This analysis resulted in a range of implied equity per share values for API of

$0.27 to $0.70 per share. Mooreland noted that the per share value implied by the assumed exchange ratio of 0.31782 and the Luna closing stock price on January 29, 2015 was $0.52.

Present Value of Future Share Price Analysis for Luna

Mooreland also performed an analysis of the present value of the implied future price per share of Luna common stock. Mooreland applied an enterprise value to LTM revenue of 0.7x to estimated revenues of Luna for each of the calendar years 2015, 2016, and 2017 revenue forecast, as provided by Luna s management. This selected

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multiple was the median multiple based upon the Selected Public Company Analysis for Luna. Mooreland then discounted the 2015, 2016, and 2017 values back to present by using a discount rate of 14.0%, reflecting an estimate of Selected Public Company Analysis for Luna WACC. Mooreland also reviewed and calculated the potential impact of the Technical Specifications Payment. These analyses resulted in a range of implied equity per share values for Luna of $1.18 to $1.66 per share.

No company, transaction or business used in the Selected Public Company Analysis, Selected Transactions Analysis or Premiums Paid Analysis as a comparison is identical to API, Luna or the Merger. Accordingly, an evaluation of the results of these analyses is not entirely mathematical; rather, it involves complex considerations and judgments concerning differences in the financial and operating characteristics and other factors that could affect the acquisition, public trading or other values of the selected companies or selected transactions or the business segment, company or transaction to which they are being compared.

The summary set forth above does not purport to be a complete description of the analyses performed by Mooreland in connection with the rendering of its opinion. The preparation of a fairness opinion is a complex analytical process involving various determinations as to the most appropriate and relevant quantitative and qualitative methods of financial analyses and the application of those methods to the particular circumstances and, therefore, such an opinion is not readily susceptible to summary description. Accordingly, Mooreland believes that its analyses must be considered as a whole and that selecting portions of its analyses or the factors it considered, without considering all analyses and factors, could create a misleading or incomplete view of the process underlying its analyses and opinion. Mooreland did not attribute any specific weight to any factor or analysis considered by it. The fact that any specific analysis has been referred to in the summary above is not meant to indicate that such analysis was given greater weight than any other analysis.

In performing its analyses, Mooreland made numerous assumptions with respect to industry performance, general business and economic conditions and other matters, many of which are beyond API s or Luna s control. Any estimates contained in or underlying these analyses, including estimates of future performance, are not necessarily indicative of actual values or predictive of future results or values, which may be significantly more or less favorable than those estimates. Additionally, analyses relating to the values of businesses or assets do not purport to be appraisals or necessarily reflect the prices at which businesses or assets may actually be sold or the prices at which any securities have traded or may trade at any time in the future. Accordingly, these analyses and estimates are inherently subject to substantial uncertainty. Mooreland s opinion and its related analyses were only one of many factors considered by Luna s board of directors in their evaluation of the Merger and should not be viewed as determinative of the views of Luna s board of directors or management with respect to the Exchange Ratio or the Merger.

Mooreland is a financial institution engaged in various activities, which may include financial advisory, mergers, acquisitions, divestitures, capital raising activities, among others. Mooreland has not provided investment banking or financial advisory services to API or Luna for which compensation was received before the signing of their letter of engagement with Luna on March 25, 2014. Under the terms of its engagement letter with Mooreland, Luna has paid or agreed to pay Mooreland fees in amounts that Luna and Mooreland believe are customary in transactions of this nature. These fees include retainer fees of $100,000, which are creditable against the fee for the consummation of the Merger, a non-refundable fee for rendering the Mooreland fairness opinion of $200,000 and a transaction fee payable upon consummation of the Merger of $750,000. In addition, Luna has agreed to reimburse Mooreland for certain of its out-of-pocket expenses and to indemnify Mooreland and related persons against various liabilities, including certain liabilities under the federal securities laws. In the future, Mooreland may perform additional financial advisory and investment banking services for Luna, for which it may receive customary fees and expenses.

Mooreland, its members, affiliates, directors and officers may at any time invest on a principal basis, hold long or short positions, finance positions, and may trade or otherwise structure and effect transactions, for their own account in securities of Luna, API, or any other company (including debt, equity and convertible securities), or any currency or commodity, that may be involved in this transaction.

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Nature of Financial Projections Reviewed by the Luna Board of Directors and Luna s Financial Advisor

Luna does not make public disclosure of forecasts or projections of its expected financial performance because of, among other things, the inherent difficulty of accurately predicting future periods and the likelihood that the underlying assumptions and estimates may prove incorrect. In connection with its evaluation of the Merger, however, Luna management prepared and provided to the Luna board of directors and Mooreland Partners, some non-public internal financial projections regarding Luna s anticipated future operations and estimated synergies arising in connection with the Merger. In addition, Luna management provided to Mooreland Partners and the Luna board of directors certain non-public internal financial projections for API prepared by API management. A summary of these financial projections and estimated synergies is included below to provide Luna stockholders and API stockholders access to specific non-public information that was considered by the Luna board of directors for purposes of evaluating the Merger and provided to Mooreland Partners for its use in evaluating the fairness, from a financial point of view, of the Exchange Ratio to Luna stockholders.

The financial projections and estimated synergies summarized below were not prepared for purposes of public disclosure, nor were they prepared on a basis designed to comply with published guidelines of the SEC, the guidelines established by the American Institute of Certified Public Accountants for preparation and presentation of projections, or U.S. GAAP. Luna s independent registered public accounting firm, which is listed as an expert below in Experts, did not compile, examine or perform any procedures with respect to the projections or estimated synergies summarized below, and has not expressed any opinion or any other form of assurance on this information or its achievability, and assumes no responsibility for, and disclaims any association with, these projections and estimated synergies. The reports of the independent registered public accounting firms included in this joint proxy statement/prospectus relate to historical financial statements. They do not extend to any prospective financial information and should not be seen to do so.

Although presented with numerical specificity, the projections and estimated synergies were prepared in the context of numerous variables, estimates and assumptions that are inherently uncertain and may be beyond the control of Luna, and which may prove not to have been, or to no longer be, accurate. The projections and the estimated synergies are subject to many risks and uncertainties. Important factors that may affect actual results and cause actual results to differ materially from these projections and synergies include risks and uncertainties relating to Luna s and API s businesses (including their ability to achieve strategic goals, objectives and targets over the applicable periods), industry performance, the regulatory environment, general business and economic conditions, market and financial conditions, various risks set forth in Luna s and API s reports filed with the SEC, and other factors described in Risk Factors or referenced under Cautionary Statement Concerning Forward-Looking Statements, beginning on pages 21 and 60, respectively, of this joint proxy statement/prospectus. The projections and estimated synergies also reflect assumptions that are subject to change and are susceptible to multiple interpretations and periodic revisions based on actual results, revised prospects for Luna s and API s businesses, changes in general business or economic conditions, or any other transaction or event that has occurred or that may occur and that was not anticipated at the time the projections and estimated synergies were prepared. In addition, other than with respect to the estimated synergies discussed below, the projections do not take into account any of the transactions contemplated by the Merger Agreement, including the Merger and associated expenses, or Luna s and API s compliance with their respective covenants under the Merger Agreement. Moreover, the projections and estimated synergies do not take into account any circumstances, transactions or events occurring after the date the projections and estimated synergies were prepared. Accordingly, actual results will likely differ, and may differ materially, from those contained in the projections and estimated synergies. Neither Luna nor API can assure you that these projections and estimated synergies will be realized or that future financial results of Luna or API will not materially vary from these projections and estimated synergies.

The inclusion of a summary of the projections and estimated synergies in this joint proxy statement/prospectus should not be regarded as an indication that any of Luna, API or their respective affiliates, officers, directors, financial advisors or other representatives consider the projections or estimated synergies to be necessarily predictive of actual future events, and neither the projections nor the estimated synergies should be relied upon as

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such. None of Luna, API or their respective affiliates, officers, directors, financial advisors or other representatives gives any stockholder of Luna, stockholder of API or other person any assurance that actual results will not differ materially from the projections and estimated synergies, and, except as otherwise required by law, none of them undertakes any obligation to update or otherwise revise or reconcile the projections or estimated synergies to reflect circumstances existing after the date the projections and estimated synergies were generated or to reflect the occurrence of future events, even in the event that any or all of the assumptions and estimates underlying the projections or estimated synergies are shown to be in error.

No one has made or makes any representation to any Luna stockholder, API stockholder or anyone else regarding, nor assumes any responsibility for the validity, reasonableness, accuracy or completeness of, the information included in the projections and estimated synergies set forth below. Readers of this joint proxy statement/prospectus are cautioned not to rely on the projections and estimated synergies. Luna has not updated and, except as otherwise required by law, does not intend to update or otherwise revise the projections or estimated synergies, even in the short term, to reflect circumstances existing after the date when the projections or estimated synergies were made or to reflect the occurrence of future events, including the Merger. Moreover, the projections and estimated synergies do not take into account the effect of any failure of the Merger to occur and should not be viewed as accurate or continuing in that context.

A summary of these financial projections and estimated synergies is included solely to give Luna stockholders and API stockholders access to the information that was made available to the Luna board of directors and Mooreland Partners, as described below, and is not included in this document in order to influence your decision whether to vote for or against the proposals regarding the issuance of Luna common stock in connection with the Merger or adoption of the Merger Agreement, as applicable, at the Luna stockholder meeting or the API stockholder meeting. The inclusion of this information should not be regarded as an indication that the Luna board of directors, its advisors or any other person considered, or now considers, this information to be material or to be a reliable prediction of actual future results. Luna management s internal financial projections upon which the Luna Projections (as defined below) were based, as well as the estimated synergies that may result from the Merger, are subjective in many respects. Neither Luna nor API can assure you that these projections or estimated synergies will be realized or that actual results will not be significantly higher or lower than forecasted. The projections included below cover multiple years, and this information by its nature becomes subject to greater uncertainty with each successive year. The financial projections and summary information should be evaluated, if at all, in conjunction with the historical financial statements and other information contained in Luna s and API s respective public filings with the SEC.

Summary of Financial Projections Reviewed by the Luna Board and Mooreland Partners

As part of its evaluation of the Merger, Luna s management prepared the unaudited financial projections regarding Luna s future operations for fiscal years ending December 31, 2014 through 2017 that are summarized below (which projections are referred to in this document as the Luna Projections). In addition, API s management provided various unaudited financial projections to Luna s management (which projections are referred to in this document as the API Projections). The API Projections were derived from API s internal fiscal year projections and were converted to a calendar year format to facilitate comparative financial analysis of Luna, which has a December 31 fiscal year, and the API Projections are summarized under Nature of Financial Projections Reviewed by the API Board of Directors and API s Financial Advisor beginning on page 103 of this joint proxy statement/prospectus. As part of its evaluation of the Merger, both the Luna Projections and the API Projections were provided to the Luna board of directors for use in its evaluation of the Merger and were provided to Mooreland Partners for its use in evaluating the fairness, from a financial point of view, of the Exchange Ratio to Luna stockholders.

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The following tables present a summary of the Luna Projections:

($ in thousands)	**2014E**	**2015E**	**2016E**	**2017E**
Revenues:				
Technology Development	$ 12,457	$ 12,480	$ 12,540	$ 12,916
Products and Licensing	8,803	13,958	20,858	28,741
Total Revenue	21,260	26,438	33,398	41,657
Cost of Revenue:				
Technology Development	9,496	9,331	9,400	9,600
Products and Licensing	3,937	5,449	8,700	10,725
Total Cost of Revenue	13,433	14,780	18,100	21,325
Gross Profit				
Technology Development	2,961	3,149	3,140	3,316
Products and Licensing	4,866	8,509	12,158	17,016
Total Gross Profit	7,827	11,658	15,298	20,332
Operating Expenses [1]	12,799	13,667	14,702	17,174
Operating (Loss) Income	(4,972)	(2,009)	596	3,158
Other Income (expense), net	(12)			
Interest Income (expense), net	(96)	(96)		
(Loss) Income from Operations before Income Taxes	(5,080)	(2,104)	596	3,158
Reorganization Costs				
Income tax expense / (benefit)	175	18		
Loss from Continuing Operations	(5,255)	(2,123)	596	3,158
Income from Discontinued Operations	10,698			
Net Income / (Loss)	5,443	(2,123)	596	3,158
Preferred Stock Dividend	112	144		
Net Loss Attributed to Common Stockholders	$ 5,331	($ 2,267)	$ 596	$ 2,720
Adjusted EBITDA [2]	($ 2,728)	($ 374)	$ 2,216	$ 4,778

(1) 2014E operating expenses includes $600 in bonuses under Luna s 2014 senior management incentive plan.
(2) Adjusted EBITDA represents earnings before interest, taxes, depreciation and amortization, adjusted to exclude stock-based compensation expenses.

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Luna s management also prepared estimates of annual cost savings synergies that Luna would realize beginning in the first year following completion of the Merger and provided these estimates to the Luna board of directors and to Mooreland for purposes of its financial analyses. These estimates are summarized in the following table. Based on these synergies, Luna s management estimated that Luna would realize approximately $3.0 million in annual cost savings.

($ in thousands)	**Run-Rate**
Public Company Costs	
Public Accountants	$ 150
Legal	300
Transfer Agent	20
Proxy Services	30
Board Fees	300
D&O Insurance	108
Listing Fees	120
Investor Relations	120
Total Estimated Public Company Savings	**1,148**
Executive Salaries & Benefits	923
Other Operational Synergies	900
Total Estimated Cost Savings	**$ 2,971**

Opinion of B. Riley to the Board of Directors of API

The API board of directors retained B. Riley to provide a fairness opinion, from a financial point of view, to API s stockholders, of the Exchange Ratio being used in connection with the Merger. The API board of directors engaged B. Riley for such opinion due to its experience in similar transactions, institutional knowledge of the optical technology sector and intimate familiarity with API s business and financial condition.

A complete copy of the fairness opinion, dated January 29, 2015, provided by B. Riley is attached as Annex C to this joint proxy statement/prospectus and is incorporated herein by reference. The description of the B. Riley opinion set forth in this joint proxy statement/prospectus is qualified in its entirety by reference to the full text of such opinion and related documents. Holders of API common stock are urged to read the B. Riley opinion in its entirety for a description of the procedures followed, assumptions made, matters considered and qualifications and limitations on the review undertaken by B. Riley in connection with the opinion. The B. Riley opinion is for the benefit of the API board of directors and only addresses the fairness, from a financial point of view, to API s stockholders, of the Exchange Ratio being used in connection with the Merger as of the date of the B. Riley opinion. The B. Riley opinion does not address the relative merits of the Merger as compared to any alternative transaction or opportunity that might be available to API, nor does it address the underlying business decision by API to engage in the Merger, and it does not constitute a recommendation to any holder of API common stock as to how such holder should vote on the Merger or any matter related thereto. The B. Riley opinion is necessarily based on economic, market, monetary and other conditions as they existed and could be evaluated, and the information made available to B. Riley, as of the date of the B. Riley opinion. B. Riley has assumed no responsibility for updating or revising its opinion based on circumstances or events occurring after the date of the opinion. The following is only a summary of the B. Riley opinion. API

stockholders are urged to read the entire opinion, a copy of which is attached as Annex C.

The API board of directors held a meeting on January 28, 2015 to review the proposed terms of the Merger. During this meeting B. Riley rendered its oral opinion, subsequently confirmed in writing on January 29, 2015, that as of that date based upon and subject to the procedures followed, assumptions made, matters considered and qualifications and limitations on the review undertaken by B. Riley, the Exchange Ratio being used in connection

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with the Merger was fair to API s stockholders, from a financial point of view. The API board of directors and API management represented that there were no material changes to the draft of the Merger Agreement reviewed by B. Riley prior to delivering its opinion. The API board of directors held a subsequent meeting on January 30, 2015 to approve the terms of the Merger.

In preparing its opinion to the board of directors, B. Riley held discussions with members of senior management of API and Luna concerning their evaluations of the Merger and the business, operating and regulatory environment, financial condition, prospects, and strategic objectives of API and Luna, as well as such other matters as B. Riley deemed necessary or appropriate for purposes of rendering the opinion. Additionally B. Riley reviewed and analyzed documents and materials related to the proposed Merger. Included in this were the following:

- the financial terms of the latest drafts provided to B. Riley as of January 26, 2015 of the Merger Agreement;
- certain publicly available information, which B. Riley believed to be relevant, concerning the business, financial condition and operations of API and Luna;
- certain information internal to API and Luna concerning their respective business, financial condition and operations, prepared and furnished to B. Riley by API and Luna management;
- the three-year financial forecasts of API and Luna as furnished to B. Riley by API and Luna management;
- certain internal financial analyses, estimates and forecasts, prepared and furnished to B. Riley by the management of API and Luna;
- API and Luna s annual audited and quarterly unaudited financial statements through September 2014;
- certain publicly available financial data, stock market performance data and trading multiples of companies which B. Riley deemed to be generally comparable to API and Luna; and
- the publicly available financial terms of certain other business combinations that B. Riley deemed to be relevant in industries similar to those in which API and Luna participate and the consideration received for such companies that B. Riley believed to be generally relevant.

In addition to reviewing these materials, B. Riley also performed the following actions, among other things:

- performed a discounted cash flow analysis of API and Luna utilizing pro forma financial information prepared by and furnished to B. Riley by the respective management teams;

reviewed and analyzed premiums paid in business combinations involving publicly traded companies that B. Riley deemed to be generally comparable to API with respect to size and industry; and

performed such other financial studies, analyses and investigations, and considered such other matters, as B. Riley deemed necessary or appropriate for purposes of rendering the opinion.

In preparing the opinion, at the direction of the API board of directors, B. Riley has relied, without assuming responsibility or liability for independent verification, upon the accuracy and completeness of all financial and other information available from public sources and all other information provided to B. Riley or otherwise discussed with or reviewed by B. Riley. B. Riley has assumed, at the direction of the API board of directors and with its consent, that the financial and other projections prepared by API and Luna s management and the assumptions underlying those projections, including the amounts and the timing of all financial and other performance data, have been reasonably prepared in accordance with industry practice and represent API and Luna management s best estimates and judgments as of the date of their preparation. B. Riley has assumed at the direction of the API board of directors no responsibility for and expresses no opinion as to such analyses or forecasts or the assumptions on which they are based. B. Riley has also assumed that there have been no material changes in the assets, financial condition, results of operations, business or prospects of API and Luna since the

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respective dates of the last financial statements made available to B. Riley. B. Riley has further relied, with the API board of directors consent, upon the assurances of the management of API and Luna that they are not aware of any facts that would make the information and projections provided by them inaccurate, incomplete or misleading.

In rendering its opinion to the board of directors, B. Riley assumed that:

- the final executed form of the Merger Agreement would not differ in any material respects from the latest draft provided to B. Riley;
- the consummation of the Merger would be effected in accordance with the terms and conditions of the Merger Agreement, without waiver, modification or amendment of any material term, condition or agreement; and
- in the course of obtaining the necessary regulatory or third party consents and approvals (contractual or otherwise) for the Merger, no delay, limitation, restriction or condition will be imposed that would have an adverse effect on API or Luna or the contemplated benefits of the Merger.

B. Riley did not express any opinion as to legal, tax and regulatory matters with respect to the proposed Merger. The B. Riley opinion is limited to the fairness, from a financial point of view, to API s stockholders of the Exchange Ratio being used in connection with the Merger. B. Riley expressed no opinion as to the fairness of the Merger to the holders of any other class of securities, creditors or other constituencies of API or as to the underlying decision by API to engage in the Merger. The B. Riley opinion does not address any other aspect or implication of the Merger, the Merger Agreement, or any other agreement or understanding entered into in connection with the Merger or otherwise. B. Riley also expressed no opinion as to the fairness of the amount or nature of the compensation to any of API s officers, directors or employees, or any class of such persons relative to the Exchange Ratio in connection with the Merger. B. Riley expressed no opinion as to the prices or trading ranges at which API or Luna common stock would trade at any time before consummation of the Merger. Furthermore, B. Riley did not express any opinion as to the impact of the Merger on the solvency or viability of API, or the ability of API to pay its obligations when they become due before consummation of the Merger.

B. Riley s opinion is necessarily based upon economic, market, monetary, regulatory and other conditions as they existed and can be evaluated, and the information made available to B. Riley, as of the date of the opinion. B. Riley assumes no responsibility for updating or revising B. Riley s opinion based on circumstances or events occurring after the date of the opinion.

The following is a brief summary of the material financial analyses that B. Riley deemed appropriate for this type of transaction and that were performed by B. Riley in connection with rendering its opinion. The summary of B. Riley s analyses described below is not a complete description of the analyses underlying its opinion. The preparation of a fairness opinion is a complex analytical process involving determinations as to the most appropriate and relevant methods of financial analyses and the application of those methods to the particular circumstances, and, therefore, is not readily susceptible to summary description. In arriving at its opinion, B. Riley considered the results of all of the analyses and did not attribute any particular weight to any factor or analysis considered by it; rather, B. Riley made its determination as to the fairness, from a financial point of view, to API s stockholders, of the Exchange Ratio being used in connection with the Merger, on the basis of its experience and professional judgment after considering the results of all of the analyses.

In its analyses, B. Riley considered industry performance, general business, economic, market and financial conditions and other matters, many of which are beyond the control of API. No company or business used in B. Riley s analyses as a comparison is identical to API or Luna, and an evaluation of the results of those analyses is not entirely mathematical. Rather, the analyses involve complex considerations and judgments concerning financial, operating, and geographical characteristics and other factors that could affect the public trading or other values of the companies analyzed. The estimates contained in B. Riley s analyses and the ranges of

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valuations resulting from any particular analysis are not necessarily indicative of actual values or predictive of future results or values, which may be significantly more or less favorable than those suggested by the analyses. In addition, analyses relating to the value of businesses or securities do not purport to be appraisals or to reflect the prices at which businesses or securities actually may be sold. Accordingly, the estimates used in, and the results derived from, B. Riley s analyses are inherently subject to substantial uncertainty.

The financial analyses summarized below include information presented in tabular format. In order to fully understand B. Riley s financial analyses, the tables must be read together with the text of each summary. The tables alone do not constitute a complete description of the financial analyses. Considering the data in the tables below without considering the full narrative description of the financial analyses, including the methodologies and assumptions underlying the analyses, could create a misleading or incomplete view of B. Riley s financial analyses.

Historical Trading Range

B. Riley presented to the API board of directors the trading range of API s common stock for the 52-week period ended January 27, 2015, which ranged from $0.26 per share to $0.85 per share, and compared that to the closing price of API s common shares of $0.33 on January 27, 2015 and the implied per share equity value based on the Exchange Ratio of $0.51, calculated as of January 27, 2015. B. Riley also reviewed with the API board of directors the trading range of Luna s common stock for the 52-week period ending January 27, 2015, which ranged from $1.20 per share to $2.70 per share, and compared that to the closing price of Luna s common stock of $1.61 on January 27, 2015. The implied per share equity value of API of $0.51 as used throughout this summary was calculated based on the Exchange Ratio of 0.31782 multiplied by the closing stock price of Luna on January 27, 2015 of $1.61. B. Riley noted that the historical trading range analysis is not a valuation methodology and that such analysis was presented merely for reference purposes only and not as a component of its fairness analysis.

Comparable Companies Analysis

Using publicly available information, B. Riley compared selected financial data of API with similar data for publicly traded companies engaged in businesses that B. Riley judged to be sufficiently analogous to API s business segments or aspects thereof. The companies were as follows:

Optoelectronics:

First Sensor AG

Micropac Industries Inc.

High Speed Optical Receivers:

Exar Corporation

EMCORE Corporation

NeoPhotonics Corporation

Oclaro, Inc.

GigOptix, Inc.

Terahertz:

American Science and Engineering, Inc.

Aware, Inc.

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Using publicly available information, B. Riley compared selected financial data of Luna with similar data for publicly traded companies engaged in businesses that B. Riley judged to be sufficiently analogous to Luna s business or aspects thereof. The companies were as follows:

Technology Development Division (TDD):

Serma Technologies SA

RCM Technologies, Inc.

Intermolecular, Inc.

Sagentia Group plc.

Dynasil Corporation of America

ABIST Co., Ltd.

Lightwave Division:

Xcerra Corporation

Vishay Precision Group, Inc.

Photon Control, Inc.

Acorn Energy, Inc.

None of the selected companies reviewed is identical to API or Luna, as applicable, and certain of these companies may have characteristics that are materially different from those of API and Luna, as applicable. These companies were selected, among other reasons, because they are publicly traded companies with operations and businesses that, for purposes of B. Riley s analysis, may be considered similar to those of API or Luna, as applicable, based on sector participation, financial metrics and form of operations. The analyses necessarily involve complex considerations and judgments concerning differences in financial and operational characteristics of the companies involved and other factors that could affect the companies differently than would affect API or Luna, as applicable.

For each company listed above, B. Riley calculated and compared various financial multiples and ratios based on publicly available financial data as of January 27, 2015. The financial multiples reviewed included:

Enterprise value (EV) as a multiple of estimated Revenue for the last twelve months, or LTM Revenue ;

EV as a multiple of estimated revenue for the calendar year ended December 31, 2014, or 2014E Revenue ;

EV as a multiple of estimated revenue for the calendar year ended December 31, 2015, or 2015E Revenue ;

EV as a multiple of estimated gross profit for the last twelve months, or LTM Gross Profit ;

EV as a multiple of estimated gross profit for the calendar year ended December 31, 2014, or 2014E Gross Profit ;

EV as a multiple of estimated gross profit for the calendar year ended December 31, 2015, or 2015E Gross Profit ;

EV as a multiple of estimated earnings before interest, taxes, depreciation, amortization and stock-based compensation (referred to in this section of this joint proxy statement/prospectus as EBITDAS) for the last twelve months, or LTM EBITDAS ;

EV as a multiple of estimated EBITDAS for the calendar year ended December 31, 2014, or 2014E EBITDAS ; and

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EV as a multiple of estimated EBITDAS for the calendar year ended December 31, 2015, or 2015E EBITDAS. Based on the results of this analysis, B. Riley applied multiple reference ranges of 0.59x to 1.35x for EV/LTM Revenue, 0.84x to 1.16x for EV/2014E Revenue, 0.80x to 1.49x for EV/2015E Revenue, 1.68x to 4.27x for EV/LTM Gross Profit, 2.10x to 3.58x for EV/2014E Gross Profit, 2.07x to 3.00x for EV/2015E Gross Profit and 8.09x to 9.56x for 2015E EV/EBITDAS. The aforementioned multiple ranges were applied to API s estimates for revenue, gross profit, and EBITDAS, respectively, which were provided by API management to B. Riley. Based on this methodology, B. Riley arrived at the following implied equity value per share ranges for API:

	Public Trading Analysis Implied Equity Value per Share for API	
LTM Revenue (0.59x 1.35x)	$ 0.37	$0.95
Estimated 2014 Revenue (0.84x 1.16x)	$ 0.52	$0.76
Estimated 2015 Revenue (0.80x 1.49x)	$ 0.59	$1.17
LTM Gross Profit (1.68x 4.27x)	$ 0.32	$0.96
Estimated 2014 Gross Profit (2.10x 3.58x)	$ 0.42	$0.78
Estimated 2015 Gross Profit (2.07x 3.00x)	$ 0.52	$0.80
Estimated 2015 EBITDAS (8.09x 9.56x)	$ 0.13	$0.18

The ranges of implied equity value for API were compared to the closing price of API s common shares of $0.33 on January 27, 2015 and the implied per share equity value based on the Exchange Ratio of $0.51 per share, calculated as of January 27, 2015.

The table below sets forth the upper quartile, mean, median and lower quartile of certain of the financial multiples reviewed:

	EV/LTM Revenue	EV/2014E Revenue	EV/2015E Revenue	EV/LTM Gross Profit	EV/2014E Gross Profit	EV/2015E Gross Profit	EV/2015E EBITDAS
Optoelectronics							
Upper Quartile	0.9x	1.1x	1.0x	1.7x	2.0x	1.9x	7.6x
Mean	0.7x	1.1x	1.0x	1.6x	2.0x	1.9x	7.6x
Median	0.7x	1.1x	1.0x	1.6x	2.0x	1.9x	7.6x
Lower Quartile	0.6x	1.1x	1.0x	1.4x	2.0x	1.9x	7.6x
High Speed Optical Receivers							
Upper Quartile	1.7x	1.2x	2.0x	6.4x	5.8x	4.0x	8.5x
Mean	1.2x	1.0x	1.0x	5.0x	3.2x	2.9x	6.2x
Median	0.6x	0.6x	0.5x	1.5x	1.5x	1.2x	8.2x
Lower Quartile	0.4x	0.4x	0.3x	1.4x	1.5x	1.2x	4.9x
Terahertz							
Upper Quartile	2.5x	1.7x	1.7x	4.0x	4.2x	3.7x	20.5x
Mean	2.2x	1.7x	1.7x	4.0x	4.2x	3.7x	20.5x
Median	2.2x	1.7x	1.7x	4.0x	4.2x	3.7x	20.5x
Lower Quartile	1.9x	1.7x	1.7x	3.9x	4.2x	3.7x	20.5x

Based on the results of this analysis, B. Riley applied multiple reference ranges of 0.65x to 0.93x for EV/LTM Revenue, 0.78x to 0.91x for EV/2014E Revenue, 0.73x to 0.86x for EV/2015E Revenue, 1.74x to 2.57x for EV/LTM Gross Profit, 1.86x to 1.99x for EV/2014E Gross Profit, and 1.48x to 1.66x for EV/2015E Gross Profit. The aforementioned multiple ranges were applied to Luna s estimates for revenue and gross profit, respectively,

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which were provided by Luna management to B. Riley. Due to Luna s forecasted negative 2015E EBITDAS, B. Riley did not consider EBITDAS multiples. Based on this methodology, B. Riley arrived at the following implied equity value per share ranges for Luna:

	Public Trading Analysis Implied Equity Value per Share for Luna	
LTM Revenue (0.65x 0.93x)	$ 1.38	$1.72
Estimated 2014 Revenue (0.78x 0.91x)	$ 1.60	$1.77
Estimated 2015 Revenue (0.73x 0.86x)	$ 1.76	$1.96
LTM Gross Profit (1.74x 2.57x)	$ 1.36	$1.73
Estimated 2014 Gross Profit (1.86x 1.99x)	$ 1.48	$1.54
Estimated 2015 Gross Profit (1.48x 1.66x)	$ 1.64	$1.77

The ranges of implied equity value for Luna were compared to the closing price of Luna s common shares of $1.61 on January 27, 2015.

Selected Transaction Multiples Analysis

Using publicly available information, B. Riley examined selected transactions involving businesses that B. Riley judged to be sufficiently analogous to API s business or aspects thereof. For each of the selected transactions, B. Riley calculated the ratio of the target s EV to the target s revenue for the last twelve months (LTM) as of the date of transaction announcement.

Optoelectronics:

Target	Acquiror
Sensor Holding Corporation	Semiconductor Components Industries, LLC
UEC Electronics, LLC	Arotech Corporation
SymCom, Inc.	Littelfuse, Inc.
MRSI Systems, LLC	Undisclosed
Spanoptic Ltd	Gooch & Housego plc
CyOptics, Inc.	Avago Technologies Wireless Manufacturing, Inc.
Lightworks Optics, Inc.	Exotic Electro-Optics, Inc.
Roctest Ltd.	Nova Metrix, LLC
Semco Instruments, Inc.	TransDigm Group, Inc. (NYSE:TDG)
SphereOptics, LLC	Labsphere, Inc.
Applied Optical Systems, Inc.	Optical Cable Corporation (NasdaqGM:OCC)
New Focus, Inc.	Newport Corporation (NasdaqGS:NEWP)
AXSUN Technologies, Inc.	Volcano Corporation (NasdaqGS:VOLC)
Weed Instrument, Inc.	Ultra Electronics Holdings plc (LSE:ULE)
General Optics	Gooch & Housego plc (AIM:GHH)
Copley Controls Corporation	Analogic Corporation (NasdaqGS:ALOG)

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High Speed Optical Receivers:

Target	Acquiror
MRSI Systems, LLC	Undisclosed
Micronetics Inc.	Mercury Systems, Inc. (NasdaqGS:MRCY)
RF Monolithics Inc.	Murata Electronics N.A., Inc.
Santur Corporation	NeoPhotonics Corporation (NYSE:NPTN)
Aegis Lightwave, Inc.	II-VI Incorporated (NasdaqGS:IIVI)
GarrettCom, Inc.	Belden Inc. (NYSE:BDC)
Mintera Corporation	Oclaro, Inc. (NasdaqGS:OCLR)
Merrimac Industries, Inc.	Crane Co. (NYSE:CR)
New Focus, Inc.	Newport Corporation (NasdaqGS:NEWP)
General Optics	Gooch & Housego plc (AIM:GHH)

Terahertz:

Target	Acquiror
Sensor Holding Corporation	Semiconductor Components Industries, LLC
Hamlin Electronics, LP	Littelfuse, Inc.
Infimed, Inc.	Varian Medical Systems, Inc. (NYSE:VAR)
Ophthalmic Imaging Systems	Merge Healthcare, Inc. (NasdaqGS:MRGE)
LMI Technologies, Inc.	Augusta Technologie AG (DB:ABE1)
RAE Systems, Inc.	Vector Capital
Cambridge Research & Instrumentation, Inc.	Caliper Life Sciences, Inc.
Roctest Ltd.	Nova Metrix LLC
Lumen Dynamics Group Inc.	The Riverside Co.
OI Corporation	ITT Corporation (NYSE:ITT)
Semco Instruments, Inc.	TransDigm Group, Inc. (NYSE:TDG)

Using publicly available information, B. Riley examined selected transactions involving businesses that B. Riley judged to be sufficiently analogous to Luna s business or aspects thereof. For each of the selected transactions, B. Riley calculated the ratio of the target s EV to the target s revenue for the last twelve months (LTM) as of the date of transaction announcement.

Technology Development Division (TDD):

Target	Acquiror
Centro Sviluppo Materiali S.p.A.	RINA S.p.A.
Dentsu Marketing Insight, Inc.	Macromill, Inc.
Applied Science Associates, Inc.	RPS Group plc
Shanghai Fast. and Welding Mat. Tech. Research Centre	Shanghai Prime Machinery, Ltd.
Lightning Technologies, Inc.	NTS Technical Systems, Inc.
Ktech Corporation (nka:Raytheon Ktech)	Raytheon Missile Systems
LabGenomics Co., Ltd.	Mora Resource Co., Ltd. (nka:VO Industrial Co., Ltd.)
Ecowise Environmental Pty, Ltd.	Australian Laboratory Services Pty. Ltd.
Shanghai Research Institute of Petrochemical Technology	China Petroleum & Chemical Corporation
Proytecsa Security, S.L.	Miura Private Equity, SGECR, S.A.; Miura Fund I, FCR
Digital Fusion, Inc.	Kratos Defense & Security Solutions, Inc.
Aerostructures Group	QinetiQ Group Plc

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Lightwave Division:

Target	Acquiror
BlueView Technologies, Inc.	Teledyne RD Instruments, Inc.
Infimed, Inc.	Varian Medical Systems, Inc. (NYSE:VAR)
Celesco Transducer Products, Inc.	Measurement Specialties Inc. (NasdaqGS:MEAS)
Ophthalmic Imaging Systems	Merge Healthcare, Inc. (NasdaqGS:MRGE)
LMI Technologies, Inc.	Augusta Technologie AG
Roctest Ltd.	Nova Metrix, LLC
O.I. Corporation	ITT Corporation
Semco Instruments, Inc.	TransDigm Group, Inc.
Mintera Corporation	Oclaro, Inc.
Photonic Instruments, Inc.	Andor Technology plc
Weed Instrument, Inc.	Ultra Electronics Holdings plc
SANS Group	MTS Systems (China), Ltd.

Based on the results of this analysis, B. Riley selected an EV/LTM Revenue multiple reference range of 0.88x to 1.73x for API. The aforementioned multiples were applied to both API s LTM Revenue and 2014 estimated calendar revenue (provided by API management to B. Riley). Included in the assessment of the select precedent transactions were the price per share premium one day prior to announcement of the transaction and the price per share premium one month prior to announcement of the transaction. B. Riley noted that the price per share premiums were derived from a sample set of 129 information technology transactions for companies with a market capitalization equal to or less than $500 million market capitalization since January 1, 2012. Based on this methodology, B. Riley arrived at the following implied equity value per share ranges for API:

	Transaction Multiples Analysis Implied Equity Value per Share for API	
LTM Revenue (0.88x 1.73x)	$ 0.59	$1.25
Estimated 2014 Revenue (0.88x 1.73x)	$ 0.55	$1.17
1-Day Premium (12.4% 62.5%)	$ 0.37	$0.54
1-Month Premium (16.5% 65.3%)	$ 0.38	$0.55

The ranges of implied equity value for API were compared to the closing price of API s common shares of $0.33 on January 27, 2015 and the implied per share equity value based on the Exchange Ratio of $0.51 per share, calculated as of January 27, 2015.

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The EV/LTM Revenue and EV/LTM EBITDA multiples observed by B. Riley and used in its selected transaction multiples analysis of API are as follows:

Optoelectronics

Target	Acquiror	EV/LTM Revenue Multiple	EV/LTM EBITDA Multiple
Sensor Holding Corporation	Semiconductor Components Industries LLC	1.2x	
UEC Electronics, LLC	Arotech Corporation	1.2x	
SymCom, Inc.	Littelfuse Inc.	2.3x	
MRSI Systems, LLC	Undisclosed	0.5x	
Spanoptic Ltd.	Gooch & Housego plc	0.8x	
CyOptics, Inc.	Avago Technologies Wireless (U.S.A.) Manufacturing, Inc.	1.8x	
Lightworks Optics, Inc.	Exotic Electro-Optics, Inc.	1.6x	
Roctest Ltd.	Nova Metrix LLC	1.0x	11.0x
Semco Instruments, Inc.	TransDigm Group Incorporated (NYSE:TDG)	1.8x	10.7x
SphereOptics, LLC	Labsphere, Inc.	1.4x	
Applied Optical Systems, Inc.	Optical Cable Corp. (NasdaqGM:OCC)	2.4x	
New Focus, Inc.	Newport Corp. (NasdaqGS:NEWP)	0.5x	
AXSUN Technologies, Inc.	Volcano Corporation (NasdaqGS:VOLC)	1.0x	
Weed Instrument Co., Inc.	Ultra Electronics Holdings plc (LSE:ULE)	1.7x	
General Optics	Gooch & Housego plc (AIM:GHH)	1.8x	7.7x
Copley Controls Corporation	Analogic Corporation (NasdaqGS:ALOG)	0.6x	5.2x

High Speed Optical Receivers

Target	Acquiror	EV/LTM Revenue Multiple	EV/LTM EBITDA Multiple
MRSI Systems, LLC	Undisclosed	0.5x	
Micronetics Inc.	Mercury Systems, Inc. (NasdaqGS:MRCY)	1.6x	10.6x
RF Monolithics Inc.	Murata Electronics N.A., Inc.	0.7x	NM
Santur Corporation	NeoPhotonics Corporation (NYS:NPTN)	1.0x	NM
Aegis Lightwave, Inc.	II-VI Incorporated (NasdaqGS:IIVI)	1.7x	

GarrettCom, Inc.	Belden Inc. (NYSE:BDC)	1.4x	
Mintera Corporation	Oclaro, Inc. (NasdaqGS:OCLR)	1.6x	NM
Merrimac Industries, Inc.	Crane Co. (NYSE:CR)	1.6x	7.5x
New Focus, Inc.	Newport Corp. (NasdaqGS:NEWP)	0.5x	
General Optics	Gooch & Housego plc (AIM:GHH)	1.8x	7.7x

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Terahertz

Target	Acquiror	EV/LTM Revenue Multiple	EV/LTM EBITDA Multiple
Sensor Holding Corporation	Semiconductor Components Industries LLC	1.2x	
Hamlin Electronics L.P.	Littelfuse Inc.	1.9x	
Infimed, Inc.	Varian Medical Systems, Inc. (NYSE:VAR)	1.0x	
Ophthalmic Imaging Systems	Merge Healthcare Incorporated (NasdaqGS:MRGE)	2.0x	NM
LMI Technologies Inc.	Augusta Technologie AG (DB:ABE1)	2.0x	
RAE Systems Inc.	Vector Capital	1.3x	14.5x
Cambridge Research & Instrumentation, Inc.	Caliper Life Sciences, Inc.	1.7x	NM
Roctest Ltd.	Nova Metrix LLC	1.0x	11.0x
Lumen Dynamics Group Inc.	The Riverside Company	1.0x	
Ol Corp.	ITT Corporation (NYSE:ITT)	1.1x	10.1x
Semco Instruments, Inc.	TransDigm Group Incorporated (NYSE:TDG)	1.8x	10.7x

Based on the results of this analysis, B. Riley selected an EV/LTM Revenue multiple reference range of 1.09x to 1.74x for Luna. The aforementioned multiple was applied to both Luna s LTM Revenue and 2014 estimated calendar revenue (provided by Luna management to B. Riley). Based on this methodology, B. Riley arrived at the following implied equity value per share ranges for Luna:

	Transaction Multiples Analysis Implied Equity Value per Share for Luna	
LTM Revenue (1.09x 1.74x)	$ 1.91	$2.65
Estimated 2014 Revenue (1.09x 1.74x)	$ 1.99	$2.77

The ranges of implied equity value for Luna were compared to the closing price of Luna s common shares of $1.61 on January 27, 2015.

Discounted Cash Flow Analysis

B. Riley conducted a discounted cash flow analysis for the purpose of determining the fully diluted equity value per share for both API and Luna on a stand-alone basis. A discounted cash flow analysis is a method of evaluating an asset using estimates of the future unlevered free cash flows generated by the asset, and taking into consideration the time value of money with respect to those cash flows by calculating their present value. The unlevered free cash flows refers to a calculation of the future cash flows generated by an asset without including in such calculation any debt servicing costs. Specifically, unlevered free cash flow represents unlevered net operating profit after tax, adjusted for depreciation, capital expenditures, changes in net working capital, and certain other one-time cash expenses as

applicable. Present value refers to the current value of the cash flows generated by the asset, and is obtained by discounting those cash flows back to the present using an appropriate discount rate and applying a discounting convention that assumes that all cash flows were generated at the midpoint of each period. Terminal value refers to the present value of all future cash flows generated by the asset for periods beyond the projections period.

B. Riley utilized the unlevered free cash flows for API and Luna for calendar years 2015 through 2017 as reflected in API and Luna s respective projections, which were obtained from each management team. See Certain Projected Financial Information below. Terminal value was derived by applying either an

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(1) enterprise value to revenue multiple or (2) enterprise value to gross profit multiple to the 2017 calendar year revenue and gross profit estimates, respectively. B. Riley noted that both the discount rate ranges and multiple ranges applied to the terminal value for API and Luna were derived assuming a weighted average of each company s business segments. The unlevered free cash flows and the range of terminal values were discounted to present value using a range of discount rates from 24.1% to 26.1% for API, which was chosen by B. Riley based upon an analysis of the weighted average cost of capital of API, and a range of discount rates from 14.4% to 16.4% for Luna, which was chosen by B. Riley based upon an analysis of the weighted average cost of capital of Luna. B. Riley s analyses of the weighted average cost of capital of API and Luna were based upon the capital assets pricing model to derive a discount rate that takes into account macroeconomic assumptions and estimates of risk, the opportunity cost of capital and other appropriate factors. Furthermore, a market risk premium and micro-cap size premium per the 2013 Ibbotson® SBBI® Risk Premia Over Time Report was also applied in deriving both API s and Luna s respective weighted average costs of capital. Finally, an additional 5% discount rate was applied to API s resulting weighted average cost of capital to reflect API s projected liquidity constraints and other financial difficulties on a stand-alone basis. The implied equity values were divided by the number of fully diluted shares outstanding of each company to arrive at a range of implied equity value per share as follows:

API s implied equity value was derived using either a terminal value multiple of revenue and gross profit ranging from 0.73x to 1.13x and 1.70x to 2.50x, respectively. The resulting ranges of implied equity value per share for API included:

	Discounted Cash Flow Implied API Equity Value Per Share	
2015E Revenue Exit Multiple (0.73x 1.13x)	$ 0.39	$0.70
2015E Gross Profit Exit Multiple (1.70x 2.50x)	$ 0.31	$0.55

Luna s implied equity value was derived using either a terminal value multiple of revenue and gross profit ranging from 0.65x to 1.05x and 1.52x to 2.32x, respectively. The resulting ranges of implied equity value per share for Luna included:

	Discounted Cash Flow Implied Luna Equity Value Per Share	
2015E Revenue Exit Multiple (0.65x 1.05x)	$ 1.65	$2.34
2015E Gross Profit Exit Multiple (1.52x 2.32x)	$ 1.79	$2.47

Relative Implied Exchange Ratio Analysis

B. Riley compared the results for API to the results for Luna with respect to the Comparable Companies, Selected Transaction Multiples, and the Discounted Cash Analysis referenced above on a combined basis. For each comparison, B. Riley compared the highest equity value per share for API to the highest equity value per share for Luna, and compared the lowest equity value per share for API to the lowest equity value per share for Luna to derive the low exchange ratio. On a combined basis, the implied exchange ratios resulting from these analyses were:

	Implied Exchange Ratio	
	Low	**High**
Comparable Companies	0.2337	0.4080
Selected Transaction Multiples	0.3333	0.4735
Discounted Cash Flow	0.2849	0.3628

The implied exchange ratios were compared to the Exchange Ratio in the Merger of 0.31782 and the exchange ratio of 0.2050 implied by the closing price of API s common stock of $0.33 on January 27, 2015 and the closing price of Luna s common stock of $1.61 on January 27, 2015.

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General

The API board of directors retained B. Riley to provide an opinion as to the fairness, from a financial point of view, to API s stockholders, of the Exchange Ratio being used in connection with the Merger. As part of its investment banking business, B. Riley is engaged in the valuation of company securities in connection with mergers and acquisitions, negotiated underwritings, secondary distributions of listed and unlisted securities, private placements and valuations for other purposes. B. Riley has experience in, and knowledge of, the valuation of enterprises. In the ordinary course of its business as a broker-dealer, B. Riley may, from time to time, purchase securities of the firms involved in this Merger. As a market maker in securities, B. Riley may from time to time have a long or short position in, and buy or sell, debt or equity securities of API for B. Riley s own account and for the accounts of its customers.

As described above, the B. Riley opinion was one of many factors taken into consideration by the API board of directors in making the determination to approve the Merger Agreement. Consequently, the analyses described above should not be viewed as determinative of the opinion of the API board of directors. The Exchange Ratio was determined through extensive negotiations between the API and Luna. Except as described in this summary, API imposed no other instructions or limitations on the investigations made or procedures followed by B. Riley in rendering its opinion.

B. Riley and its affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. B. Riley and its affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for API, for which it has received or will receive customary fees and expenses. Additionally, B. Riley and its affiliates, from time to time, may in the future perform various financial advisory and investment banking services for Luna, for which it may receive customary fees and expenses. Except as set forth below, B. Riley and its affiliates have not provided investment banking or financial advisory services to API or Luna for which compensation was received during the two-year period prior to delivery by B. Riley of its opinion to API s board of directors in connection with the Merger. In 2013, B. Riley was engaged by the API board of directors to evaluate strategic alternatives and to explore the potential divestiture of its High Speed Optical Receiver business for which it received $70,000. In 2014, B. Riley received approximately $229,400 in in connection with its role as underwriter for the sale of 6,200,000 shares of API common stock. The fees received by B. Riley for each of those past services to API were customary fees charged by B. Riley for similar transactions to other similarly situated clients of B. Riley and were not related to the services provided by B. Riley to API in connection with the opinion. For rendering the opinion, B. Riley will receive $125,000, no portion of which is contingent upon conclusions reached in the opinion, which is due and payable upon delivery of the opinion. In addition, B. Riley will receive $50,000 upon closing of the Merger for services rendered in negotiating, at the direction of API management and API board of directors, the Exchange Ratio.

B. Riley and its affiliates have accumulated API common stock as a result of B. Riley s prior investment banking and financial advisory services to API. As of the date of the opinion, B. Riley and its affiliates owned approximately 1.85 million shares of API common stock, which is approximately 4.9% of API s outstanding common stock.

The opinion has been approved by B. Riley s Fairness Opinion Committee in accordance with its established policies and procedures.

Nature of Financial Projections Reviewed by the API Board of Directors and API s Financial Advisor

Although API has historically publicly issued limited short-term guidance concerning various aspects of its expected financial performance, API does not make public disclosure of detailed forecasts or projections of its expected

financial performance for extended periods because of, among other things, the inherent difficulty of accurately predicting future periods and the likelihood that the underlying assumptions and estimates may prove

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incorrect. In connection with its evaluation of the Merger, however, API management prepared and provided to the API board of directors and B. Riley, some non-public internal financial projections regarding API s anticipated future operations and estimated synergies arising in connection with the Merger. In addition, API management provided to B. Riley and the API board of directors certain non-public internal financial projections for Luna prepared by Luna management. A summary of these financial projections and estimated synergies is included below to provide API stockholders and Luna stockholders access to specific non-public information that was considered by the API board of directors for purposes of evaluating the Merger and provided to B. Riley for its use in evaluating the fairness, from a financial point of view, of the Exchange Ratio to API stockholders.

The financial projections and estimated synergies summarized below were not prepared for purposes of public disclosure, nor were they prepared on a basis designed to comply with published guidelines of the SEC, the guidelines established by the American Institute of Certified Public Accountants for preparation and presentation of projections, or U.S. GAAP. API s independent registered public accounting firm, which is listed as an expert below in Experts, did not compile, examine or perform any procedures with respect to the projections or estimated synergies summarized below, and has not expressed any opinion or any other form of assurance on this information or its achievability, and assumes no responsibility for, and disclaims any association with, these projections and estimated synergies. The reports of the independent registered public accounting firms included in this joint proxy statement/prospectus relate to historical financial statements. They do not extend to any prospective financial information and should not be seen to do so.

Although presented with numerical specificity, the projections and estimated synergies were prepared in the context of numerous variables, estimates and assumptions that are inherently uncertain and may be beyond the control of API, and which may prove not to have been, or to no longer be, accurate. The projections and the estimated synergies are subject to many risks and uncertainties. Important factors that may affect actual results and cause actual results to differ materially from these projections and synergies include risks and uncertainties relating to API s and Luna s businesses (including their ability to achieve strategic goals, objectives and targets over the applicable periods), industry performance, the regulatory environment, general business and economic conditions, market and financial conditions, various risks set forth in API s and Luna s reports filed with the SEC, and other factors described in Risk Factors or referenced under Cautionary Statement Concerning Forward-Looking Statements, beginning on pages 21 and 60, respectively, of this joint proxy statement/prospectus. The projections and estimated synergies also reflect assumptions that are subject to change and are susceptible to multiple interpretations and periodic revisions based on actual results, revised prospects for API s and Luna s businesses, changes in general business or economic conditions, or any other transaction or event that has occurred or that may occur and that was not anticipated at the time the projections and estimated synergies were prepared. In addition, other than with respect to the estimated synergies discussed below, the projections do not take into account any of the transactions contemplated by the Merger Agreement, including the Merger and associated expenses, or API s and Luna s compliance with their respective covenants under the Merger Agreement. Moreover, the projections and estimated synergies do not take into account any circumstances, transactions or events occurring after the date the projections and estimated synergies were prepared. Accordingly, actual results will likely differ, and may differ materially, from those contained in the projections and estimated synergies. Neither API nor Luna can assure you that these projections and estimated synergies will be realized or that future financial results of API or Luna will not materially vary from these projections and estimated synergies.

The inclusion of a summary of the projections and estimated synergies in this joint proxy statement/prospectus should not be regarded as an indication that any of API, Luna or their respective affiliates, officers, directors, financial advisors or other representatives consider the projections or estimated synergies to be necessarily predictive of actual future events, and neither the projections nor the estimated synergies should be relied upon as such. None of API, Luna or their respective affiliates, officers, directors, financial advisors or other representatives gives any stockholder

of API, stockholder of Luna or other person any assurance that actual results will not differ materially from the projections and estimated synergies, and, except as otherwise required by law, none of them undertakes any obligation to update or otherwise revise or reconcile the projections or

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estimated synergies to reflect circumstances existing after the date the projections and estimated synergies were generated or to reflect the occurrence of future events, even in the event that any or all of the assumptions and estimates underlying the projections or estimated synergies are shown to be in error.

No one has made or makes any representation to any API stockholder, Luna stockholder or anyone else regarding, nor assumes any responsibility for the validity, reasonableness, accuracy or completeness of, the information included in the projections and estimated synergies set forth below. Readers of this joint proxy statement/prospectus are cautioned not to rely on the projections and estimated synergies. API has not updated and, except as otherwise required by law, does not intend to update or otherwise revise the projections or estimated synergies, even in the short term, to reflect circumstances existing after the date when the projections or estimated synergies were made or to reflect the occurrence of future events, including the Merger. Moreover, the projections and estimated synergies do not take into account the effect of any failure of the Merger to occur and should not be viewed as accurate or continuing in that context.

A summary of these financial projections and estimated synergies is included solely to give API stockholders and Luna stockholders access to the information that was made available to the API board of directors and B. Riley, as described below, and is not included in this document in order to influence your decision whether to vote for or against the proposals regarding the issuance of Luna common stock in the Merger or adoption of the Merger Agreement, as applicable, at the API stockholder meeting or the Luna stockholder meeting. The inclusion of this information should not be regarded as an indication that the API board of directors, its advisors or any other person considered, or now considers, this information to be material or to be a reliable prediction of actual future results. API management s internal financial projections upon which the API Projections (as defined below) were based, as well as the estimated synergies that may result from the Merger, are subjective in many respects. Neither API nor Luna can assure you that these projections or estimated synergies will be realized or that actual results will not be significantly higher or lower than forecasted. The projections included below cover multiple years, and this information by its nature becomes subject to greater uncertainty with each successive year. The financial projections and summary information should be evaluated, if at all, in conjunction with the historical financial statements and other information contained in API s and Luna s respective public filings with the SEC.

Summary of Financial Projections Reviewed by the API Board and B. Riley

As part of its evaluation of the Merger, API s management prepared the unaudited financial projections regarding API s future operations for calendar years ending December 31, 2014 through 2017 that are summarized below (which projections are referred to in this document as the API Projections). The API Projections were derived from API s internal fiscal year projections and were converted to a calendar year format to facilitate comparative financial analysis of Luna, which has a December 31 fiscal year. In addition, Luna s management provided various unaudited financial projections to API s management (which projections are referred to in this document as the Luna Projections). The Luna Projections are summarized under Nature of Financial Projections Reviewed by the Luna Board of Directors and Luna s Financial Advisor beginning on page 88 of this joint proxy statement/prospectus. As part of its evaluation of the Merger, both the API Projections and the Luna Projections were provided to the API board of directors for use in its evaluation of the Merger and were provided to B. Riley for its use in evaluating the fairness, from a financial point of view, of the Exchange Ratio to API stockholders.

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The following tables present a summary of the API Projections:

$ in thousands	Estimated CY14E	Projected CY15E	CY16E	CY17E
Revenue:				
Opto Solutions	$ 14,684	$ 15,054	$ 16,090	$ 16,599
HSOR	11,197	13,536	21,866	28,400
Terahertz	2,351	4,073	4,425	7,201
Total Revenue	**28,232**	**32,663**	**42,381**	**52,200**
Gross Profit:				
Opto Solutions	5,085	5,097	5,563	5,854
HSOR	3,203	3,832	8,127	9,963
Terahertz	1,127	2,465	1,991	3,307
Gross Profit	**$ 9,416**	**$ 11,394**	**$ 15,681**	**$ 19,125**
Operating Expenses	**$ 11,592**	**$ 11,272**	**$ 12,308**	**$ 14,162**
EBIT	**$ (2,176)**	**$ 122**	**$ 3,373**	**$ 4,963**
Net Income	**$ (2,480)**	**$ (523)**	**$ 1,649**	**$ 2,862**
Adjusted EBITDA (1)	**$ (688)**	**$ 1,119**	**$ 4,574**	**$ 6,326**

(1) Adjusted EBITDA represents earnings before interest, taxes, depreciation and amortization, adjusted to exclude stock-based compensation expense.

	Estimated CY14E	Projected CY15E	CY16E	CY17E
Net Income	$ (2,480)	$ (523)	$ 1,649	$ 2,862
Add or (subtract):				
Net Interest	$ 600	$ 645	$ 720	$ 506
Depreciation	$ 639	$ 607	$ 742	$ 889
Amortization	$ 799	$ 313	$ 339	$ 353
Taxes	$	$	$ 1,004	$ 1,596
Change in Warrant fair value	$ (327)	$	$	$
Stock Based Compensation	$ 81	$ 77	$ 120	$ 120
Adjusted EBITDA	$ (688)	$ 1,119	$ 4,574	$ 6,326
Free Cash Flows from Operations (1)		$ (1,828)	$ 1,060	$ 816

(1) Free cash flows from operations were derived from management s projections by starting with EBIT and adjusting for the tax provision, depreciation and amortization, capital expenditures, and estimated changes in net working capital.

As explained in the Background of the Merger section above, in October 2014 API provided Luna certain financial forecasts (the Initial Forecasts), which were prepared by API management in September and revised in October 2014 to extend the forecasts through API s fiscal year 2016. API determined in December 2014 that the Initial Forecasts had become unreliable as a result of a slowdown in API sales that extended for a longer period than had been anticipated in the Initial Forecasts and because API s financial results for the fourth quarter of calendar year 2014 were not as strong as API had projected in the Initial Forecasts. The Initial Forecasts included projected revenue and Adjusted EBITDA for calendar year 2014 of $29,322,000 and $(476,000) which were revised to $28,232,000 and $(688,000), respectively. Revenue and Adjusted EBITDA in the Initial Forecasts for calendar year 2014 were reduced by $1,090,000 and $212,000, respectively. Revenue and Adjusted EBITDA projections for calendar year 2015 in the Initial Forecasts of $37,271,000 and $2,396,000, respectively, were revised to $32,663,000 and $1,119,000, respectively. Revenue and Adjusted EBTIDA projections in the

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Initial Forecasts for calendar year 2015 were reduced by $4,608,000 and $1,277,000, respectively. The Initial Forecasts included forecasts for fiscal year 2016 but did not include projected financial results for calendar years 2016 or 2017. This information about the Initial Forecasts is being provided solely for factual context, because this information was provided to Luna. The boards of directors of API and Luna did not rely upon the Initial Forecasts in deciding whether to approve the Merger Agreement, and B. Riley and Mooreland Partners did not rely upon the Initial Forecasts in connection with their analyses and fairness opinions.

API s management also prepared estimates of annual cost savings synergies that the combined company would realize beginning in the first year following completion of the Merger and provided these estimates to the API board of directors and to B. Riley for purposes of its financial analyses. These estimates are summarized in the following table. Based on these synergies, API s management estimated that the combined company would realize approximately $3.0 million in annual cost savings.

$ in thousands	**Run-Rate**
Public Company Costs	
Public Accountants	$ 150
Legal	300
Transfer Agent	20
Proxy Services	30
Board Fees	300
D&O Insurance	108
Listing Fees	120
Investor Relations	120
Total Estimated Public Company Savings	**$ 1,148**
Executive Salaries & Benefits	$ 923
Other Operational Synergies	900
Total Estimated Cost Savings	**$ 2,971**

Ownership Interests

As of the record date for the API special meeting, the directors and executive officers of API, together with their affiliates, owned in the aggregate 4,022,152 shares of API s outstanding common stock, entitling them to exercise 10.8% of the voting power of the API common stock at the API special meeting. API cannot complete the Merger unless the Merger Agreement is adopted by the affirmative vote of the holders of a majority of the outstanding API common stock as of the record date for the API special meeting. Certain of API directors and executive officers, and their affiliates, have entered into voting agreements in connection with the Merger and have granted irrevocable proxies appointing My E. Chung, Luna s president and chief executive officer, and Luna their lawful proxy and attorney-in-fact to vote at any meeting of API stockholders called for purposes of considering whether to adopt the Merger Agreement and approve the transactions contemplated thereby. For a more detailed discussion of these voting agreements, see the section entitled Certain Agreements Related to the Merger API Voting Agreements in this joint proxy statement/prospectus.

Appraisal Rights

Neither Luna stockholders nor API stockholders are entitled to appraisal rights under the Delaware General Corporation Law in connection with the Merger.

NASDAQ Listing of Luna Shares Issued in Connection with the Merger

Luna will use commercially reasonable efforts to cause all shares of Luna common stock to be issued in connection with the Merger to be listed on the NASDAQ Capital Market as of the Effective Time.

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Effective Time of the Merger

The Merger will be completed and become effective at the time the certificate of merger is filed with the Secretary of State of the State of Delaware, merging API Merger Sub, Inc. with and into API, or at such later time as specified in the certificate of merger. The parties intend to complete the Merger as soon as practicable following receiving the approvals from each of the API and Luna stockholders, and the satisfaction or waiver of the conditions to closing of the Merger set forth in the Merger Agreement. The parties to the Merger Agreement currently anticipate that the Merger will be completed sometime in the first half of 2015. However, because the Merger is subject to a number of conditions, the exact timing of the completion of the Merger cannot be determined with any certainty, if it is completed at all.

The Board of Directors and Management of the Combined Company Following the Merger

After completion of the Merger, Neil D. Wilkin, Jr. and Warner Dalhouse will resign as directors of Luna and Donald Pastor and Gary Spiegel will be appointed to fill the vacancies created thereby. In addition, Ed J. Coringrato Jr. will be appointed to fill an existing vacancy on Luna s board of directors.

Therefore, the following individuals will serve as Luna s board of directors immediately following completion of the Merger:

Name	Age	Position and Director Term Expiration
Donald Pastor	61	Class III Director (term to expire at 2018 annual meeting)
My E. Chung	62	Class III Director (term to expire at 2018 annual meeting)
Richard W. Roedel	65	Chairman/Class I Director (term to expire at 2016 annual meeting)
Ed J. Coringrato Jr.	56	Class I Director (term to expire at 2016 annual meeting)
Michael M. Wise	64	Class II Director (term to expire at 2017 annual meeting)
John B. Williamson, III	60	Class II Director (term to expire at 2017 annual meeting)
Gary Spiegel	64	Class II Director (term to expire at 2017 annual meeting)

After the completion of the Merger, the following individuals will serve as the executive officers of Luna:

Name	Age	Position
My E. Chung	62	President and Chief Executive Officer
Dale E. Messick	51	Chief Financial Officer
Scott A. Graeff	48	Chief Strategy Officer and Treasurer
Talfourd H. Kemper, Jr.	46	Vice President, General Counsel and Secretary

Ownership of Luna Following the Merger

After the Merger, API will continue as a wholly owned subsidiary of Luna, and API stockholders will no longer have any interest in API, but will have an equity interest in Luna, the new parent company of API s operations. Immediately after the Merger, existing Luna stockholders are expected to own approximately 56% of the outstanding shares of Luna common stock and the former API stockholders are expected to own approximately 44% of the outstanding shares of Luna common stock. Upon attributing ownership to the former API s stockholders of the shares of common stock that may be issued upon exercise of the options or warrants to purchase Luna common stock issued in the Merger, and attributing ownership of the shares of Luna common stock issuable upon exercise of outstanding Luna

options and restricted stock units (but excluding, for this purpose, the shares of Luna common stock issuable upon conversion of Luna s outstanding Series A convertible preferred stock and upon payment of accrued dividends thereon), existing Luna securityholders would own approximately 57% of the common stock of Luna on a fully diluted basis and the former API securityholders would own approximately 43% of the common stock of Luna on a fully diluted basis.

For detailed information regarding the beneficial ownership of certain key stockholders of the combined entity prior to and after consummation of the Merger, see the sections entitled Principal Stockholders of Luna, Principal Stockholders of API and Principal Stockholders of the Combined Company in this joint proxy statement/prospectus.

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Interests of Directors, Executive Officers and Affiliates of API

In considering the recommendation of the API board of directors with respect to adopting the Merger Agreement and approving the transactions contemplated thereby, API stockholders should be aware that members of the API board of directors and each executive officer of API have interests in the Merger that may be different from, or in addition to, interests they may have as API stockholders. For example:

- in connection with the Merger, Luna will assume outstanding options to purchase an aggregate of 1,324,535 shares of API common stock, 25,000 shares of API restricted stock and warrants to purchase an aggregate of 267,196 shares of API common stock held by such directors and executive officers;

- under the terms of his employment agreement with API, API s president and chief executive officer, Richard D. Kurtz, is entitled to receive severance in an amount equal to two years of his current salary plus bonus, medical benefits and accrued vacation time (estimated to aggregate approximately $647,000) if his employment is terminated without cause, and it is expected that he will not be retained by the combined company following the Merger;

- upon completion of the Merger, Luna will assume the employment agreements between API and each of Robin Risser, API s chief operating officer, and Steven Williamson, API s chief technology officer, in accordance with their existing terms;

- API directors and officers will be indemnified by the combined company with respect to certain acts or omissions by them in their capacities as such prior to the effective time of the Merger; and

- under the terms of the Merger Agreement, one current API director, Donald Pastor, will be designated to serve on the board of the combined company after the Effective Time of the Merger. Upon joining the board of the combined company, he will cease to be entitled to receive any compensation from API but will receive compensation in accordance with Luna s existing non-employee director compensation policy.

These interests and arrangements may create potential conflicts of interest. The API board of directors was aware of these potential conflicts of interest and considered them, among other matters, in reaching its decision to approve the Merger Agreement and the transactions contemplated by the Merger Agreement.

Interests of Directors, Executive Officers and Affiliates of Luna

In considering the recommendation of the Luna board of directors with respect to approving the issuance of shares of common stock in connection with the Merger, Luna stockholders should be aware that members of the Luna board of directors and each executive officer of Luna have interests in the Merger that may be different from, or in addition to, interests they may have as Luna stockholders. For example:

the board of directors of the combined company will include four of the six current members of the Luna board of directors, and such directors, with the exception of Mr. Chung, will continue to be entitled to compensation in accordance with Luna s existing non-employee director compensation policy;

Mr. Chung will continue to serve as President and Chief Executive Officer of the combined company following the Merger;

the remaining executive officers of Luna will continue to serve in their existing capacities with the combined company following the Merger; and

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pursuant to Luna s 2014 senior management incentive plan, Luna s executive officers will be entitled to bonuses in the aggregate amount of approximately $585,000 upon the completion of the Merger based on the determination that the completion of the Merger meets the specified corporate objective to complete a strategic transaction. The bonuses for My Chung, Luna s president and chief executive officer, Dale Messick, Luna s chief financial officer and Scott Graeff, Luna s chief strategy officer will be $167,117, $116,700 and $119,075, respectively.

These interests and arrangements may create potential conflicts of interest. The Luna board of directors was aware of these potential conflicts of interest and considered them, among other matters, in reaching its decision to approve the Merger Agreement and the transactions contemplated by the Merger Agreement.

Regulatory Approvals

Luna must comply with applicable federal and state securities laws and the rules and regulations of the NASDAQ Capital Market in connection with the issuance of shares of Luna common stock to purchase shares of Luna common stock, and the filing of this joint proxy statement/prospectus with the SEC.

NASDAQ Capital Market Listing

Application will be made to NASDAQ to have the shares of Luna common stock issued in connection with the Merger approved for listing on the NASDAQ Capital Market, where Luna common stock currently is traded under the symbol LUNA. If the Merger is completed, API common stock will be delisted from the New York Stock Exchange MKT and there will no longer be a trading market for such stock. In addition, promptly following the closing of the Merger, API common stock will be deregistered under the Exchange Act and API will no longer file periodic reports with the SEC.

Anticipated Accounting Treatment

Luna will account for the Merger using the acquisition method of accounting under U.S. GAAP. Under the acquisition method of accounting, the tangible and identifiable intangible assets and liabilities of API will be recorded, as of completion of the Merger, at their respective fair values. The excess of the purchase price over the net assets acquired will be recorded as goodwill to the extent not allocated to other identifiable intangible assets. Goodwill resulting from the Merger will not be amortized, but will be reviewed for impairment at least annually. Financial statements and reported results of operations of Luna issued after completion of the Merger will not be restated retroactively to reflect the historical financial position or results of operations of API.

Litigation Involving the Merger

On February 18, 2015, a purported stockholder of API filed a putative class action complaint in the Circuit Court for the County of Washtenaw of the State of Michigan against API, API s directors, Luna and Merger Sub captioned *Clark v. Advanced Photonix, Inc., et al.,* Case No. 15-169-CB (the Clark Action). In the complaint, the plaintiff alleges that the director defendants and certain officer defendants breached their fiduciary duties in connection with the Merger and that Luna and API Merger Sub aided and abetted the breaches of fiduciary duty. Plaintiff seeks, among other things, an order enjoining the consummation of the Merger. On February 20, 2015, plaintiff amended his complaint to, among other things, add claims against the director defendants for breach of their fiduciary duty of disclosure in connection with the Merger. On February 24, 2015, a second putative class action complaint was filed by another purported stockholder of API in the Court of Chancery of the State of Delaware against API, certain of API s directors, Luna and Merger Sub, captioned *Henderson v. Advanced Photonix, Inc., et al.,* C.A. No. 10715-VCL**,** alleging similar claims regarding the Merger contained in the Clark Action. On March 2, 2015, a third putative class action complaint

was filed by a third purported stockholder of API in the Circuit Court for the County of Washtenaw of the State of Michigan against API, certain of API s directors, Luna and API Merger Sub, captioned *Panzer v. Advanced Photonix, Inc., et al.*, Case No. 15-214-CB**,** alleging claims similar to the other two aforementioned actions regarding the Merger. These actions are collectively referred to as the Actions.

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API, Luna and the other named defendants believe that the claims contained in the Actions are without merit but in order to avoid the costs, risks and uncertainties inherent in litigation and to allow stockholders to vote on the proposal to adopt the Merger Agreement and approve the transactions contemplated in the Merger Agreement, including the Merger, at the scheduled meetings, counsel for API and Luna have entered into a memorandum of understanding (MOU) with the counsel of each of the plaintiffs in the Actions. Under the terms of the MOU, API will provide certain additional disclosure in the Registration Statement on Form S-4 that includes this preliminary joint proxy statement/prospectus with respect to, among other things, certain of the analyses undertaken by B. Riley & Co., LLC, the financial advisor to API, in connection with B. Riley s assessment of the fairness to API s stockholders, from a financial point of view, of the Exchange Ratio being used in connection with the Merger and certain additional information regarding the background of the Merger. The MOU reflects the parties agreement in principle to resolve the allegations by the settling plaintiffs against API, Luna and the other defendants in connection with the Merger and provides a release and settlement by the purported class of API s stockholders of all claims against API, Luna and the other defendants and their affiliates and agents in connection with the Merger and the Merger Agreement and the dismissal of the Actions with prejudice. The MOU and settlement are contingent upon, among other things, approval of the Circuit Court of the County of Washtenaw of the State of Michigan and consummation of the Merger. In the event that the MOU is not approved and such conditions are not satisfied, API and Luna will continue to vigorously defend these Actions. API, Luna and the other named defendants continue to believe that the claims in each of the Actions are without merit and that the defendants have valid defenses to all claims made by the applicable plaintiffs.

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MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES OF THE MERGER

The following discussion summarizes the material U.S. federal income tax consequences of the Merger to U.S. Holders (as defined below) of API common stock who exchange their API common stock for Luna common stock in connection with the Merger. This summary is based upon current provisions of the Code, existing Treasury Regulations promulgated thereunder and current administrative rulings and court decisions, all of which are subject to change and to differing interpretations, possibly with retroactive effect. Any such change could affect the continuing validity of this discussion. This discussion does not address any alternative minimum tax or any state, local or foreign tax consequences of the Merger. In addition, this summary assumes the truth and satisfaction of the statements and conditions described below as the basis for the tax opinions of Tarter Krinsky & Drogin LLP, tax counsel to API, and Cooley LLP, tax counsel to Luna.

This discussion addresses only API stockholders who are U.S. Holders and hold API common stock as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences of the Merger that may be relevant to particular API stockholders that are subject to special treatment under U.S. federal income tax laws, including, without limitation:

- dealers, brokers and traders in securities;
- non-U.S. Holders;
- tax-exempt entities;
- financial institutions, mutual funds, regulated investment companies, real estate investment trusts or insurance companies;
- entities or arrangements treated as partnerships for U.S. federal income tax purposes and investors in such partnerships;
- holders who are subject to the alternative minimum tax provisions of the Code;
- holders who acquired their shares of API common stock in connection with stock option or stock purchase plans or in other compensatory transactions;
- holders who hold their shares of API common stock as part of an integrated investment such as a hedge or as part of a hedging, straddle or other risk reduction strategy;
- persons who are non-U.S. holders;

U.S. expatriates; or

holders who have a functional currency other than the U.S. dollar.

For purposes of this discussion, U.S. Holder refers to a beneficial owner of API common stock that is, for U.S. federal income tax purposes, (1) an individual who is a citizen or resident of the United States; (2) a corporation, or other entity taxable as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or any political subdivision thereof; (3) an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or (4) a trust if it (i) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust, or (ii) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person. The term non-U.S. Holder means a beneficial owner of API common stock that is neither a U.S. Holder nor an entity or arrangement treated as a partnership for U.S. federal income tax purposes.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds API common stock, the tax treatment of a partner in such entity will generally depend upon the status of the partner and the activities of that partnership. A partner in a partnership holding API common stock should consult its tax advisor regarding the tax consequences of the Merger.

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In addition, this discussion does not address:

- the tax consequences of transactions effectuated before, after or at the same time as the Merger, whether or not they are in connection with the Merger, including, without limitation, transactions in which shares of API common stock are acquired or expenses are reimbursed;
- the tax consequences to holders of options or restricted stock units issued by API that are assumed, replaced, exercised or converted, as the case may be, in connection with the Merger; or
- the tax consequences of the receipt of shares of Luna common stock other than in exchange for shares of API common stock.

API stockholders are advised to consult their tax advisors regarding the U.S. federal income tax consequences of the Merger in light of their personal circumstances and the consequences of the Merger under U.S. federal non-income tax laws and state, local and foreign tax laws.

The Merger has been structured to qualify as a reorganization within the meaning of Section 368(a) of the Code. As a condition to the completion of the Merger, Cooley LLP must render a tax opinion to Luna, and Tarter Krinsky & Drogin LLP must render a tax opinion to API, in each case dated as of the closing date of the Merger to the effect that the Merger will constitute a reorganization within the meaning of Section 368(a) of the Code. Neither Luna nor API intends to waive these conditions, and such conditions may not be waived without the approval of Luna and API stockholders.

These tax opinions will be based on customary assumptions and the truth and accuracy, as of the completion of the Merger, of certain representations and covenants made in representation letters by Luna, Merger Sub and API. The accuracy of those assumptions, representations and covenants may affect the conclusions set forth in these opinions, in which case the U.S. federal income tax consequences of the transaction could differ from those discussed herein. These tax opinions are not binding on the IRS or any court. In addition, no ruling from the IRS has been or will be requested regarding the U.S. federal income tax consequences of the Merger. Accordingly, there can be no assurance that the IRS will not disagree with or challenge any of the conclusions described therein and that such contrary position could be sustained by a court.

Subject to the qualifications and limitations set forth above and assuming the Merger qualifies as a reorganization within the meaning of Section 368(a) of the Code, the material U.S. federal income tax consequences to U.S. Holders of API common stock are as follows:

- U.S. Holders of API common stock will recognize no gain or loss upon the receipt of Luna common stock for their API common stock, except with respect to cash received in lieu of fractional shares of Luna common stock (as discussed below);
- the aggregate tax basis of the shares of Luna common stock that are received by U.S. Holders of API common stock in the Merger (including any fractional shares deemed received and exchanged for cash) will

be equal to the aggregate tax basis of the shares of API common stock surrendered in exchange therefor; and

the holding period of the shares of Luna common stock received by a U.S. Holder of API common stock in connection with the Merger will include the holding period of the shares of API common stock surrendered in exchange therefor.

A U.S. Holder of API common stock who receives cash in lieu of a fractional share of Luna common stock generally will be treated as having received such fractional share in the Merger and then as having received cash in exchange for such fractional share. Gain or loss generally will be recognized based on the difference, if any, between such stockholder s basis in the fractional share and the amount of cash received. Any such gain or loss generally will be long-term capital gain or loss if, as of the effective date of the Merger, the U.S. Holder s holding period in the API common stock exchanged is more than one year; otherwise, such capital gain will be short-term capital gain.

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API stockholders that immediately prior to the Merger owned at least five percent (by vote or value) of the total outstanding stock of API or API stock with a tax basis of $1.0 million or more are required to attach a statement to their tax returns for the year in which the Merger is completed setting forth certain information listed in Treasury Reg. 1.368-3(b) pertaining to the Merger. In addition, all API stockholders must retain permanent records of certain information relating to the Merger.

For the purposes of the above discussion of basis and holding periods for shares of API common stock and Luna common stock, stockholders who acquired different blocks of API common stock at different times for different prices must calculate their basis, gains and losses and holding periods separately for each identifiable block of such stock exchanged or received in the Merger.

If the Merger does not qualify as a reorganization within the meaning of Section 368(a) of the Code, then a U.S. Holder of API common stock that receives Luna common stock in the Merger would generally recognize capital gain or loss equal to the difference between the fair market value of the Luna common stock and cash for fractional shares received and such holder s tax basis in the API common stock surrendered. U.S. Holders that realize a loss should consult their tax advisors regarding allowance of this loss.

Information Reporting and Backup Withholding

Payments in lieu of fractional shares of Luna common stock may, under certain circumstances, be subject to information reporting and backup withholding unless the recipient provides proof of an applicable exemption or furnishes its taxpayer identification number, and otherwise complies with all applicable requirements of the backup withholding rules. Any amounts withheld under the backup withholding rules are not additional taxes and will be allowed as a refund or credit against such API stockholders U.S. federal income tax liability, provided the information is timely furnished to the IRS.

THE PRECEDING DISCUSSION IS INTENDED ONLY AS A SUMMARY OF CERTAIN FEDERAL INCOME TAX CONSEQUENCES OF THE MERGER AND DOES NOT PURPORT TO BE A COMPLETE ANAYLSIS OR DISCUSSION OF ALL POTENTIAL TAX EFFECTS RELEVANT THERETO. EACH API STOCKHOLDER IS STRONGLY URGED TO CONSULT HIS, HER OR ITS TAX ADVISOR TO DETERMINE THE PARTICULAR U.S. FEDERAL, STATE, LOCAL OR FOREIGN INCOME OR OTHER TAX CONSEQUENCES OF THE MERGER TO SUCH API STOCKHOLDER.

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THE MERGER AGREEMENT

The following is a summary of the material provisions of the Merger Agreement. This summary does not purport to describe all the terms of the Merger Agreement and is qualified by reference to the complete Merger Agreement, which is attached as Annex A to this joint proxy statement/prospectus and incorporated by reference. You should read the Merger Agreement in its entirety, as it represents the legal document governing the Merger.

Explanatory Note Regarding the Merger Agreement

The Merger Agreement is included to provide you with information regarding its terms. Factual disclosures about Luna and API contained in this joint proxy statement/prospectus or in the public reports of Luna and API filed with the SEC may supplement, update or modify the factual disclosures about Luna and API contained in the Merger Agreement. The Merger Agreement contains representations and warranties by Luna, on the one hand, and by API, on the other hand, made solely for the benefit of the other party. The representations, warranties and covenants made in the Merger Agreement by Luna and API are qualified and subject to important limitations agreed to by Luna and API in connection with negotiating the terms of the Merger Agreement. In particular, in your review of the representations and warranties contained in the Merger Agreement and described in this summary, it is important to bear in mind that the representations and warranties were negotiated with the principal purpose of establishing circumstances in which a party to the Merger Agreement may have the right not to consummate the Merger if the representations and warranties of the other party prove to be untrue due to a change in circumstance or otherwise, and allocating risk between the parties to the Merger Agreement, rather than establishing matters as fact. The representations and warranties also may be subject to a contractual standard of materiality different from that generally applicable to stockholders and reports and documents filed with the SEC and were qualified by the matters contained in the disclosure schedules that API and Luna each delivered in connection with the Merger Agreement and certain documents filed with the SEC. Moreover, information concerning the subject matter of the representations and warranties, which do not purport to be accurate as of the date of this joint proxy statement/prospectus, may have changed since the date of the Merger Agreement. Accordingly, the representations and warranties in the Merger Agreement should not be relied on by any persons as characterizations of the actual state of facts about Luna or API at the time they were made or otherwise.

The Merger

Pursuant to the Merger Agreement, API Merger Sub, Inc., a wholly owned subsidiary of Luna, will merge with and into API. API will survive the Merger and, as a result, will become a wholly owned subsidiary of Luna. The directors and officers of the surviving corporation at the Effective Time will be mutually agreed upon by Luna and API prior to the Effective Time. The certificate of incorporation and bylaws of the surviving corporation will be amended and restated at the Effective Time in the form agreed to by Luna and API pursuant to the Merger Agreement. The Merger is intended to constitute a reorganization for federal income tax purposes.

Timing of Closing and Effective Time

The closing of the Merger will take place on the second business day after satisfaction or waiver of all the conditions to the Merger (except for those conditions to be satisfied at closing), unless another time or date is agreed to by the parties.

Luna and API cannot assure you when, or if, all the conditions to completion of the Merger will be satisfied or waived or that the Merger will not be terminated. See Conditions To The Merger and Termination. The parties intend to complete the Merger as promptly as practicable, subject to the satisfaction or waiver of a number of customary closing conditions in the Merger Agreement, including, among others, the effectiveness of this registration statement, the

adoption of the Merger Agreement and approval of the transactions contemplated thereby by API s stockholders, approval by Luna s stockholders of the issuance of shares of Luna common stock, the absence of certain governmental restraints and the absence of a material adverse effect on Luna or API.

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The Merger will be completed and become effective when the certificate of merger is filed with the Secretary of State of the State of Delaware or at such later date or time as specified in the certificate of merger.

Merger Consideration

Stock Payment

At the completion of the Merger, holders of API common stock issued and outstanding prior to the completion of the Merger will have the right to receive 0.31782 shares of Luna common stock for each share of API common stock.

No fractional shares of Luna common stock will be issued in connection with the Merger, and no certificates or scrip for any such fractional shares will be issued. Any holder of API common stock who would otherwise be entitled to receive a fraction of a share of Luna common stock (after aggregating all fractional shares of Luna common stock issuable to such holder) shall, in lieu of such fraction of a share and upon surrender of such holder s API stock certificate(s), or non-certificated shares of API common stock represented by book entry, be paid in cash the dollar amount (rounded to the nearest whole cent), without interest, determined by multiplying such fraction by the closing price of a share of Luna common stock on the NASDAQ Capital Market on the last business day prior to the date on which the Merger becomes effective.

Common Stock Options, Restricted Stock and Warrants

Treatment of Options

At the Effective Time, each option to purchase shares of API common stock outstanding and unexercised immediately prior to the Effective Time, whether or not vested, shall be converted at the Exchange Ratio and become an option to purchase Luna common stock, and Luna shall assume such API option in accordance with the terms of the applicable API option plan and the terms of the stock option agreement by which such API option is evidenced.

Treatment of Restricted Stock

At the Effective Time, each share of API restricted common stock outstanding immediately prior to the Effective Time shall be converted at the Exchange Ratio and become Luna restricted common stock, and Luna shall assume such shares of API restricted common stock.

Treatment of Warrants

At the Effective Time, except for the warrants with Silicon Valley Bank, Partners for Growth III, L.P., and PFG Equity Investors, LLC, the terms of which provide that the warrants may be exchanged, at the option of the holder, for a cash sum payment from the combined company after the Merger not to exceed $250,000 in the aggregate, each warrant to acquire API common stock outstanding immediately prior to the Effective Time will be assumed or substituted by Luna, and will therefore become a warrant to purchase the number of shares of Luna common stock, with appropriate adjustments made to the exercise price, number of shares and other terms of the warrants to reflect this Merger and the Exchange Ratio.

Exchange of API Stock Certificates

Exchange Agent

Luna has appointed American Stock Transfer & Trust Company (the Exchange Agent) to serve as exchange and payment agent to handle the exchange of API stock certificates for Luna common stock. On or prior to the Closing Date, Luna will cause to be deposited with the Exchange Agent a sufficient number of certificates representing whole shares of Luna common stock to make all deliveries required under the Merger Agreement.

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Payment Procedures

Promptly after the Effective Time, the Exchange Agent will mail to each former API common stockholder a (i) form of letter of transmittal and (ii) instructions explaining the procedure for surrendering API stock certificates for payment therefor.

Stock certificates and book entry shares should not be surrendered for exchange by API stockholders prior to the completion of the Merger and should be sent only pursuant to instructions set forth in the letters of transmittal, which the Merger Agreement provides will be mailed to API stockholders promptly following the completion of the Merger. In all cases, the certificates representing shares of Luna common stock and cash in lieu of fractional shares will be delivered only in accordance with the procedures set forth in the letter of transmittal.

Upon delivery to the Exchange Agent of the API certificates, along with the properly completed letter of transmittal duly executed and any other required documents, the Exchange Agent will deliver to the holder:

- a stock certificate representing the number of whole shares of Luna common stock such holder has a right to receive pursuant to the Merger Agreement; and
- cash in lieu of any fractional shares required to be delivered pursuant to the Merger Agreement.

Each API stock certificate and book entry share so surrendered to the Exchange Agent will thereafter be cancelled and retired.

If any API stock certificate has been lost, stolen or destroyed, Luna may, in its discretion and as a condition to the issuance of any non-certificated shares of Luna common stock in book entry form, require the owner of such lost, stolen or destroyed API stock certificate to post a bond, in such reasonable and customary amount as Luna may direct, as indemnity against any claim that may be made against Exchange Agent, Luna or API with respect to such API stock certificate.

From and after the Effective Time, until it is surrendered and exchanged, each certificate that previously evidenced API common stock and each book entry share will be deemed, from and after the Effective Time, to represent only the right to receive shares of Luna common stock (and cash in lieu of any fractional share of Luna common stock) in accordance with the terms of the Merger Agreement. Luna will not pay dividends or other distributions, if any, on any shares of Luna common stock to be issued in exchange for any unsurrendered API common stock certificate or book entry share until the API common stock certificate or book entry share is surrendered as provided in the Merger Agreement (at which time such holder shall be entitled, subject to abandoned property and similar laws, to receive all such dividends and distributions, without interest).

The Merger Agreement contemplates that, upon any demand by Luna following the first anniversary of the Effective Time, the Exchange Agent will deliver to Luna any shares of Luna common stock and any deposited funds which have not been disbursed to holders of API stock certificates or book entry shares. Any holders of API stock certificates or book entry shares who have not surrendered such certificates or book entry shares in compliance with the above-described procedures may thereafter look only to Luna for satisfaction of their claims for Luna common stock, cash in lieu of fractional shares of Luna common stock and any dividends or distributions with respect to shares of Luna common stock.

Representations and Warranties

The Merger Agreement contains a number of representations and warranties made by API to Luna and API Merger Sub, Inc., and by Luna and API Merger Sub, Inc. to API. Some of these representations and warranties are qualified as to materiality, knowledge, or the disclosures made by Luna or API in certain of their respective filings with the SEC or in their respective disclosure schedules.

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The representations and warranties made by API include, but are not limited to, those regarding:

- capitalization;
- corporate organization and good standing;
- corporate power and authority to enter into and perform API s obligations under the Merger Agreement and, subject to receipt of API stockholder approval, to consummate the transactions contemplated thereby;
- absence of violation or breach of its corporate governance documents, certain contracts and agreements and laws at the time of the Merger;
- accuracy of certain financial statements and compliance with the filing requirements of the SEC;
- no material change in API s accounting principles, methods or policies except as required by concurrent changes in generally accepted accounting principles, and the existence of internal controls over financial reporting;
- the absence of broker s fees, other than those specified in the Merger Agreement;
- the existence of any pending or served legal proceedings;
- material indebtedness, obligations, and liabilities;
- tax matters;
- employee and labor matters and API s employee benefit plans;
- certain API contracts and API s property and assets, including intellectual property;
- compliance with laws, including environmental laws and the absence of unlawful payments and contributions;

accuracy of information supplied for use in this joint proxy statement/ prospectus and the registration statement of which it is a part; and

the receipt of a fairness opinion with respect to the consideration to be received by the holders of API common stock in the Merger.

The representations and warranties made by Luna include, but are not limited to, those regarding:

capitalization;

corporate organization and good standing;

corporate power and authority to enter into the Merger Agreement to consummate the transactions contemplated thereby, subject to receipt of Luna stockholder approval;

absence of violation or breach of its corporate governance documents, certain contracts and agreements and laws at the time of the Merger;

accuracy of certain financial statements and compliance with the filing requirements of the SEC;

no material change in Luna s accounting principles, methods or policies except as required by concurrent changes in generally accepted accounting principles, and the existence of internal controls over financial reporting;

the absence of broker s fees, other than those specified in the Merger Agreement;

the existence of any pending or served legal proceedings;

material indebtedness, obligations, and liabilities;

tax matters;

employee and labor matters and Luna s employee benefit plans;

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certain Luna contracts and Luna s property and assets, including intellectual property;

compliance with laws, including environmental laws and the absence of unlawful payments and contributions;

accuracy of information supplied for use in this joint proxy statement/ prospectus and the registration statement of which it is a part; and

the receipt of a fairness opinion with respect to the Exchange Ratio.

Covenants

Conduct of API s Business Prior to Completion of The Merger

API has agreed to certain restrictions on the manner in which it will carry on its business until either completion of the Merger or the termination of the Merger Agreement. In general, except as specifically contemplated by the Merger Agreement, or to the extent Luna consents in writing, API will conduct its business in the ordinary course and consistent with past practices and use commercially reasonable efforts to preserve the material components of its current business organization, keep available the services of its current officers and directors, and maintain its relations and goodwill with all material suppliers, material customers, material licensors and governmental bodies. In addition, API has agreed that, subject to specified exceptions or the written consent of Luna, it will not, among other things:

declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of capital stock, or repurchase, redeem or otherwise reacquire any shares of capital stock or other securities;

effect or become a party to any merger, consolidation, share exchange, business combination, amalgamation, recapitalization, reclassification of shares, stock split, reverse stock split, division or subdivision of shares, consolidation of shares or similar transaction;

sell, issue, grant or authorize the sale, issuance or grant of shares of its capital stock or securities convertible into any shares of its capital stock;

amend its certificate of incorporation or bylaws;

enter into or become bound by, or permit any of the assets owned or used by it to become bound by, any new material contract or amend, terminate, or waive any material right or remedy under, any existing material contract;

establish, adopt, enter into or amend any employee plan or employee agreement, pay any bonus or make any profit-sharing or similar payment to, pay any severance, retention or change-of-control or similar benefits, or increase the amount of the wages, salary, commissions, fringe benefits or other compensation (including equity-based compensation, whether payable in stock, cash or other property) or remuneration payable to, any of its directors or any of its officers or other employees;

lend money to any person or incur or guarantee any indebtedness;

acquire, lease or license any right or other asset or sell or otherwise dispose of, or lease or license, any right or other asset;

settle any legal proceeding or other material claim, other than pursuant to a settlement that results solely in monetary obligation involving payment of the amount specifically reserved in accordance with GAAP with respect to such legal proceedings or claim on API s audited balance sheet or that results solely in monetary obligation involving only the payment of monies by API of not more than $200,000 in the aggregate; or

take any action that would reasonably be expected to cause the Merger to fail to qualify as a reorganization under Section 368(a) of the Code or fail to take any action reasonably necessary to cause the Merger to so qualify.

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Conduct of Luna s Business Prior to Completion of The Merger

Luna has also agreed to certain restrictions on the manner in which it will carry on its business until either completion of the Merger or the termination of the Merger Agreement. In general, except as specifically contemplated by the Merger Agreement, or to the extent API consents in writing, Luna will conduct its business in the ordinary course and consistent with past practices and use commercially reasonable efforts to preserve the material components of its current business organization, keep available the services of its current officers and directors, and maintain its relations and goodwill with all material suppliers, material customers, material licensors and governmental bodies. In addition, Luna has agreed that, subject to specified exceptions or the written consent of API, it will not, among other things:

declare, accrue, set aside or pay any dividend or make any other distribution in respect of any shares of capital stock, or repurchase, redeem or otherwise reacquire any shares of capital stock or other securities;

effect or become a party to any merger, consolidation, share exchange, business combination, amalgamation, recapitalization, reclassification of shares, stock split, reverse stock split, division or subdivision of shares, consolidation of shares or similar transaction;

sell, issue, grant or authorize the sale, issuance or grant of shares of its capital stock or securities convertible into any shares of its capital stock;

amend its certificate of incorporation or bylaws;

enter into or become bound by, or permit any of the assets owned or used by it to become bound by, any new material contract or amend, terminate, or waive any material right or remedy under, any existing material contract;

establish, adopt, enter into or amend any employee plan or employee agreement, pay any bonus or make any profit-sharing or similar payment to, pay any severance, retention or change-of-control or similar benefits, or increase the amount of the wages, salary, commissions, fringe benefits or other compensation, including equity-based compensation, whether payable in stock, cash or other property, or remuneration payable to, any of its directors or any of its officers or other employees;

lend money to any person or incur or guarantee any indebtedness;

acquire, lease or license any right or other asset or sell or otherwise dispose of, or lease or license, any right or other asset;

settle any legal proceeding or other material claim, other than pursuant to a settlement that results solely in monetary obligation involving payment of the amount specifically reserved in accordance with GAAP with respect to such legal proceedings or claim on Luna s audited balance sheet or that results solely in monetary obligation involving only the payment of monies by Luna of not more than $200,000 in the aggregate; or

take any action that would reasonably be expected to cause the Merger to fail to qualify as a reorganization under Section 368(a) of the Code or fail to take any action reasonably necessary to cause the Merger to so qualify.

Conditions to the Merger

The obligations of all parties to complete the Merger are subject to a number of customary conditions, subject to exceptions specified in the Merger Agreement or set forth in the confidential disclosure schedules exchanged by Luna and API, including the following:

adoption of the Merger Agreement and approval of the transactions contemplated thereby by the API stockholders;

approval of the issuance of the shares of Luna common stock pursuant to the Merger Agreement by the Luna stockholders;

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absence of any legal restraints or prohibitions preventing the consummation of the Merger or making the Merger illegal;

effectiveness of the registration statement of which this joint proxy statement/prospectus is a part and the absence of any stop order suspending its effectiveness;

any governmental authorization or other consent required to be obtained with respect to the Merger under any legal requirement must have been obtained and remain in full force and effect;

authorization of shares of Luna common stock to be issued in the Merger have been authorized for listing on the NASDAQ Capital Market; and

absence of any legal proceeding in which a governmental body with jurisdiction over the parties is a party: (a) challenging or seeking to restrain, prohibit, rescind or unwind the consummation of the Merger or any of transactions contemplated thereby; (b) seeking to prohibit or limit in any material respect Luna s ability to vote, transfer, receive dividends with respect to or otherwise exercise ownership rights with respect to the stock of API; (c) that would reasonably be expected to materially and adversely affect the right or ability of Luna or API to own any of the material assets or materially limit the operation of the business of API; (d) seeking to compel Luna or API to dispose of or hold separate any material assets or material business as a result of the Merger or any of the transactions contemplated thereby; or (e) relating to the Merger or the transactions contemplated thereby and seeking to impose any criminal sanctions or criminal liability on Luna or API.

Additionally, unless waived by Luna, Luna s obligations to complete the Merger are subject to a number of customary conditions, subject to exceptions specified in the Merger Agreement or set forth in the confidential disclosure schedules exchanged by Luna and API, including the following:

certain representations and warranties of API being accurate in all material respects, both as of the date of the Merger Agreement and the Effective Time;

API s performance or compliance in all material respects of all of its covenants and obligations under the Merger Agreement at or prior to the Effective Time;

receipt of an opinion from Cooley LLP regarding tax matters and receipt of a certificate executed by the chief executive officer of API that specified closing conditions have been satisfied;

absence of a material adverse effect on API and absence of any event or circumstance that, in combination with any other events or circumstances, would reasonably be expected to have or result in a material adverse effect on API;

receipt from API of a statement described in Section 1.1445-2(c)(3)(i) of the United States Treasury Regulations certifying the interests in API are not U.S. real property interests; and

receipt from API of (i) payoff letters in a form reasonably acceptable to Luna with respect to API s debt (other than SVB debt) for borrowed money as of immediately prior to the Effective Time, and (ii) evidence that all encumbrances relating to API s debt (other than SVB debt) for borrowed money as of immediately prior to the Effective Time have been removed.

Further, unless waived by API, API s obligations to complete the Merger are subject to a number of customary conditions, subject to exceptions specified in the Merger Agreement or set forth in the confidential disclosure schedules exchanged by Luna and API, including the following:

certain representations and warranties of Luna being accurate in all material respects, both as of the date of the Merger Agreement and the Effective Time;

Luna s performance or compliance in all material respects of all of its covenants and obligations under the Merger Agreement at or prior to the Effective Time;

receipt of an opinion from Tarter Krinsky & Drogin LLP regarding tax matters and receipt of a certificate executed by the chief executive officer of Luna; and

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absence of a material adverse effect on Luna and absence of any event or circumstance that, in combination with any other events or circumstances, would reasonably be expected to have or result in a material adverse effect on Luna.

Other Covenants

The Merger Agreement contains certain other covenants and agreements, including covenants relating to preparation and distribution of this joint proxy statement/prospectus, public announcements, and cooperation regarding certain filings with governmental and other agencies and organizations. In addition, the Merger Agreement contains a general covenant requiring each of the parties to use its reasonable best efforts to consummate the Merger and make effective the transactions contemplated thereby.

Stockholder Meetings

API has agreed to convene and hold a meeting of its stockholders as promptly as practicable after this registration statement is declared effective to vote upon the adoption of the Merger Agreement and the approval of the transactions contemplated thereby. Luna has agreed to convene and hold a meeting of its stockholders on the same date as the meeting of API s stockholders to vote upon the issuance of shares of Luna common stock in connection with the Merger Agreement. Luna and API have agreed to use their reasonable best efforts to hold Luna s stockholder meeting and API s stockholder meeting on the same date.

No Solicitation

The Merger Agreement provides that during the period beginning on the date of the Merger Agreement and continuing until the earlier of the termination of the Merger Agreement or the Effective Time, subject to specified exceptions, API will not, and will not permit its directors, officers, other employees, agents, attorneys, accountants, investment bankers, other advisors and representatives to:

solicit, initiate, knowingly encourage or knowingly facilitate the making, submission or announcement of any acquisition proposal or acquisition inquiry with respect to API;

knowingly furnish any information regarding API to any person in connection with or in response to an acquisition proposal or inquiry;

engage in discussions or negotiations with any person relating to any acquisition proposal or acquisition inquiry with respect to API;

approve, endorse or recommend any acquisition proposal or acquisition inquiry with respect to API; or

enter into any letter of intent or similar document or any contract contemplating or otherwise relating to any acquisition proposal or inquiry with respect to API.

However, prior to the adoption of the Merger Agreement by API s stockholders, nothing in the Merger Agreement prohibits API from furnishing information regarding API to, or entering into discussions and negotiations with, any

person in response to an acquisition proposal that API s board of directors determines in good faith is reasonably likely to lead to an API Superior Offer (as defined below) and that is submitted to API by such person (and not withdrawn) if: (A) such acquisition proposal did not result from any material breach of any of the non-solicitation provisions of the Merger Agreement; (B) API s board of directors concludes in good faith, after having consulted with its outside legal counsel, that failure to take such action would be inconsistent with the fiduciary duties of API s board of directors to API s stockholders under applicable law; (C) prior to furnishing any such information to, or entering into discussions or negotiations with, such person, API gives Luna written notice of the identity of such person and of API s intention to furnish information to, or enter into discussions with, such person, and API receives from such person an executed confidentiality agreement containing provisions at least as favorable to API as the provisions of the confidentiality agreement with Luna as

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in effect immediately prior to the execution of the Merger Agreement; and (D) contemporaneously with furnishing any such information to Luna to such person, API furnishes such information to Luna (to the extent such information has not been previous furnished or made available to Luna).

API Superior Offer means an unsolicited bona fide written offer by a third party to purchase or otherwise acquire all or substantially all of the outstanding shares of API s common stock (whether through a tender offer, merger or otherwise) or all or substantially all of the assets of API, that is determined by API s board of directors, in its good faith judgment, after consulting with its outside financial advisor and outside legal counsel, and after taking into account the terms and conditions of the offer, including the likelihood and anticipated timing of consummation and all other financial, regulatory, legal and other aspects of such offer, including any financing condition, to be more favorable from a financial point of view to API s stockholders than the Merger.

The Merger Agreement also provides that during the period beginning on the date of the Merger Agreement and continuing until the earlier of the termination of the Merger Agreement or the Effective Time, subject to specified exceptions, Luna will not, and will not permit its directors, officers, other employees, agents, attorneys, accountants, investment bankers, other advisors and representatives to:

- solicit, initiate, knowingly encourage or knowingly facilitate the making, submission or announcement of any acquisition proposal or acquisition inquiry with respect to Luna;
- knowingly furnish any information regarding Luna to any person in connection with or in response to an acquisition proposal or acquisition inquiry;
- engage in discussions or negotiations with any person relating to any acquisition proposal or acquisition inquiry with respect to Luna;
- approve, endorse or recommend any acquisition proposal or acquisition inquiry with respect to Luna; or
- enter into any letter of intent or similar document or any contract contemplating or otherwise relating to any acquisition with respect to Luna proposal or inquiry.

However, prior to the approval of the issuance of shares pursuant to the Merger by Luna s stockholders, nothing in the Merger Agreement prohibits Luna from furnishing information regarding Luna to, or entering into discussions and negotiations with, any person in response to an acquisition proposal that Luna s board of directors determines in good faith is reasonably likely to lead to a Luna Superior Offer (as defined below) and that is submitted to Luna by such person (and not withdrawn) if: (A) such acquisition proposal did not result from any material breach of any of the non-solicitation provisions of the Merger Agreement; (B) Luna s board of directors concludes in good faith, after having consulted with its outside legal counsel, that failure to take such action would be inconsistent with the fiduciary duties of Luna s board of directors to Luna s stockholders under applicable law; (C) prior to furnishing any such information to, or entering into discussions or negotiations with, such person, Luna gives API written notice of the identity of such person and of Luna s intention to furnish information to, or enter into discussions with, such person, and Luna receives from such person an executed confidentiality agreement containing provisions at least as favorable to Luna as the provisions of the confidentiality agreement with API as in effect immediately prior to the

execution of the Merger Agreement; and (D) contemporaneously with furnishing any such information to such person, Luna furnishes such information to API (to the extent such information has not been previously furnished or made available to API).

Luna Superior Offer means an unsolicited bona fide written offer by a third party to purchase or otherwise acquire all or substantially all of the outstanding shares of Luna s common stock (whether through a tender offer, merger or otherwise) or all or substantially all of the assets of Luna, that is determined by Luna s board of directors, in its good faith judgment, after consulting with its outside financial advisor and outside legal counsel, and after taking into account the terms and conditions of the offer, including the likelihood and anticipated timing of consummation and all other financial, regulatory, legal and other aspects of such offer, including any financing condition, to be more favorable from a financial point of view to Luna s stockholders than the Merger.

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Termination

The Merger Agreement may be terminated at any time prior to the Effective Time:

by mutual written consent of Luna and API;

by either party, if the Merger is not consummated by August 31, 2015, unless the failure to consummate the Merger by such date is attributable to a failure on the part of the terminating party to perform any covenant or obligation in the Merger Agreement required to be performed by such party at or prior to the Effective Time;

by either party if a court of competent jurisdiction or other governmental body has issued a final and nonappealable order, or has taken any other action, having the effect of permanently restraining, enjoining or otherwise prohibiting the Merger, unless such order or other action is attributable to a failure on the part of the terminating party to perform any covenant or obligation in the Merger Agreement required to be performed by such party at or prior to the Effective Time;

by either party, if API s stockholders do not adopt the Merger Agreement and approve the transactions contemplated thereby, or Luna s stockholders do not approve the issuance of shares of Luna common stock in the Merger, unless the failure of API s stockholders to adopt the Merger Agreement and approve the transactions contemplated thereby or of Luna s stockholders to approve the issuance of shares of Luna common stock in the Merger is attributable to a failure on the part of the terminating party to perform any covenant or obligation in the Merger Agreement required to be performed by such party at or prior to the Effective Time;

by Luna, if any of API s representations and warranties contained in the Merger Agreement were inaccurate as of the date of the Merger Agreement, or have become inaccurate as of a date subsequent to the date of the Merger Agreement, subject to exceptions specified in the Merger Agreement or set forth in the confidential disclosure schedules exchanged by Luna and API, such that the applicable condition precedent is not satisfied, or any of API s covenants or obligations contained in the Merger Agreement have been materially breached; *provided, however*, that if an inaccuracy in any of API s representations and warranties or a breach of a covenant or obligation by API is curable by August 31, 2015 and API is continuing to exercise its reasonable best efforts to cure such inaccuracy or breach, then Luna may not terminate the Merger Agreement on account of such inaccuracy or breach unless such inaccuracy or breach remains uncured for a period of 30 days after the date that Luna gives API notice of such inaccuracy or breach;

by API, if any of Luna s representations and warranties contained in the Merger Agreement were inaccurate as of the date of the Merger Agreement, or have become inaccurate as of a date subsequent to the date of the Merger Agreement, subject to exceptions specified in the Merger Agreement or set forth in the confidential disclosure schedules exchanged by Luna and API, such that the applicable condition precedent is not satisfied, or any of Luna s covenants or obligations contained in the Merger Agreement have been materially

breached; *provided, however*, that if an inaccuracy in any of Luna s representations and warranties or a breach of a covenant or obligation by Luna is curable by August 31, 2015 and Luna is continuing to exercise its reasonable best efforts to cure such inaccuracy or breach, then API may not terminate the Merger Agreement on account of such inaccuracy or breach unless such inaccuracy or breach remains uncured for a period of 30 days after the date that API gives Luna notice of such inaccuracy or breach;

by Luna (at any time prior to the adoption of the Merger Agreement by API s stockholders) if an API Triggering Event has occurred; an API Triggering Event will be deemed to have occurred if: (a) the API board of directors fails to recommend that API s stockholders vote to adopt the Merger Agreement or withdraws or modifies such recommendation in a manner adverse to Luna; (b) API fails to include in the joint proxy statement/prospectus API s board of directors recommendation and a statement to the effect that API s board of directors has determined and believes that the Merger Agreement and the Merger are advisable and fair to, and in the best interests of, API and its stockholders; (c) API effects

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an API Change in Recommendation (as defined below) or (d) API breaches, or is deemed to have breached, in any material respect, the non-solicitation provisions of the Merger Agreement or the provisions related to API s stockholder meeting;

by API (at any time prior to the approval of the issuance of the shares of Luna s Common Stock in the Merger by Luna s stockholders) if a Luna Triggering Event has occurred; a Luna Triggering Event will be deemed to have occurred if: (a) the Luna board of directors fails to recommend that Luna s stockholders vote to approve the issuance of shares of Luna common stock in the Merger or withdraws or modifies such recommendation in a manner adverse to API; (b) Luna fails to include in the joint proxy statement/prospectus Luna s board of directors recommendation and a statement to the effect that Luna s board of directors has determined and believes that the Merger Agreement and the Merger are advisable and fair to, and in the best interests of, Luna and its stockholders; (c) Luna effects a Luna Change in Recommendation (as defined below) or (d) Luna breaches, or is deemed to have breached, in any material respect, the non-solicitation provisions of the Merger Agreement or the provisions related to Luna s stockholder meeting;

by Luna (at any time prior to the approval of the issuance of the shares of Luna common stock in the Merger by Luna s stockholders) in order to accept a Luna Superior Offer if (i) such Luna Superior Offer did not result from a material breach of the non-solicitation provisions of the Merger Agreement and (ii) Luna s board of directors has authorized Luna to enter into a binding written definitive agreement providing for the consummation of a transaction constituting a Luna Superior Offer and Luna shall have simultaneously paid the specified termination fee; or

by API (at any time prior to the adoption of the Merger Agreement by API s stockholders) in order to accept an API Superior Offer if (i) such API Superior Offer has not resulted from a material breach of the non-solicitation provisions of the Merger Agreement and (ii) API s board of directors has authorized API to enter into a binding written definitive agreement providing for the consummation of a transaction constituting an API Superior Offer and API has simultaneously paid the specified termination fee.

API Change in Recommendation means (i) API s board recommendation has been directly or indirectly withdrawn or modified in a manner adverse to Luna or (ii) API s board of directors or a committee thereof has: (A) failed to include API s board recommendation in the joint proxy statement/prospectus; (B) recommended, adopted or approved, or proposed publicly to recommend, adopt or approve, an acquisition proposal with respect to API; (C) failed to publicly reaffirm API s board recommendation within five business days after Luna requests in writing that such action be taken; or (D) resolved to take any of the foregoing actions.

Luna Change in Recommendation means (i) Luna s board recommendation has been directly or indirectly withdrawn or modified in a manner adverse to API or (ii) Luna s board of directors or a committee thereof has: (A) failed to include Luna s board recommendation in the joint proxy statement/prospectus; (B) recommended, adopted or approved, or proposed publicly to recommend, adopt or approve, an acquisition proposal with respect to Luna; (C) failed to publicly reaffirm Luna s board recommendation within five business days after API requests in writing that such action be taken; or (D) resolved to take any of the foregoing actions.

Effects of Termination

If the Merger Agreement is terminated as described above, it will be of no further force or effect, except with respect to the treatment of confidential information, payment of expenses and fees and certain other provisions as provided for in the Merger Agreement. The termination of the Merger Agreement will not relieve any party from any liability for any willful and material inaccuracy in or breach of any representation, warranty, covenant, obligation or other provision contained in the Merger Agreement.

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Termination Fee

API will be required to pay a termination fee of $750,000 to Luna if the Merger Agreement is terminated under the following circumstances:

- if Luna terminates the Merger at any time prior to the adoption of the Merger Agreement by API s stockholders because of an API Triggering Event;

- if API terminates the Merger at any time prior to the adoption of the Merger Agreement by API s stockholders in order to accept an API Superior Offer if (i) such API Superior Offer has not resulted from a material breach of the non-solicitation provisions of the Merger Agreement and (ii) API s board of directors has authorized API to enter into a binding written definitive agreement providing for the consummation of a transaction constituting an API Superior Offer and API has simultaneously paid the specified termination fee; or

- if API or Luna terminate the Merger because, following an API Change in Recommendation, API s stockholders do not adopt the Merger Agreement and approve the transactions contemplated thereby.

In addition, if the Merger Agreement is terminated by either API or Luna because API s stockholders do not adopt the Merger Agreement and approve the transactions contemplated thereby, in the absence of an API Change in Recommendation, then API shall pay to Luna a nonrefundable reimbursement fee in the amount of Luna s expenses of up to $250,000.

Luna will be required to pay a termination fee of $750,000 to API if the Merger Agreement is terminated under the following circumstances:

- if API terminates the Merger at any time prior to the approval of the issuance of the shares of Luna common stock in the Merger by Luna s stockholders because of a Luna Triggering Event;

- if Luna terminates the Merger at any time prior to the approval of the issuance of the shares of Luna common stock in the Merger by Luna s stockholders in order to accept a Luna Superior Offer if (i) such Luna Superior Offer did not result from a material breach of the non-solicitation provisions of the Merger Agreement and (ii) Luna s board of directors has authorized Luna to enter into a binding written definitive agreement providing for the consummation of a transaction constituting a Luna Superior Offer and Luna shall have simultaneously paid the specified termination fee; or

- if API or Luna terminate the Merger, following a Luna Change in Recommendation, because Luna s stockholders do not approve the issuance of shares of Luna common stock in the Merger.

In addition, if the Merger Agreement is terminated by either API or Luna because Luna s stockholders do not approve the issuance of shares of Luna common stock in the Merger, in the absence of a Luna Change in Recommendation, then Luna shall pay to API a nonrefundable reimbursement fee in the amount of API s expenses of up to $250,000.

Expenses

All costs and expenses incurred in connection with the Merger Agreement will be paid by the party incurring such expense, except that Luna and API will share equally all out-of-pocket fees and expenses, other than accountants and attorneys fees, incurred in connection with the filing, printing and mailing of this joint proxy statement/prospectus, and the registration statement of which it is a part and any amendments or supplements thereto.

Amendment, Extensions, Waivers

Luna and API may amend the Merger Agreement in writing at any time with the approval of the respective boards of directors of API and Luna. However, after Luna and API have received stockholder approval, no amendments will be made that require further approval by API s or Luna s respective stockholders without the further approval of such stockholders. Any amendment must be made in writing.

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At any time prior to the completion of the Merger, Luna or API may extend the time for performance of any of the obligations or other acts of the parties, waive any inaccuracies in the representations and warranties in the Merger Agreement or in any document delivered pursuant to the Merger Agreement, or waive compliance with any of the agreements or conditions contained in the Merger Agreement. Any agreement of extension or waiver must be in writing.

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CERTAIN AGREEMENTS RELATED TO THE MERGER

The following summary describes the material provisions of certain agreements that have been entered into in connection with, or otherwise relate to, the Merger. Copies of these agreements are attached as exhibits to the Merger Agreement, which is attached as Annex A to this joint proxy statement/prospectus, and are incorporated by reference into this joint proxy statement/prospectus. The rights and obligations of the parties to these agreements are governed by the express terms and conditions of such agreements, respectively, and not by this summary. This summary may not contain all of the information about these agreements that may be important to the stockholders of Luna and API, and are qualified in their entirety by reference to the complete text of these agreements. Luna and API encourage you to read these agreements carefully and in their entirety for a more complete understanding of these agreements.

Luna Voting Agreements

In order to induce API to enter into the Merger Agreement, each of Luna s executive officers and directors entered into a voting agreement with Luna and API (collectively, the Luna Voting Agreements). As of March 23, 2015, existing Luna stockholders that entered into the Luna Voting Agreements owned an aggregate of 992,783 shares of Luna common stock, representing approximately 6.6% of Luna s outstanding common stock as of March 23, 2015. A copy of the form of Luna Voting Agreement is attached as Exhibit A-1 in Annex A to this joint proxy statement/prospectus.

The Luna Voting Agreements include the following provisions, among others:

The Luna stockholders who are parties to the Luna Voting Agreements have agreed, solely in their capacity as Luna stockholders, and among other things, to vote all of their shares of common stock in favor of the issuance of shares of Luna common stock in connection with the Merger Agreement and the transactions contemplated thereby and to not vote any Shares in favor of the approval of any (i) other acquisition transaction; (ii) any change in a majority of the board of directors of Luna; (iii) any amendment to Luna s certificate of incorporation or bylaws, which amendment would in any manner frustrate, prevent or nullify the Merger, the Merger Agreement or any transactions contemplated by the Merger Agreement or change in any manner the voting rights of any class of Luna s capital stock; (iv) any material change in the capitalization of Luna, or Luna s corporate structure; or (v) any other action which is intended, or could reasonably be expected, to impede, interfere with, delay, postpone, discourage or adversely affect the Merger or any of the other transactions contemplated by the Merger Agreement or the Luna Voting Agreements. The stockholders that are parties to the Luna Voting Agreements also granted Donald Pastor, API s chairman of the board of directors, and API an irrevocable proxy to vote their respective common stock in accordance with the terms of the Luna Voting Agreements.

The Luna Voting Agreements provide that each stockholder who is a party to the Luna Voting Agreements will not, subject to specified exceptions and among other things, sell, pledge, encumber, grant an option with respect to, transfer or dispose of, or enter into any agreement or commitment contemplating the possible sale of, pledge of, encumbrance of (other than restrictions imposed by applicable laws or legal requirements or pursuant to the Luna Voting Agreements), grant of an option with respect to, transfer of or disposition of, any Luna common stock beneficially owned by such stockholder, or grant any proxies with respect to such shares. Pursuant to the Luna Voting Agreements, each stockholder who is a party to the Luna Voting Agreements has also agreed not to: (i) make certain solicitations regarding any alternative acquisition proposal related to Luna; (ii) knowingly furnish any information regarding Luna in connection with an acquisition proposal; (iii) engage in discussions or negotiations with any person relating to any acquisition proposal with respect to Luna; (iv) approve, endorse or recommend any alternative acquisition proposal with respect to Luna; (v) enter into any letter of intent or similar document relating to any alternative acquisition transaction with respect to Luna; (vi) make any disclosure or communication to any person of or with respect to any non-public information relating to the Merger or indicating that such stockholder is against the

Merger or any of the transactions contemplated thereby, subject to certain specified exceptions; (vii) take any action that could result in the revocation or invalidation of the proxy; and (viii) agree or publicly propose to take any actions prohibited by the Luna Voting Agreements.

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The Luna Voting Agreements will terminate upon the earliest to occur of: (i) the termination of the Merger Agreement in accordance with its terms; (ii) the date of any modification, waiver, change or amendment of the Merger Agreement executed after the date of the Luna Voting Agreements that is materially adverse to the Luna stockholders or that results in a (a) decrease in the Exchange Ratio or (b) change in the form of consideration payable to the Luna stockholders under the Merger Agreement; and (iii) the Effective Time.

API Voting Agreements

In order to induce Luna to enter into the Merger Agreement, each of API s executive officers and directors entered into a voting agreement with Luna and API (collectively, the API Voting Agreements). As of March 23, 2015, API stockholders that entered into these API Voting Agreements owned an aggregate of 4,022,152 shares of API common stock, representing approximately 10.8% of the outstanding API common stock as of March 23, 2015. A copy of the form of API Voting Agreement is attached as Exhibit A-2 in Annex A to this joint proxy statement/prospectus.

The API Voting Agreements include the following provisions, among others:

The stockholders who are parties to the API Voting Agreements have agreed, solely in their capacity as stockholders, and among other things, to vote all of their shares of common stock in favor of the adoption of the Merger Agreement and approval of the transactions contemplated thereby and to not vote any Shares in favor of the approval of any (i) other acquisition transaction; (ii) any change in a majority of the board of directors of API; (iii) any amendment to API s certificate of incorporation or bylaws, which amendment would in any manner frustrate, prevent or nullify the Merger, the Merger Agreement or any transactions contemplated by the Merger Agreement or change in any manner the voting rights of any class of API s capital stock; (iv) any material change in the capitalization of API, or API s corporate structure; or (v) any other action which is intended, or could reasonably be expected, to impede, interfere with, delay, postpone, discourage or adversely affect the Merger or any of the other transactions contemplated by the Merger Agreement or the API Voting Agreements. The stockholders that are parties to the API Voting Agreements also granted My E. Chung, Luna s president and chief executive officer, and Luna an irrevocable proxy to vote their respective common stock in accordance with the terms of the API Voting Agreements.

The API Voting Agreements provide that each stockholder who is a party to the API Voting Agreements will not, subject to specified exceptions and among other things, sell, pledge, encumber, grant an option with respect to, transfer or dispose of, or enter into any agreement or commitment contemplating the possible sale of, pledge of, encumbrance of (other than restrictions imposed by applicable laws or legal requirements or pursuant to the API Voting Agreements), grant of an option with respect to, transfer of or disposition of, any API common stock beneficially owned by such stockholder, or grant any proxies with respect to such shares. Pursuant to the API Voting Agreements, each stockholder who is a party to the API Voting Agreements has also agreed not to: (i) make certain solicitations regarding any alternative acquisition proposal related to API; (ii) knowingly furnish any information regarding API in connection with an acquisition proposal; (iii) engage in discussions or negotiations with any person relating to any acquisition proposal with respect to API; (iv) approve, endorse or recommend any alternative acquisition proposal with respect to API; (v) enter into any letter of intent or similar document relating to any alternative acquisition transaction with respect to API; (vi) make any disclosure or communication to any person of or with respect to any non-public information relating to the Merger or indicating that such stockholder is against the Merger or any of the transactions contemplated thereby, subject to certain specified exceptions; (vii) take any action that could result in the revocation or invalidation of the proxy; and (viii) agree or publicly propose to take any actions prohibited by the API Voting Agreements.

The API Voting Agreements will terminate upon the earliest to occur of: (i) the termination of the Merger Agreement in accordance with its terms; (ii) the date of any modification, waiver, change or amendment of the Merger Agreement

executed after the date of the API Voting Agreements that is materially adverse to the API stockholders or that results in a (a) decrease in the Exchange Ratio or (b) change in the form of consideration payable to the API stockholders under the Merger Agreement; and (iii) the Effective Time.

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INFORMATION ABOUT LUNA

Overview

Luna develops, manufactures and markets fiber optic sensing and test & measurement products focused on bringing new and innovative technology solutions to measure, monitor, protect and improve critical processes in the aerospace, automotive, energy, composite, telecommunications, and defense industries. Luna s business model is designed to accelerate the process of bringing new and innovative products to market. In addition, Luna uses in-house technical expertise across a range of technologies to perform applied research services for companies and government-funded projects in the areas of sensing & instrumentation, advanced materials, and health sciences. Luna continues to invest in product development and commercialization, which Luna anticipates will lead to increased product sales growth.

Luna s corporate growth strategy is focused on becoming a leading provider of fiber optic strain and temperature sensing solutions and standard test methods for composite, as well as non-composite materials, structures and systems. Luna is organized into two main business segments, Luna s Products and Licensing segment and Luna s Technology Development segment. Luna s Products and Licensing segment develops, manufactures and markets Luna s fiber optic sensing, as well as test and measurement products. Luna s Products and Licensing segment also includes the funded development of Luna s fiber optic shape sensing technology for minimally invasive medical applications.

On January 21, 2014, Luna sold the assets associated with Luna s fiber optic shape sensing technology in the medical field to affiliates of Intuitive Surgical, Inc. (as referring either to these affiliates in such capacity as buyers or to Intuitive Surgical, Inc., Intuitive), as described more fully below. As part of this transaction, Luna entered into a revocable license agreement with Intuitive pursuant to which Luna has the right to use all of Luna s transferred technology outside the field of medicine and in respect of Luna s existing non-shape sensing products in certain non-robotic medical fields. Luna is continuing to develop and commercialize Luna s fiber optic technology for strain and temperature sensing applications for the aerospace, automotive, and energy industries. Luna s Products and Licensing segment revenues represented approximately 38%, and 43% of Luna s total revenues for the years ended December 31, 2013 and 2014, respectively.

Luna s Technology Development segment performs applied research principally in the areas of sensing & instrumentation, advanced materials and health sciences. Luna s Technology Development segment revenues comprised approximately 62% and 57% of Luna s total revenues for the years ended December 31, 2013 and 2014, respectively. Historically, this segment also included Luna s secure computing and communications group (SCC), which focused on technologies for ensuring the integrity of integrated circuits used in defense systems. On March 1, 2013, Luna sold the assets associated with SCC to MacAulay-Brown, Inc. (Mac-B), another defense contractor. Most of the government funding for Luna s Technology Development segment outside of SCC is derived from the Small Business Innovation Research (SBIR) program coordinated by the U.S. Small Business Administration (SBA). Luna s SBIR research is focused on technological areas with commercial potential and Luna strives to commercialize any resulting scientific advancements. For the year ended December 31, 2013, approximately 54% of Luna s total revenues were generated under the SBIR program, compared to 47% in 2014. For the years ended December 31, 2013 and 2014, 62% and 54%, respectively, of Luna s revenues were derived from the U.S. government.

Products and Licensing

In Luna s Products and Licensing segment Luna has been successful in developing and marketing fiber optic test and measurement products which provide solutions primarily for the telecommunications industry. In 2011, Luna first introduced Luna s ODiSI platform of products for distributed sensing of strain and temperature. Luna s key initiative for long term growth is to become a leading provider of fiber optic strain & temperature sensing systems and standard

test methods based upon this product platform. Luna s Products and Licensing segment includes approximately 29 full-time employees. Luna s primary product lines and development services in this segment are described in more detail below.

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Test & Measurement, Sensing, and Instrumentation Products

Test and Measurement Equipment for Fiber Optic Components and Sub-Assemblies

Luna s product lines in the test and measurement domain include Luna s Optical Vector Analyzer (OVA), Luna s Optical Backscatter Reflectometer (OBR),and the Phoenix family of tunable lasers.

Historically, Luna s test and measurement products have primarily served the telecommunications industry, although most of Luna s products have valuable applications in other fields. Luna s test and measurement products monitor the integrity of fiber optic network components and sub-assemblies. These products are designed for manufacturers and suppliers of optical components and sub-assemblies and allow them to reduce development, test and production costs and improve the quality of their products. Most manufacturers and suppliers of optical components and modules currently use a combination of different types of optical test equipment to identify and measure failures in optical networks, such as bad splices, bends, crimps and other reflective and non-reflective events that can cause defects and negatively impact product performance. Luna s optical test equipment products replace the need to employ multiple test products by addressing all stages of the end user s product development lifecycle, including design verification, component qualification, assembly process verification and failure analysis. Luna s OVA platform allows manufacturers and suppliers of optical components and sub-assemblies to reduce development, test and production costs and time-to-market by replacing multiple, time consuming and expensive measurement platforms with a single, integrated and easy-to-use instrument.

Luna s OBR is a highly sensitive diagnostic device which has application in the telecommunications industry and flexibility to provide measurements in various other applications. Luna s OBR allows data and telecommunications companies and the service providers who maintain their own fiber optic networks to reduce test time and improve product quality. Luna s OBR provides the ability to inspect fiber networks with higher resolution and better sensitivity than is possible with other existing test products. Its user-friendly graphical user interface also makes the OBR product suitable for both research and manufacturing applications. The OBR gives end users a very high resolution view that is similar to an X-Ray into the inner workings of a fiber optic network. The OBR also has a feature that allows users to turn standard optical fiber into multiple sensors that could be used in a variety of temperature measurement and monitoring applications including power generation; civil structure monitoring; industrial process control; component-level heating in optical amplifiers; strain and load distribution measurements of aircraft harnesses; and temperature monitoring inside telecommunications cabinets and enclosures.

ODiSI Sensing Solution; Optical Distributed Sensor Interrogator

In 2011, Luna launched Luna s new sensing platform called ODiSI. These products provide fully distributed strain or temperature measurements and deliver an extraordinary amount of data by using an optical fiber as a continuous sensor over up to 50 meters of surface. Compared to traditional sensing methods, such as strain gages, this technology provides greater insight into the performance, tolerances and failure mechanisms of structures and vehicles. Luna believes the technology can provide exceptional value to the aerospace, automotive, and energy industries providing solutions for composite, as well as non-composite materials, structures and systems.

Luna has significant expertise in distributed sensing systems, such as ODiSI, which are products composed of multiple sensors whose inputs are integrated through a fiber optic network and software. These products use fiber optic sensing technology with an innovative monitoring system that allows several thousand sensors to be networked along a single optical fiber. Potential key applications and markets of Luna s fiber optic sensing solutions include the airframe industry, integrated structural monitoring of civil structures and space applications. For example, a major airframe manufacturer has explored the use of Luna s system during fatigue testing to measure strain through a

network of sensors distributed throughout an aircraft. Luna s ODiSI platform also enables the direct monitoring of temperature. Potential markets include automotive manufacturing, automotive component manufacturing, motorsports, industrial process control and electrical system monitoring. For example, Luna s network of distributed temperature sensors has been tested by a major manufacturer of electrical generators for the purpose of increasing operational efficiency and prolonging generator life.

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Tunable Lasers

Luna has acquired the rights to manufacture a line of swept tunable lasers to allow Luna to compete more effectively in Luna s existing fiber optic test and measurement as well as sensing markets. This laser is in production, and this technology is being integrated into current and new products to help Luna provide Luna s customers with faster, more flexible and cost-effective test and measurement products. The laser has desirable properties in the quality of the laser light produced, the speed at which it can operate, the small size of the package, and the environmental conditions in which it can operate. Luna believes that these traits make it possible for Luna to move Luna s fiber optic sensing capabilities out of the laboratory, and into more demanding environments such as aircraft structural health monitoring, automotive manufacturing, green energy, and industrial applications.

Sales & Marketing

Luna primarily markets fiber optic test and measurement products to telecommunications companies, defense agencies, government system integrators, researchers, original equipment manufacturers, distributors, testing labs and strategic partners worldwide. Luna has a regional sales force that markets and sells Luna s products through manufacturer representative organizations to customers in North America and through partner and distribution channels for other sales around the world. Luna is building a dedicated sales force for direct marketing of Luna s distributed sensing products, with an initial focus on customers in the automotive, aerospace, and energy industries. Luna believes that Luna provides a high level of support in developing and maintaining Luna s long-term relationships with Luna s customers. Customer service and support are provided through Luna s offices and those of Luna s partners that are located throughout the world.

Fiber Optic Shape Sensing Solutions for Robotic, Non-Robotic and Minimally Invasive Surgical Systems

In 2012, Luna entered into a development agreement with Philips Healthcare, acting through Philips Medical Systems Nederland BV (Philips). Under the development agreement, Luna conducted certain development work during 2012 and during 2013 in cooperation with Philips to advance Luna s fiber-optic shape sensing technology towards commercialization in the non-robotic medical field. Under the development agreement, Philips agreed to pay Luna monthly on a time and materials basis, less a specified holdback amount, in accordance with corresponding milestones and estimated resource requirements. In addition, under the development agreement, Philips purchased specified prototype systems from Luna. Luna s agreement with Philips expired at the end of 2013 and was not renewed or extended. As a result of the sale of Luna s shape sensing assets related to medical applications to Intuitive in January 2014, Luna does not expect to do any further work with Philips.

On January 21, 2014, Luna sold assets associated with the development of fiber optic shape sensing for the medical field to affiliates of Intuitive. However, Luna has a development and supply agreement with Hansen Medical, Inc. (Hansen) under which Luna develops localization and shape sensing solutions for Hansen s medical robotics system and under which Luna would supply fiber optic shape sensing systems to Hansen. Although the terms of Luna s sale to Intuitive generally preclude Luna from pursuing fiber optic shape sensing in medical applications in the future, Luna is specifically permitted to continue to develop this technology and supply related products to Hansen. At this time, however, Hansen is not requesting Luna to perform any development work towards this solution. Luna s business relationship with Hansen is further described below under Litigation and Agreements with Hansen Medical, Inc.

Technology Development

Luna provides applied research for customers in Luna s primary areas of focus, including sensing and materials such as nanomaterials, coatings, adhesives, composites and bio-engineered materials. Luna generally competes to win

contracts in these areas on a fee-for-service basis. Luna s Technology Development segment has a successful track record of evaluating innovative technologies to address the needs of Luna s customers.

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Luna seeks to maximize the benefits Luna derives from Luna s contract research business, including revenue generation and identification of promising technologies for further development. Luna focuses primarily on opportunities in which Luna develop intellectual property rights in areas that Luna believes have commercialization potential. Luna takes a disciplined approach to contract research to try to ensure that the costs of any contract Luna undertakes will be fully reimbursed. Luna believes that this model is cost-efficient and significantly reduces Luna s development risk in that it enables Luna to defray the costs of riskier technology development with third-party funding.

As of January 30, 2015, Luna s Technology Development segment was engaged in more than 50 active contracts, with typical terms ranging from six months to three years. These projects span a wide range of applications across Luna s areas of focus.

Although Luna conducts Luna s applied research on a fee-for-service basis for third parties, Luna seeks to retain full or partial rights to the technologies and patents developed under those contracts and to continuously enlarge and strengthen Luna s intellectual property portfolio. New technology that Luna develops may complement existing technologies and enable Luna to develop applications and products that were not previously possible. In addition, the technologies Luna develops may also be applicable to commercial markets beyond the scope of the applications originally contemplated in the contract research stage, and Luna endeavors to capture the value of those opportunities.

As of January 30, 2015, Luna s Technology Development segment consisted of approximately 54 full time employees, of whom 44 hold advanced degrees, including 18 Ph.D. degrees. Luna also utilizes the knowledge and experience of researchers employed through the academic institutions, corporations and government agencies with which Luna subcontracts. Luna s Technology Development segment is organized into subgroups according to areas of technology, with each subgroup being managed by its own director who is responsible for its financial performance. In addition, Luna has in place disciplined processes designed to ensure quality control of proposal preparation, program reviews, pipeline reviews, revenue tracking and financial reporting.

Each year, U.S. government federal agencies and departments are required to set aside a portion of their grant awards for SBIR-qualified organizations. SBIR contracts include Phase I feasibility contracts of up to $150,000 and Phase II proof-of-concept contracts, which can be as high as $1,000,000. Luna has won three National Tibbetts Awards from the SBA for outstanding SBIR performance. Luna has also won research contracts outside the SBIR program from corporations and government entities. These contracts typically have a longer duration and higher value than SBIR grants. In the future, Luna will seek to derive a larger portion of Luna s contract research revenues from contracts outside of the SBIR program.

Materials

Luna is actively developing a wide variety of materials. For example, Luna has developed a range of coatings, including both hydrophobic and superoleophobic coatings. These coatings are being evaluated for use in a number of applications. Other coatings under development include anti-corrosion and damage-indicating coatings.

Luna is also working on a variety of bioengineered materials for homeostatic agents and wound healing. These materials must be approved by the FDA or similar foreign regulatory agencies before they can be marketed, which Luna does not expect to occur for at least several years, if at all.

Luna s nanomaterials activity is focused on fullerenes and tri-metal nitride endohedral fullerene (Trimetasphere®) materials. The Trimetasphere® nanomaterial is a carbon sphere with three metal atoms and an enclosed nitrogen atom. Luna has obtained an exclusive license from Virginia Tech to commercialize Trimetasphere® nanomaterials under an

issued U.S. patent and pending U.S. patent applications.

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Luna is also researching other applications for nanomaterial-based drugs based on the anti-oxidative characteristics of fullerenes. These products are in the early stages of development, but if successful, could offer new market opportunities for Luna.

In 2009, Luna has acquired a patent portfolio from Tego Biosciences, Inc., including in- and out-licenses, generally for the use of carbon fullerene nanomolecules in the treatment of human health. Luna believes this acquisition strengthened Luna s patent position in this area, but there can be no assurances that Luna will be able to obtain commercial success as a result of these patents and licenses.

Sensing

Luna s Technology Development segment also performs a significant amount of applied research towards developing new sensors. This includes sensors for the purpose of corrosion, temperature, strain, pressure, structural health and chemical detection. Much of the work is directed to harsh environments and uses optics. Examples include measuring temperature and neutron flux in nuclear reactors, pressure and temperature in gas turbines, and temperatures of cryogenic lines. The effort utilizes both discrete and distributed sensors. Luna s technology development work in this area is closely aligned with Luna s Products and Licensing segment and is directed at advancing the technology and the development of new applications.

Intellectual Property

Luna seeks patent protection on inventions that Luna considers important to the development of Luna s business. Luna relies on a combination of patent, trademark, copyright and trade secret laws in the United States and other jurisdictions, as well as confidentiality procedures and contractual provisions to protect Luna s proprietary technology and Luna s brand. Luna controls access to Luna s proprietary technology and enter into confidentiality and invention assignment agreements with Luna s employees and consultants and confidentiality agreements with other third parties.

Luna s success depends in part on Luna s ability to develop patentable products and obtain, maintain and enforce patent and trade secret protection for Luna s products, as well as to successfully defend these patents against third-party challenges both in the United States and in other countries. Luna will only be able to protect Luna s technologies from unauthorized use by third parties to the extent that Luna owns or has licensed valid and enforceable patents or trade secrets that cover them. Furthermore, the degree of future protection of Luna s proprietary rights is uncertain because Luna may not be able to obtain patent protection on some or all of Luna s technology and because legal means afford only limited protection and may not adequately protect Luna s rights or permit Luna to gain or keep Luna s competitive advantage.

Currently, Luna owns or in-licenses approximately 136 U.S. and international patents and approximately 70 U.S. and international patent applications, and Luna intends to file, or request that Luna s licensors file, additional patent applications for patents covering Luna s products. Luna s issued patents generally have terms that are scheduled to expire between 2015 and 2030. However, patents may not be issued for any pending or future pending patent applications owned by or licensed to Luna. Claims allowed under any issued patent or future issued patent owned or licensed by Luna may not be valid or sufficiently broad to protect Luna s technologies. Any issued patents owned by or licensed to Luna now or in the future may be challenged, invalidated or circumvented, and, in addition, the rights under such patents may not provide Luna with competitive advantages. In addition, competitors may design around Luna s technology or develop competing technologies. Intellectual property rights may also be unavailable or limited in some foreign countries, which could make it easier for competitors to capture or increase their market share with respect to related technologies.

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A discussion of Luna s material patents and patent applications is set forth below.

Siemens Patent

Luna has licensed a U.S. patent and related patents in Canada, Switzerland, Germany, Great Britain, Italy, Netherlands and France from Siemens AG concerning methods of preparing fullerene derivatives for use. Luna use these methods in Luna s nanotechnology area to attach certain materials to carbon fullerenes. The U.S. patent expires in April 2015. The related Canadian and European patents expired in 2014.

NASA Patents

Luna has licensed, on a non-exclusive basis, four U.S. patents and related patents in Japan, Canada, Germany, France, Great Britain and Belgium from the National Aeronautics and Space Administration, an agency of the U.S. government (NASA), which patents concern the measurement of strain in optical fiber using Bragg gratings and Rayleigh scatter and the measurement of the properties of fiber-optic communications devices. These patents expire between February 2017 and September 2020.

VTIP Patents

Luna has licensed, on an exclusive basis, two U.S. patents from Virginia Tech Intellectual Properties, Inc. (VTIP) to commercialize Trimetasphere® nanomaterials for all fields of human endeavor. These patents expire in December 2019 and December 2022.

Coherent Patents

Luna has licensed, on a non-exclusive basis, several U.S. patents and other intellectual property rights owned or controlled by Coherent, Inc., related to the manufacturing, using, importing, selling and offering for sale of Coherent s Iolon brand of swept tunable lasers, which Luna markets under Luna s Phoenix brand of lasers. These U.S. patents expire between 2020 and 2025.

Shape Sensing Patents

As a part of Luna s sale of assets associated with Luna s fiber optic shape sensing technology in the medical field to Intuitive, Luna transferred Luna s related patents to Intuitive. Also as a part of this transaction, Luna entered into a revocable license agreement with Intuitive pursuant to which Luna has the right to use all of Luna s transferred technology outside the field of medicine and in respect of Luna s existing non-shape sensing products in certain non-robotic medical fields. Two U.S. patents that Luna now license back from Intuitive cover the use of optical frequency domain reflectometry, or OFDR, and multiple, closely spaced Bragg gratings for shape sensing, and the use of the inherent scatter as a strain sensor for shape sensing. These two patents expire in July 2025. Luna also has a license back from Intuitive for a patent application that covers certain refinements to the measurements covered in the first two patents, which are necessary in order to achieve the necessary accuracies for medical and other applications. This patent application was filed in the United States, the European Patent Office, China, India, Russia, Brazil, Japan and Indonesia. These patents and patent applications can support other nonmedical applications of Luna s fiber optic shape sensing technology.

Corporate History and Chapter 11 Reorganization

Luna was incorporated in the Commonwealth of Virginia in 1990 and reincorporated in the State of Delaware in April 2003. Luna completed Luna s initial public offering in June 2006. Luna s executive offices are located at 1 Riverside Circle, Suite 400, Roanoke, Virginia 24016 and Luna s main telephone number is (540) 769-8400.

On July 17, 2009, Luna filed a voluntary petition for relief in order to reorganize under Chapter 11 of the United States Bankruptcy Code, including a proposed plan of reorganization, which Luna refers to in this report as the Reorganization Plan, with the United States Bankruptcy Court for the Western District of Virginia. On January 12, 2010, the Bankruptcy Court approved the Reorganization Plan and Luna emerged from bankruptcy on that date.

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Litigation and Agreements with Hansen Medical, Inc.

In June 2007, Hansen, a company for which Luna had conducted certain research and performed certain services, filed a lawsuit against Luna for using allegedly misappropriated trade secrets from Hansen in connection with Luna s work with Intuitive or otherwise. On April 21, 2009, a jury found in favor of Hansen and awarded a verdict of $36.3 million against Luna. As a result of this jury verdict, Luna filed for Chapter 11 reorganization in July 2009.

On December 11, 2009, Luna and Luna s wholly owned subsidiary Luna Technologies, Inc. entered into a settlement agreement with Hansen to settle all claims arising out of the litigation. On January 12, 2010, as part of Luna s Reorganization Plan, Luna entered into a series of agreements with Hansen and Intuitive that were contemplated by the settlement agreement. Under Luna s license agreement with Hansen (the Hansen License), Luna granted Hansen (i) a co-exclusive (with Intuitive), royalty-free, fully paid, perpetual and irrevocable license to Luna s fiber optic shape sensing/localization technology within the medical robotics field. The license can only be sublicensed by Hansen in connection with Hansen products, except that Hansen can grant full sublicenses to third parties for single degree of freedom robotic medical devices; (ii) an exclusive (and fully sublicenseable) royalty-free, fully paid, perpetual and irrevocable license to Luna s fiber optic shape sensing/localization technology for non-robotic medical devices within the orthopedics, vascular, and endoluminal fields; and (iii) a co- exclusive (with Luna) royalty-free, fully paid, perpetual and irrevocable license to Luna s fiber optic shape sensing/localization technology for non-robotic medical devices in other medical fields (including colonoscopies but not including devices described in clause (ii) above). In 2011, Hansen entered into certain agreements with Philips Medical Systems (and/or its affiliates) under which Hansen sublicensed its non-robotic medical rights to Luna s fiber optic shape sensing/localization technology.

In connection with the settlement agreement, Luna also entered into a development and supply agreement with Hansen. The agreement provides that Luna will perform product development services with respect to fiber optic shape sensing at Hansen s request and provide Luna s shape sensing products to Hansen. Revenues earned for product development will be determined in a manner consistent with Luna s normal contract development services and will be payable monthly to Luna. The agreement also sets forth certain terms under which Luna would supply fiber optic components to Hansen. In May 2011, Luna amended this development and supply agreement with Hansen in order to update the specifications and estimated budget amounts for certain development milestones and provide for additional development milestones and related budget estimates and specifications to be achieved. The amendment also provides for a payment structure whereby Luna shares a specified percentage of the development expenses otherwise payable in connection with certain of the development milestones, up to a certain cumulative maximum, and changes the mechanism for calculating amounts that Hansen may hold back from being paid to Luna while such expenses are being shared by the parties. Finally, the amendment adjusted the commercial transfer pricing mechanism for Luna s supply of fiber optic components to Hansen. At this time, Hansen is not requesting Luna to perform any development work under this development and supply agreement. Luna s sale of assets to Intuitive was made expressly subject to the development and supply agreement with Hansen and the Hansen License.

Material Agreements

Sale of Assets to Intuitive Surgical

On January 17, 2014, Luna entered into an Asset Purchase Agreement with Intuitive (the Asset Purchase Agreement). Under the Asset Purchase Agreement, effective as of 12:01 a.m. on January 21, 2014, Luna closed on the sale to Intuitive of substantially all of Luna s assets related to Luna s medical shape sensing business, including all of the patents and patent applications used or useful for Luna s fiber optical shape sensing and localization technology, for $12 million, plus up to $8 million upon the accomplishment by Intuitive of certain technical specifications (the Technical Specifications Payment) and up to $10 million in potential future royalties (altogether, the Transaction).

Luna had been engaged since 2007 in a development project for

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Intuitive developing a fiber optic-based shape sensing and position tracking system to be integrated into Intuitive s products. Also as a part of the Transaction, Intuitive has hired certain of Luna s employees, many of whom were historically engaged in this development project.

The Technical Specifications Payment is tied to the achievement of certain technical specifications that were previously established for the development project between Luna and Intuitive. If these technical specifications are not achieved but Luna s fiber optical shape sensing and localization technology is nevertheless included in an Intuitive medical system that receives Food and Drug Administration approval as the system s only localization solution, then Intuitive shall pay Luna $6 million upon such approval. The royalties will be paid at a rate of $10,000 per commercially-sold medical robotic system that includes Luna s fiber optical shape sensing and localization technology. The foregoing deferred and potential payments are subject to set off against any liabilities Luna may have to Intuitive for any breach of Luna s representations or obligations under the Asset Purchase Agreement.

The Asset Purchase Agreement contains representations and warranties, covenants and indemnification provisions common to transactions of this nature, except that Luna s indemnification obligations are only limited in time until no further payments are due from Intuitive. Any disputes between the parties will be handled by mediation and arbitration in Chicago, Illinois. All of the transfers of technology contemplated in the Transaction have been made subject to Luna s existing licenses and related obligations to Hansen and Philips.

Also, in connection with the Transaction, Luna and Intuitive entered into a License Agreement of the same date under which Luna received a license back to all of Luna s transferred technology outside the field of medicine and in respect of Luna s existing non-shape sensing products in certain non-robotic medical fields. The license back to Luna outside the medical field is exclusive to Luna except that Intuitive retained certain non-sublicensable rights for itself. This license back to Luna is revocable if Luna were, after notice and certain time periods, (i) to challenge the validity or enforceability of the transferred patents and patent applications, (ii) to commercialize Luna s fiber optical shape sensing and localization technology in the field of medicine (except to perform on a development and supply project for Hansen), (iii) to violate Luna s obligations related to Luna s ability to sublicense in the field of medicine or (iv) to violate Luna s confidentiality obligations in a manner that advantages a competitor in the field of medicine and not cure such violation. As a part of the Transaction, Luna retained assets and rights necessary to perform on Luna s development and supply project for Hansen if that project is re-started. Also, as a part of the Transaction, for a period of 15 years after closing, Luna agreed to exit and not develop or commercialize Luna s fiber optical shape sensing and localization technology in the field of medicine (except for Hansen as described above). For a period of 10 years after closing, Intuitive has agreed not to use any of the assets being acquired in the Transaction, including the key employees being hired, to compete with Luna outside the field of medicine for shape, strain and/or temperature sensing in the aerospace, automotive, and energy markets and for strain sensing in the civil structural monitoring and composite material markets.

Prior to Luna s recent sale of Luna s shape sensing assets related to medical applications to Intuitive, Luna was party to an intellectual property licensing, development and supply agreement with Intuitive, which Luna originally entered into in June 2007. Under this multi-year agreement, Luna was to develop and supply a fiber optic-based shape sensing and position tracking system for integration into Intuitive s future products.

Under the agreement, Intuitive agreed to pay Luna an up-front license fee, development fees payable in quarterly installments for the first 18 months of the agreement, and certain other fees, subject to specified termination rights by Intuitive and other rights of repayment or reduction. There were also minimum purchase requirements by Intuitive, which were subject to Luna s successful completion of the development criteria and certain other terms and conditions.

In January 2010, in connection with Luna s settlement with Hansen, and related emergence from Chapter 11 bankruptcy, Luna amended Luna s agreement with Intuitive in order to make it consistent with Luna s January 2010 license agreement with Hansen and to make certain other changes to provide, among other things, additional development of enhancements to the Intuitive product platform. The amendment also provided that

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Intuitive could request Luna to perform additional development work for a period of 10 years ending January 2020 and that this additional development work, if requested, would be paid by Intuitive on a time and materials basis. Under the amendment, Intuitive received a limited credit against a future portion of this development work and against the transfer pricing for the shape-sensing products supplied by Luna to Intuitive. The amendment also eliminated certain future fees that would have otherwise been payable by Intuitive and also eliminated all of Intuitive s future minimum purchase requirements. Intuitive continued to be obligated to purchase its reasonable commercial requirements of the shape-sensing products from Luna, subject to Intuitive s right to purchase optical fiber or sensors from other suppliers. The amendment also provided that the exclusive license granted by Luna to Intuitive in the medical robotics field was modified to allow for the co-exclusive license granted to Intuitive and Hansen and any restrictions or prohibitions on Luna to develop and manufacture products for Hansen were eliminated.

The agreement was further amended to provide for the development work to be conducted in 2010 and provide a budget for this work. The agreement was amended again in respect of development work to be conducted in 2011, setting certain milestones for Luna to achieve during 2011, establishing the amounts to be paid by Intuitive to Luna for this development work and providing that, if Luna successfully completed the milestones by a certain date, any remaining credit in favor of Intuitive would be eliminated. The agreement was amended again in respect of development work to be conducted in 2012, similarly setting certain milestones to be achieved by Luna during 2012, establishing the amounts to be paid by Intuitive to Luna for this development work and confirming that no further credit remained. In June 2013, Luna again amended Luna s agreement with Intuitive, to cover development work during the period of 2013 through 2015. This amendment established certain milestones for Luna to achieve during this period, as well as the amounts to be paid by Intuitive for development work during this period.

As amended, the term of Luna s agreement with Intuitive extended to January 2020 and was terminable by either party for cause upon notice and opportunity to cure.

As part of Luna s agreement with Intuitive, Luna granted Intuitive a co-exclusive (with Hansen), royalty-free, fully paid, perpetual and irrevocable license to Luna s fiber optic shape sensing/localization technology within the medical robotics field. The license can only be sublicensed by Intuitive in connection with Intuitive products and Intuitive and Hansen have the right to enforce the licensed intellectual property within the medical robotics field. Because of the nature of this perpetual license, the license does not provide for a term or termination provisions. Intuitive has granted to Luna a perpetual, royalty-free license to any intellectual property solely or jointly invented by Intuitive on Luna s development project for all fields outside of medical robotics, which is exclusive to the extent of any patents and patent applications included in such intellectual property.

Although, after Luna s sale of assets to Intuitive, Luna no longer has a development and supply relationship with Intuitive and Intuitive no longer has any payment obligations to Luna, this agreement remains in place.

Virginia Tech

Luna s nanomaterials activity is focused on Trimetasphere® materials. The Trimetasphere® nanomaterial is a carbon sphere with three metal atoms and a nitrogen atom enclosed. Luna has obtained an exclusive license from VTIP to commercialize Trimetasphere nanomaterials under two U.S. patents for all fields of human endeavor. The term of this license ends upon the last expiration date of the underlying patents, which is December 2022. The license provides for certain royalties to be paid as a percentage of Luna s net sales, certain percentages of amounts received from any of Luna s sublicensees and certain milestone payments based on product development phases. Luna paid VTIP a total of approximately $3,000 in royalties in respect of 2012 and 2011 under the license. Luna reimburses VTIP for patent costs incurred under the license. VTIP may terminate the license for cause. Luna may terminate the license at any time for any reason on 60 days notice.

Luna primarily utilize the VTIP license in Luna s ongoing research into the potential use of Trimetaspheres to improve the safety of contrast agents commonly utilized in magnetic resonance imaging (MRI) procedures.

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Luna believes that contrast agents utilizing Luna s Trimetasphere nanomaterials may be able to provide a higher image contrast than existing contrast agents but with a lower risk of toxicity. Medical contrast agents for human use, such as Luna s Trimetasphere nanomaterials, must be approved by the FDA or similar foreign regulatory agencies before they can be marketed, which Luna does not expect to occur for at least several years, if at all. As described below under Government Regulation, this approval process can involve significant time and expense and may delay or prevent Luna s products from reaching the market.

Coherent

In December 2006, Luna entered into an asset transfer and license agreement with Coherent. Under the agreement, Luna acquired the rights to manufacture Coherent s Iolon brand of swept tunable lasers as well as certain manufacturing equipment and inventory previously used by Coherent to manufacture the lasers. Luna continues to enhance, produce, and market these lasers under Luna s Phoenix brand. Under this agreement, Coherent granted non-exclusive licenses to Luna for certain U.S. patents and other intellectual property rights owned or controlled by Coherent for making, having made, using, importing, selling and offering for sale the lasers. The term of this agreement is 10 years, but the patent licenses become fully paid and perpetual if Luna fulfills Luna s royalty obligations during this 10-year period and the license to the other intellectual property rights is perpetual. These U.S. patents expire between 2020 and 2025. As consideration, Luna agreed to pay Coherent a total of $1.3 million over a period of two years and royalty payments on net sales of products sold by Luna that incorporate the lasers or that are manufactured using the intellectual property covered by the licenses. Luna paid Coherent a minimum royalty of $54,000 for 2013 and approximately $68,000 in royalties based on net sales for 2014. Luna also agreed to sell Coherent a limited number of lasers each year. The agreement is terminable by either party for cause after notice and an opportunity to cure.

The Phoenix laser is a miniaturized, external-cavity laser offering high performance in a compact footprint and is applicable to a range of fiber optic test and measurement, instrumentation, and sensing applications. These products employ frequency-tuned lasers to measure various aspects of the transmission properties of telecommunications fiber optic components and systems. Lasers are also used in fiber optic sensing applications such as distributed strain and temperature mapping, and distributed measurement of shape. Luna currently uses these lasers within Luna s ODiSI platform of products, Luna s fiber optic shape sensing products and certain of Luna s backscatter reflectometer products, and Luna also sells variations of the Phoenix laser as stand-alone products. Under Luna s agreements related to Luna s sale of assets to Intuitive, Luna has certain obligations to supply Intuitive with these lasers and Intuitive has certain rights to require Luna to transfer and assign this Coherent license to Intuitive, in which case Intuitive would be similarly required to supply Luna with lasers.

NASA

Luna has licensed, on a non-exclusive basis, certain patents from NASA under two license agreements.

These patents concern the measurement of strain in optical fiber using Bragg gratings and Rayleigh scatter, and also the measurement of the properties of fiber-optic communications devices. Under the license agreements, Luna pays NASA certain royalties based on a percentage of net sales of products covered by the patents. Luna incurs a royalty obligation to NASA based upon a specified percentage of the revenue earned on each product sold utilizing these patents subject to combined minimum royalties of $220,000 per year under the license agreements. The term of the license agreements continues until the expiration of the last licensed patent, which is September 2020. These license agreements may be terminated by Luna on 90 days notice. Either party may terminate the license agreements for cause upon certain conditions.

Competition

Luna compete for government, university and corporate research contracts relating to a broad range of technologies. Competition for contract research is intense and the industry has few barriers to entry. Luna competes against a number of in-house research and development departments of major corporations, as well as a

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number of small, limited-service contract research providers and companies backed by large venture capital firms. The contract research industry continues to experience consolidation, which has resulted in greater competition for clients. Increased competition might lead to price and other forms of competition that could harm Luna s operating results. Luna competes for contract research on the basis of a number of factors, including reliability, past performance, expertise and experience in specific areas, scope of service offerings, technological capabilities and price.

Luna also competes, or will compete, with a variety of companies in several different product markets. The products that Luna has developed or are currently developing will compete with other technologically innovative products, as well as products incorporating conventional materials and technologies. Luna expects that Luna will compete with companies in a wide range of industries, including semiconductors, electronics, biotechnology, textiles, alternative energy, military, defense, healthcare, telecommunications, industrial measurement, security applications and consumer electronics. Although there can be no assurance that Luna will continue to do so, Luna believes that Luna competes favorably in these areas because Luna s products leverage advanced technologies to offer superior performance. If Luna is unable to effectively compete in these areas in the future, Luna could lose business to Luna s competitors, which could harm Luna s operating results.

Government Regulation

Qualification for Small Business Innovation Research Grants

SBIR is a highly competitive program that encourages small businesses to explore their technological potential and provides them with incentives to commercialize their technologies by funding research that might otherwise be prohibitively expensive or risky for companies like Luna. As noted above, Luna presently derives a significant portion of Luna s revenue from this program, but Luna must continue to qualify for the SBIR program in order to be eligible to receive future SBIR awards. The eligibility requirements are:

Ownership. The company must be at least 51 percent owned and controlled by U.S. citizens or permanent resident aliens, or owned by an entity that is itself at least 51 percent owned and controlled by U.S. citizens or permanent resident aliens; and

Size. The company, including its affiliates, cannot have more than 500 employees.

These requirements are set forth in the SBA s regulations and are interpreted by the SBA s Office of Hearings and Appeals. In determining whether Luna satisfies the 51% ownership requirement, agreements to merge, stock options, convertible debt and other similar instruments are given present effect by the SBA as though the underlying security were actually issued unless the exercisability or conversion of such securities is speculative, remote or beyond the control of the securityholder. Luna therefore believes Luna s outstanding options and warrants held by eligible individuals may be counted as outstanding equity for purposes of meeting the 51% equity ownership requirement. Luna believes that they are in compliance with the SBA ownership requirements.

In addition, to be eligible for SBIR contracts, the number of Luna s employees, including those of any entities that are considered to be affiliated with Luna, cannot exceed 500. As of January 30, 2015, Luna, including all of Luna s divisions, had 117 full- and part-time employees. In determining whether Luna has 500 or fewer employees, the SBA may count the number of employees of entities that are large stockholders who are affiliated or have the power to control Luna. In determining whether firms are affiliated, the SBA evaluates factors such as stock ownership and common management, but it ultimately may make its determination based on the totality of the circumstances.

Eligibility protests can be raised to the SBA by a competitor or by the awarding contracting agency. If Luna grows larger, and if Luna s ownership becomes more diversified, Luna may no longer qualify for the SBIR program, and Luna may be required to seek alternative sources and partnerships to fund some of Luna s research and development costs.

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FDA Regulation of Products

Some of the potential products that Luna is developing may be subject to regulation under the Food, Drug, and Cosmetic (FDC) Act. In particular, any Trimetasphere® nanomaterial-based MRI contrast agent would be considered a drug, and Luna s ultrasound diagnostic devices for measuring certain medical conditions will be considered medical devices, under the FDC Act. Both the statutes and regulations promulgated under the FDC Act govern, among other things, the testing, manufacturing, safety efficacy, labeling, storage, record keeping, advertising and other promotional practices involving the regulation of drug and devices. Compliance with the FDC Act may add time and expense to product development, and there can be no assurance that any of Luna s products will be successfully developed and approved for marketing by the FDA.

Environmental, Health and Safety Regulation

Luna s facilities and current and proposed activities involve the use of a broad range of materials that are considered hazardous under applicable laws and regulations. Accordingly, Luna is subject to a number of domestic and foreign laws and regulations and other requirements relating to employee health and safety, protection of the environment, product labeling and product take back. Regulated activities include the storage, use, transportation and disposal of, and exposure to, hazardous or potentially hazardous materials and wastes. Luna s current and proposed activities also include potential exposure to physical hazards associated with work environment and equipment. Luna could incur costs, fines, civil and criminal penalties, personal injury and third-party property damage claims, or Luna could be required to incur substantial investigation or remediation costs, if Luna was to violate or become liable under environmental, health and safety laws and regulations or requirements. Liability under environmental, health and safety laws can be joint and several and without regard to fault. There can be no assurance that violations of environmental, health and safety laws will not occur in the future as a result of the inability to obtain permits in a timely manner, human error, equipment failure or other causes. Environmental, health and safety laws could also become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could harm Luna s business. Further, violations of present and future environmental, health and safety laws could restrict Luna s ability to expand facilities and pursue certain technologies, as well as require Luna to acquire costly equipment or to incur potentially significant costs to comply with environmental, health and safety regulations and other requirements.

Luna has made, and will continue to make, expenditures to comply with current and future environmental, health and safety laws. Luna anticipates that Luna could incur additional capital and operating costs in the future to comply with existing environmental, health and safety laws and new requirements arising from new or amended statutes and regulations. In addition, because the applicable regulatory agencies have not yet promulgated final standards for some existing environmental, health and safety programs, Luna cannot at this time reasonably estimate the cost for compliance with these additional requirements. The amount of any such compliance costs could be material. Luna cannot predict the impact that future regulations will impose upon Luna s business.

Employees

As of January 30, 2015, Luna had 117 total employees of whom approximately 104 were full-time employees, and 32 of whom held advanced degrees, including approximately 22 Ph.D. degrees. None of Luna s employees are covered by a collective bargaining agreement, and Luna s relationship with Luna s employees is good.

Backlog

Luna has historically had a backlog of contracts for which work has been scheduled, but for which a specified portion of work has not yet been completed. The approximate value of Luna s backlog was $8.7 million at December 31, 2013 and $12.8 million at December 31, 2014, of which substantially all was from Luna s Technology Development segment.

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Luna defines backlog as the dollar amount of obligations payable to Luna under negotiated contracts upon completion of a specified portion of work that has not yet been completed, exclusive of revenues previously recognized for work already performed under these contracts, if any. Total backlog includes funded backlog, which is the amount for which money has been directly authorized by the U.S. Congress or for which a purchase order has been received from a commercial customer, and unfunded backlog, which represents firm orders for which funding has not yet been appropriated. Unfunded backlog was $1.0 million and $2.7 million as of December 31, 2013 and 2014, respectively. Indefinite delivery and quantity contracts and unexercised options are not reported in total backlog. Luna s backlog is subject to delays or program cancellations that may be beyond Luna s control.

Properties

Luna leases approximately 12,000 square feet of space in Roanoke, Virginia from Carilion Clinic Properties, LLC, a successor to Carilion Medical Center and an affiliate of Luna s largest institutional stockholder, Carilion Clinic. This property is used for Luna s corporate headquarters, as well as for general administrative functions. In January of 2015, Luna executed an amendment to this lease that provides that Luna may terminate the lease at any time on 30 days prior written notice and provides that, in any event, the term of the lease shall end April 30, 2015. Luna has provided notice to terminate the lease effective April 15, 2015. The term of the lease previously expired on December 31, 2018. In November 2014 Luna entered into a lease with an unaffiliated third party for approximately 4,400 square feet of space in Roanoke, Virginia, starting on April 1, 2015. This lease expires March 31, 2020. This property will be used for Luna s new corporate headquarters, as well as for general administrative functions.

Luna leases approximately 42,000 square feet of space in Blacksburg, Virginia, near Virginia Tech, which is used by both Luna s Technology Development segment and Luna s Products and Licensing segment. This lease expires December 31, 2024.

Luna leases approximately 16,000 square feet of space in Charlottesville, Virginia, near the University of Virginia, for use by certain groups in Luna s Technology Development segment. This lease expires December 31, 2015.

Luna owns a 24,000 square foot facility in Danville, Virginia. This property was previously the subject of a lease with the city, and Luna exercised a purchase option during 2010 to acquire the building for approximately $70,000. Luna s Technology Development segment primarily uses this facility for nanomaterials research and development and manufacturing.

Luna believes that Luna s existing facilities are adequate for Luna s current needs and suitable additional or substitute space will be available as needed to accommodate expansion of Luna s operations.

Legal Proceedings

After the announcement of the Merger with API, three separate putative class action complaints were filed on behalf of API stockholders against members of the API board of directors, API, Luna, and API Merger Sub. Two actions were filed in the Circuit Court for the County of Washtenaw of the State of Michigan (captioned *Clark v. Advanced Photonix, Inc.*, *et al.,* Case No. 15-169-CB and *Panzer v. Advanced Photonix, Inc.*, *et al.,* Case No. 15-214-CB) and one action was filed in the Court of Chancery for the State of Delaware (captioned *Henderson v. Advanced Photonix, Inc.*, *et al.,* C.A. No. 10715-VCL) (collectively, the Stockholder Litigation). In general, and to date, the plaintiffs in the Stockholder Litigation allege that API s directors breached their fiduciary duties to API s stockholders by, among other things, agreeing to sell API to Luna at an inadequate price, implementing an unfair process, agreeing to certain provisions of the Merger Agreement that are alleged to favor Luna and deter alternative bids, and/or by omitting material information from the Registration Statement on Form S-4 that Luna filed with the SEC in connection with the

Merger. The complaints have also generally

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alleged that API and Luna aided and abetted the API directors breaches of fiduciary duties. The existing complaints seek, among other things, an injunction against the consummation of the Merger and an award of costs and expenses, including a reasonable allowance for attorneys and experts fees. Luna, API and the API board of directors believe that the claims asserted in these suits are without merit but, in order to avoid the costs, risks and uncertainties inherent in litigation and to allow stockholders to vote on the proposal to adopt the Merger Agreement and approve the transactions contemplated in the Merger Agreement, including the Merger, at the scheduled meetings, API and Luna have entered into a memorandum of understanding, or MOU, with the counsel of each of the plaintiffs in the Stockholder Litigation. Under the terms of the MOU, API agreed to provide certain additional disclosure in the Registration Statement on Form S-4 that includes this preliminary joint proxy statement/prospectus with respect to, among other things, certain of the analyses undertaken by API s financial advisor and information regarding the background of the Merger.

The MOU reflects the parties agreement in principle to resolve the allegations by the settling plaintiffs against API, Luna and the other defendants in connection with the Merger and provides a release and settlement by the purported class of API s stockholders of all claims against API, Luna and the other defendants in connection with the Merger and the dismissal of the actions. The MOU and settlement are contingent upon, among other things, court approval and consummation of the Merger. If the MOU is not approved and such conditions are not satisfied, API and Luna will continue to vigorously defend these actions.

Additionally, from time to time, Luna may become involved in litigation or claims arising out of Luna s operations in the normal course of business. Management currently believes the amount of ultimate liability, if any, with respect to these actions will not materially affect Luna s financial position, results of operations, or liquidity.

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LUNA INNOVATIONS INCORPORATED MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of Luna s financial condition and results of operations should be read in conjunction with Luna s consolidated financial statements and the related notes to those statements included elsewhere in this joint proxy statement/prospectus. In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Luna s actual results and timing of selected events may differ materially from those anticipated in these forward-looking statements as a result of many factors, including those discussed under Risks Relating to Luna s Business and elsewhere in this joint proxy statement/prospectus.

Business Overview

Luna develops, manufactures and markets fiber optic sensing and test & measurement products focused on bringing new and innovative technology solutions to measure, monitor, protect and improve critical processes in the aerospace, automotive, energy, composite, telecommunications, and defense industries. Luna s business model is designed to accelerate the process of bringing new and innovative products to market. In addition, Luna uses Luna s in-house technical expertise across a range of technologies to perform applied research services for companies and government-funded projects in the areas of sensing & instrumentation, advanced materials, and health sciences. Luna continues to invest in product development and commercialization, which Luna anticipates will lead to increased product sales growth.

Luna s corporate growth strategy is focused on becoming the leading provider of fiber optic strain & temperature sensing solutions and standard test methods for composite, as well as non-composite materials, structures and systems.

Luna is organized into two main business segments, the Products and Licensing segment and the Technology Development segment. Luna s Products and Licensing segment develops, manufactures and markets Luna s fiber optic sensing products, as well as test & measurement products, and also conducts applied research in the fiber optic sensing area for both corporate and government customers. Luna is continuing to develop and commercialize Luna s fiber optic technology for strain & temperature sensing applications for the aerospace, automotive, and energy industries. Luna s Products and Licensing segment revenues represented approximately 38% and 43% of the total revenues for the years ended December 31, 2013 and 2014, respectively.

Luna s Technology Development segment performs applied research principally in the areas of sensing & instrumentation, advanced materials, and health sciences. Luna s Technology Development segment comprised approximately 62% and 57% of Luna s total revenues for the years ended December 13, 2013 and 2014, respectively. Most of the government funding for Luna s Technology Development segment is derived from the Small Business Innovation Research, or SBIR, program coordinated by the U.S. Small Business Administration, or SBA. Luna s Technology Development segment revenues have historically accounted for a large portion of Luna s total revenues, and Luna expects that they will continue to represent a significant portion of Luna s total revenues for the foreseeable future. Within the Technology Development segment, Luna has historically had a backlog of contracts for which work has been scheduled, but for which a specified portion of work has not yet been completed. Luna defines backlog as the dollar amount of obligations payable to Luna under negotiated contracts upon completion of a specified portion of work that has not yet been completed, exclusive of revenues previously recognized for work already performed under these contracts, if any. Total backlog includes funded backlog, which is the amount for which money has been directly authorized by the U.S. Congress and for which a purchase order has been received by a commercial customer, and unfunded backlog, representing firm orders for which funding has not yet been appropriated. Indefinite delivery and quantity contracts and unexercised options are not reported in total backlog. The approximate value of Luna s

Technology Development segment backlog was $8.7 million at December 31, 2013 and $12.8 million at December 31, 2014.

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Revenues from product sales are mostly derived from the sales of Luna s sensing systems and products that make use of light-transmitting optical fibers, or fiber optics. Luna continues to invest in product development and commercialization, which Luna anticipates will lead to increased product sales growth. Although Luna has been successful in licensing certain technology in past years, Luna does not expect license revenues to represent a significant portion of future revenues. Over time, however, Luna does intend to gradually increase such revenues. In the near term, Luna expects revenues from product sales and product development to be primarily in areas associated with Luna s fiber optic instrumentation, test and measurement and sensing platforms. In the long term, Luna expects that revenues from product sales will represent a larger portion of Luna s total revenues and that as Luna develops and commercializes new products, these revenues will reflect a broader and more diversified mix of products.

Luna incurred net losses attributable to common stockholders of approximately $0.9 million for the year ended December 31, 2013 and generated net income attributable to common stockholders of $5.9 million for the year ended December 31, 2014. Excluding the effects of Luna s Secure Computing and Communications (SCC) group which Luna sold in 2013 and Luna s medical shape sensing business, which Luna sold in 2014, Luna incurred net losses from continuing operations of approximately $5.5 million and $3.4 million for the years ended December 31, 2013 and 2014, respectively.

Luna may incur increasing expenses as Luna seeks to expand its business, including expenses for research and development, sales and marketing and manufacturing capabilities. Luna may also grow its business in part through acquisitions of additional companies and complementary technologies, which could cause Luna to incur transaction expenses, amortization or write-offs of intangible assets and other acquisition-related expenses. As a result, Luna expects to incur net losses for the foreseeable future, and these losses could be substantial.

Reductions in government spending may impact the availability of new program awards in 2015. For example, the Budget Control Act commits the U.S. Government to reduce the federal deficit by $1.2 trillion over ten years through a combination of automatic, across-the-board spending cuts and caps on discretionary spending, or sequestration. Automatic across-the-board cuts required by sequestration could have a material adverse effect on Luna s technology development revenues and, consequently, Luna s results of operations. While the exact manner in which sequestration will impact Luna s business is unclear, funding for programs in which Luna participates could be reduced, delayed or canceled. Luna s ability to obtain new contract awards also could be negatively affected.

Recent Sales of SCC and Medical Shape Sensing Business

In March 2013, Luna sold its SCC group to MacAuley-Brown, Inc., another defense contractor, for $6.1 million in cash. In January 2014, Luna sold its assets associated with the development of fiber optic shape sensing and localization for the medical field to affiliates of Intuitive Surgical, Inc., or Intuitive, for total cash consideration of up to $30 million, including $6 million received at closing, $6 million received in April 2014 and up to $18 million that Luna may receive in the future based on the achievement of certain technical milestones and royalties on system sales, if any.

The sales of SCC in 2013 and of Luna s medical shape sensing business in 2014 are expected to result in lower revenues than historically realized until Luna can increase revenues significantly, primarily from product sales. As a result, Luna may incur greater net losses than Luna has incurred in prior years.

Description of Luna s Revenues, Costs and Expenses

Revenues

Luna generates revenues from technology development, product sales and commercial product development and licensing activities. Luna derives technology development revenues from providing research and development services to third parties, including government entities, academic institutions and corporations, and from

achieving milestones established by some of these contracts and in collaboration agreements. In general, Luna completes contracted research over periods ranging from six months to three years, and recognizes these revenues over the life of the contract as costs are incurred or upon the achievement of certain milestones built into the contracts. Luna s technology development revenues represented approximately 62% and 57% of Luna s total revenues for the years ended December 31, 2013 and 2014, respectively.

Luna s products and licensing revenues reflect amounts that Luna receives from sales of Luna s products or development of products for third parties, as well as fees paid to Luna in connection with licenses or sub-licenses of certain patents and other intellectual property, and represented approximately 38% and 43% of Luna s total revenues for the years ended December 31, 2013 and 2014, respectively.

Cost of Revenues

Cost of revenues associated with technology development revenues consists of costs associated with performing the related research activities including direct labor, amounts paid to subcontractors and overhead allocated to technology development activities.

Cost of revenues associated with product sales and license revenues consists of license fees for use of certain technologies; product manufacturing costs including all direct material and direct labor costs; amounts paid to Luna s contract manufacturers; manufacturing, shipping and handling; provisions for product warranties; and inventory obsolescence, as well as overhead allocated to each of these activities.

Operating Expense

Operating expense consists of selling, general and administrative expenses, as well as expenses related to research, development and engineering, depreciation of fixed assets and amortization of intangible assets. These expenses also include compensation for employees in executive and operational functions including certain non-cash charges related to expenses from option grants, facilities costs, professional fees, salaries, commissions, travel expense and related benefits of personnel engaged in sales, product management and marketing activities; costs of marketing programs and promotional materials; salaries, bonuses and related benefits of personnel engaged in Luna s own research and development beyond the scope and activities of Luna s Technology Development segment; product development activities not provided under contracts with third parties; and overhead costs related to these activities.

Interest Expense, net

In February 2010, Luna entered into a new line of credit facility with Silicon Valley Bank, or SVB, with a borrowing capacity of $5.0 million. In May 2011, Luna entered into a loan modification agreement with SVB under which Luna repaid the outstanding balance under the prior line of credit and obtained a term loan in the amount of $6.0 million, along with a new $1.0 million line of credit. In May 2012, Luna entered into another loan modification agreement with SVB under which Luna extended the maturity date of the line of credit to May 2014 and adjusted certain covenants. On March 21, 2013, Luna entered into another loan modification agreement with SVB under which Luna replaced the previous financial covenants with a single covenant that Luna maintains a minimum cash balance of $5.0 million. At December 31, 2014, Luna had $0.6 million outstanding on the term loan and no amounts outstanding on the line of credit. Effective on January 21, 2014, this minimum cash balance covenant was modified to reduce the required minimum balance to $3.5 million.

During the years 2013 and 2014, interest expense included interest accrued on Luna s outstanding bank credit facilities, and interest incurred with respect to Luna s capital lease obligations.

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Critical Accounting Policies and Estimates

Technology Development Revenues

Luna performs research and development for U.S. Federal government agencies, educational institutions and commercial organizations. Luna recognizes revenue under research contracts when a contract has been executed, the contract price is fixed and determinable, delivery of services or products has occurred, and collectability of the contract price is considered reasonably assured and can be reasonably estimated. Revenue is earned under cost reimbursable, time and materials and fixed price contracts. Direct contract costs are expensed as incurred.

Under cost reimbursable contracts, Luna is reimbursed for costs that are determined to be reasonable, allowable and allocable to the contract and paid a fixed fee representing the profit negotiated between Luna and the contracting agency. Revenue from cost reimbursable contracts is recognized as costs are incurred plus an estimate of applicable fees earned. Luna considers fixed fees under cost reimbursable contracts to be earned in proportion to the allowable costs incurred in performance of the contract.

Revenue from time and materials contracts is recognized based on direct labor hours expended at contract billing rates plus other billable direct costs.

Fixed price contracts may include either a product delivery or specific service performance throughout a period. For fixed price contracts that are based on the proportional performance method and involve a specified number of deliverables, Luna recognizes revenue based on the proportion of the cost of the deliverables compared to the cost of all deliverables included in the contract as this method more accurately measures performance under these arrangements. For fixed price contracts that provide for the development and delivery of a specific prototype or product, revenue is recognized based upon the percentage of completion method.

Luna s contracts with agencies of the U.S. government are subject to periodic funding by the respective contracting agency. Funding for a contract may be provided in full at inception of the contract or ratably throughout the contract as the services are provided. In evaluating the probability of funding for purposes of assessing collectability of the contract price, Luna considers its previous experience with Luna s customers, communication with Luna s customers regarding funding status and Luna s knowledge of available funding for the contract or program. If funding is not assessed as probable, revenue recognition is deferred until realization is reasonably assured.

Contract revenue recognition inherently involves estimation, including the contemplated level of effort to accomplish the tasks under the contract, the cost of the effort and an ongoing assessment of progress toward completing the contract. From time to time, as part of normal management processes, facts may change, causing revisions to estimated total costs or revenues expected. The cumulative impact of any revisions to estimates and the full impact of anticipated losses on any type of contract are recognized in the period in which they become known.

The underlying bases for estimating Luna s contract research revenues are measurable expenses, such as labor, subcontractor costs and materials, and data that are updated on a regular basis for purposes of preparing Luna s cost estimates. Luna s research contracts generally have a period of performance of six to 18 months, and Luna s estimates of contract costs have historically been consistent with actual results. Revisions in these estimates between accounting periods to reflect changing facts and circumstances have not had a material impact on Luna s operating results, and Luna does not expect future changes in these estimates to be material.

Whether certain costs under government contracts are allowable is subject to audit by the government. Certain indirect costs are charged to contracts using provisional or estimated indirect rates, which are subject to later revision based on

government audits of those costs. Luna s management is of the opinion that costs subsequently disallowed, if any, would not likely have a significant impact on revenues recognized for those contracts.

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Products and Licensing Revenues

Luna recognizes revenue relating to its product sales when persuasive evidence of an arrangement exists, delivery has occurred, the selling price is fixed or determinable and collectability of the resulting receivable is reasonably assured. For tangible products that contain software that is essential to the tangible product s functionality, Luna considers the product and software to be a single unit of accounting and recognizes revenue accordingly. Luna evaluates product sales that are a part of multiple-element revenue arrangements to determine whether separate units of accounting exist, and Luna follows appropriate revenue recognition policies for each separate unit. For multi-element arrangements Luna allocates revenue to all significant deliverables based on their relative selling prices. In such circumstances, Luna uses a hierarchy to determine the selling price to be used for allocating revenue to deliverables: (i) vendor-specific objective evidence of fair value, or VSOE, (ii) third-party evidence of selling price or TPE, and (iii) best estimate of the selling price, or ESP. VSOE generally exists only when Luna sells the deliverable separately and is the price actually charged by Luna for that deliverable. Luna product sales often include bundled products, options and services and therefore VSOE is not readily determinable. In addition, Luna believes that because of unique features of Luna s products, TPE also is not available. ESPs reflect Luna s best estimates of what the selling prices of elements would be if they were sold regularly on a stand-alone basis.

Luna s process for determining ESP for deliverables without VSOE or TPE considers multiple factors that may vary depending upon the unique facts and circumstances related to each deliverable. Key factors considered in developing the ESPs include prices charged by Luna for similar offerings, Luna s historical pricing practices, the nature of the deliverables, and the relative ESP of all of the deliverables as compared to the total selling price of the product. Luna may also consider, when appropriate, the impact of other products and services, on selling price assumptions when developing and reviewing Luna s ESPs.

Income Taxes

Luna estimates Luna s tax liability through calculating Luna s current tax liability, together with assessing temporary differences resulting from the different treatment of items for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which Luna records on its balance sheet. Luna s management then assesses the likelihood that deferred tax assets will be recovered in future periods. In assessing the need for a valuation allowance against the net deferred tax asset, management considers factors such as future reversals of existing taxable temporary differences, taxable income in prior carry back years, whether carry back is permitted under the tax law, tax planning strategies and estimated future taxable income exclusive of reversing temporary differences and carry forwards. To the extent that Luna cannot conclude that it is more likely than not that the benefit of such assets will be realized, Luna establishes a valuation allowance to reduce Luna s net carrying value.

As Luna assesses its projections of future taxable income or other factors that may impact Luna s ability to generate taxable income in future periods, Luna s estimate of the required valuation allowance may change, which could have a material impact on future earnings or losses.

Luna recognizes tax benefits from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by taxing authorities. While it is often difficult to predict the final outcome of timing of the resolution of any particular tax matter, Luna establishes a liability at the time Luna determines it is probable Luna will be required to pay additional taxes related to certain matters. These liabilities are recorded in accrued liabilities in Luna s consolidated balance sheets. Luna adjusts this provision, including any impact on the related interest and penalties, in light of changing facts and circumstances, such as the progress of a tax audit. A number of years may elapse before a particular matter for which Luna has established a liability is audited and finally resolved. The number of years with open tax audits varies depending on the tax jurisdiction. Settlement of any particular issue would usually

require the use of cash. Luna recognizes favorable resolutions of tax matters for which Luna has previously established liabilities as a reduction to Luna s income tax expense when the amounts involved become known.

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Due to differences between federal and state tax law, and accounting principles generally accepted in the United States of America, or GAAP, certain items are included in the tax return at different times than when those items are reflected in the consolidated financial statements. Therefore, the annual tax rate reflected in Luna s consolidated financial statements is different than that reported in Luna s tax return. Some of these differences are permanent, such as expenses that are not deductible in Luna s tax return. Some differences, such as depreciation expense, reverse over time and create deferred tax assets and liabilities. The tax rates used to determine deferred tax assets or liabilities are the enacted tax rates in effect for the year in which the differences are expected to reverse. Based on the evaluation of all available information, Luna recognizes future tax benefits, such as net operating loss carry forwards, to the extent that realizing these benefits is considered more likely than not.

Stock-Based Compensation

Luna recognizes stock-based compensation expense based upon the fair value of the underlying equity award on the date of the grant. The calculation of the fair value of Luna s awards requires certain inputs that are subjective and changes to the estimates used will cause the fair values of Luna s stock awards and related stock-based compensation expense to vary. Luna has elected to use the Black-Scholes-Merton option pricing model to determine the fair value of stock options. The fair value of a stock option award is affected by Luna s stock price on the date of the grant as well as other assumptions used as inputs in the valuation model including the estimated volatility of Luna s stock price over the term of the awards, the estimate period of time that Luna expects employees to hold their stock options and the risk-free interest rate assumption. In addition, Luna is required to reduce stock-based compensation expense for the effects of estimated forfeitures of awards over the expense recognition period. Although Luna estimates the rate of future forfeitures based on historical experience, actual forfeitures may differ.

Long-lived and Intangible Assets

Long-lived assets and certain identifiable intangibles are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset might not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future un-discounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of are reported at the lower of the carrying amount or fair value, less cost to sell.

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Results of Operations

The following table shows information derived from Luna s consolidated statements of operations expressed as a percentage of total revenues for the periods presented.

	Years ended December 31,	
	2013	2014
Revenues:		
Technology development revenues	62.3%	57.4%
Product and licensing revenues	37.7	42.6
Total revenues	100.0	100.0
Cost of Revenues:		
Technology development costs	48.4	44.1
Product and licensing costs	18.6	19.0
Total cost of revenues	67.0	63.1
Gross profit	33.0	36.9
Operating expense	76.8	58.1
Operating loss	(43.8)	(21.2)
Total other income, net	0.8	0.1
Loss from continuing operations before income taxes	(43.0)	(21.1)
Loss from continuing operations, net of income taxes	(30.0)	(15.8)
Income from discontinued operations, net of income taxes	25.7	44.0
Net (loss)/income	(4.3)	28.2

Year Ended December 31, 2013 Compared to Year Ended December 31, 2014

Revenues

	Years ended December 31,			
	2013	2014	$ Difference	% Difference
Technology development revenues	$ 11,421,868	$ 12,205,889	$ 784,021	6.9%
Products and licensing revenues	6,911,707	9,054,101	2,142,394	31.0%

Total revenues	$ 18,333,575	$ 21,259,990	$ 2,926,415	16.0%

Luna s Technology Development segment revenue increased $0.8 million from $11.4 million in the year ended December 31, 2013 to $12.2 million in the year ended December 31, 2014. This increase was attributable primarily to growth in research performed under government contracts related to carbon nanomaterials and to Luna s use of sensing technologies for applications such as corrosion monitoring.

Luna s Products and Licensing segment revenue increased $2.1 million from $6.9 million in the year ended December 31, 2013 to $9.1 million in the year ended December 31, 2014. This increase was due primarily to growth in sales of Luna s optical vector analyzer products for testing of passive optical components, as the telecom market recovered somewhat in 2014, in addition to continued growth in sales of the ODiSI platform of products for fiber optic measurement of strain or temperature. Luna introduced the ODiSI platform for fiber optic sensing of strain and temperature in 2011 and has identified the growth of ODiSI as Luna s key strategic initiative for product sales.

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Cost of Revenues

	Years ended December 31,			
	2013	2014	$ Difference	% Difference
Technology development costs	$ 8,882,071	$ 9,376,485	$ 494,414	5.6%
Products and licensing costs	3,402,882	4,046,885	644,003	18.9%
Total costs of revenues	$ 12,284,953	$ 13,423,370	$ 1,138,417	9.3%

Luna s Technology Development segment costs increased $0.5 million from $8.9 million in the year ended December 31, 2013 to $9.4 million in the year ended December 31, 2014. This increase was due primarily to an increase in the utilization of subcontractors in the delivery of contract research on government programs.

Luna s Products and Licensing segment costs increased $0.6 million from $3.4 million in the year ended December 31, 2013 to $4.0 million in the year ended December 31, 2014. This increase was due primarily to the increase in sales as noted above. A significant part of the increase came from Luna s optical vector analyzer product, which typically has a higher margin and therefore tends to increase costs less than Luna s other products.

Operating Expense

	Years ended December 31,			
	2013	2014	$ Difference	% Difference
Selling general and administrative expense	$ 11,525,636	$ 10,253,847	$ (1,271,789)	(11.0)%
Research, development, and engineering expense	2,558,332	2,087,874	(470,458)	(18.4)%
Total operating expense	$ 14,083,968	$ 12,341,721	$ (1,742,247)	(12.4)%

Selling, general and administrative expenses decreased $1.3 million from $11.5 million in the year ended December 31, 2013 to $10.3 million in the year ended December 31, 2014. This decrease reflects the recognition in 2013 of an aggregate of $0.9 million of professional fees, such as investment banking and legal costs, and compensation costs incurred in connection with the sale of Luna s medical shape sensing business in January 2014, reductions in headcount taken subsequent to the sale of the medical shape sensing business, lower outside professional fees incurred with respect to SEC and NASDAQ filings and compliance and lower share-based compensation expense.

Research, development, and engineering expenses decreased $0.5 million from $2.6 million in the year ended December 31, 2013, to $2.1 million in the year ended December 31, 2014. This decrease was due primarily to the transfer of ten engineers and technicians to Intuitive in January 2014 in connection with the sale of the medical shape sensing business.

Interest Expense, net and Other Income

Luna s net interest expense was approximately $0.2 million for the year ended December 31, 2013 compared to approximately $0.1 million for the year ended December 31, 2014. During 2013 and 2014, Luna s primary outstanding borrowing was the term loan provided by SVB. The average monthly loan balance for the year ended December 31, 2013 was $2.9 million as compared to $1.3 million for the year ended December 31, 2014, resulting in a decrease in interest expense.

Other income was approximately $0.3 million for the year ended December 31, 2013 and $0.1 million for the year ended December 31, 2014. During the year ended December 31, 2013, Luna received approximately $48,000 from an insurance policy profit share and $265,000 in rent income from a sublease of office space. Luna also recognized additional income from the amortization of the discount Luna received on prepayment of the

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Hansen Note of approximately $38,000, which was fully amortized during the second quarter of 2013. Other income for 2014 primarily consisted of $106,000 from rent income from a sublease of office space, which concluded in the second quarter of 2014.

Income Tax Benefit

During 2013, Luna recorded a benefit from income taxes from continuing operations of $2.4 million that resulted in an effective tax rate from continuing operations of 30.24%, as compared to an effective tax rate of 25.33% from an income tax benefit of $1.1 million from continuing operations in 2014. The change in Luna s effective tax rate from continuing operations from 2013, as compared to 2014, was primarily due to the decrease in loss from continuing operations, the unfavorable change in alternative minimum tax, and the decrease in the intra-period allocation from benefit from discontinued operations.

Loss from Continuing Operations

Given the increases in Technology Development revenue and Product and Licensing revenue, as well as the improvement in operating expenses described above, Luna s loss from continuing operations decreased approximately $3.4 million from $8.0 million in the year ended December 31, 2013 to $4.5 million in the year ended December 31, 2014.

Income from Discontinued Operations

For the year ended December 31, 2013, Luna recognized net income from discontinued operations of $4.7 million, compared to a net income from discontinued operations of $9.3 million for the year ended December 31, 2014. For 2013, this income consisted of $1.3 million of income, net of income taxes, from the operations of Luna s medical shape sensing business and a $3.4 million gain realized on the sale of Luna s SCC business, net of income taxes, which sale occurred during the first quarter of 2013, partially offset by an operating loss of $0.1 million from the SCC business for the two months prior to the sale on March 1, 2013. The decrease in operating income of the SCC business in 2013 was primarily a result of a significant decline in revenue within Luna s SCC business as a result of a decrease in revenue from one government contract.

For the year ended December 31, 2014, Luna s net income from discontinued operations was due primarily to the gain, net of income taxes, of the sale of Luna s medical shape sensing business in the first quarter of 2014 of $9.4 million.

Preferred Stock Dividend

In January 2010, Luna issued 1,321,514 shares of Luna s newly designated Series A Convertible Preferred Stock to Carilion. The Series A Convertible Preferred Stock carries an annual cumulative dividend of 6%, or approximately $0.2815 per share. During 2013 and 2014, Luna accrued approximately $102,000 and $112,000, respectively, for the dividends payable to Carilion. The dividends are not payable in cash, but rather in shares of Luna s Common Stock, until a liquidation event occurs. During each of 2013 and 2014, 79,292 shares of common stock became issuable to Carilion as dividends and have been recorded in the statement of stockholders equity.

Liquidity and Capital Resources

At December 31, 2014, Luna s total cash and cash equivalents were $14.1 million. The sale of Luna s medical shape sensing business to Intuitive on January 21, 2014 significantly increased Luna s cash by providing Luna with net proceeds of $10.7 million, after deducting transaction expenses paid by Luna.

Luna has a term loan with SVB which at December 31, 2014 had a balance of $0.6 million. This term loan matures on May 1, 2015. Luna currently does not have plans to refinance this loan. However, following the

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closing of the proposed Merger with API, Luna intends to enter into a new debt agreement to replace the balance of the outstanding debt held by API that Luna will assume at the time of the Merger, as described below.

Luna may prepay amounts due under the term loan at any time with no penalties.

Amounts due under the term loan are secured by substantially all of Luna s assets, including intellectual property, personal property and bank accounts.

On March 21, 2013, the Credit Facility was amended to replace the existing financial covenants with a single covenant that Luna maintain a minimum cash balance of $5.0 million. Effective on January 21, 2014, in connection with Luna s sale of assets to Intuitive, this covenant was modified to reduce the minimum cash balance to $3.5 million. As of the date of this joint proxy statement/prospectus, Luna was in compliance with all covenants under the Credit Facility.

The Credit Facility contain customary events of default, including nonpayment of principal, interest or other amounts, violation of covenants, material adverse change, an event of default under any subordinated debt documents, incorrectness of representations and warranties in any material respect, bankruptcy, judgments in excess of a threshold amount, and violations of other agreements in excess of a threshold amount. If any event of default occurs SVB may declare due immediately all borrowings under the Credit Facility and foreclose on the collateral. Furthermore, an event of default under the Credit Facility would result in an increase in the interest rate on any amounts outstanding.

Luna has executed a letter-of-credit (LOC) in the amount of $1.0 million as a condition of Luna s lease on its Blacksburg office.

Luna believes that its cash balance as of December 31, 2014 will provide adequate liquidity for Luna to meet its working capital needs over the next twelve months.

New Credit Facility Upon Closing of the Merger

Upon completion of the Merger, Luna s liquidity needs will increase as it assumes the outstanding debt of API. In conjunction with the Merger, Luna intends to refinance all of the then outstanding long term debt balances of Luna and API into a new single debt facility. Luna has received a commitment from Silicon Valley Bank for a four year term debt facility in an original principal amount of up to $6.0 million with a variable interest rate of prime plus 2% per annum, and monthly payments equal to 1/48th of the original principal balance plus accrued interest.

Discussion of Cash Flows

	Years ended December 31,	
	2013	**2014**
Net cash used in operating activities	$ (1,787,292)	$ (2,714,719)
Net cash (used in)/provided by investing activities	4,670,448	10,419,943
Net cash used in by financing activities	(1,445,076)	(1,366,796)
Net increase in cash and cash equivalents	$ 1,438,080	$ 6,338,428

During 2014, operations used $2.7 million of net cash, as compared to 2013, when operations used $1.8 million of net cash. In 2014, Luna s net income of $6.0 million included a benefit of an after-tax gain on the sale of Luna s medical

shape sensing business of $9.4 million and a tax benefit of $1.1 million. Absent the effects of that gain and the tax benefit, Luna s pre-tax loss from continuing operations was $4.5 million. The pre-tax loss from continuing operations included charges for depreciation and amortization of $0.6 million and share-based compensation of $1.0 million, each of which are non-cash items that do not impact cash flow for the period.

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In 2013, Luna s net loss of $0.8 million included income from discontinued operations, net of tax, of $4.7 million and a tax benefit of $2.4 million. Absent the effects of discontinued operations and the tax benefit, Luna s pre-tax loss from continuing operations was $7.9 million. The pre-tax loss from continuing operations included charges for depreciation and amortization of $0.9 million, share-based compensation of $1.2 million and allowance for doubtful accounts of $0.1 million, all of which are non-cash items that do not impact cash flow for the period. Additionally, changes in working capital provided net cash inflow of $1.7 million, principally due to a decrease of $1.5 million in accounts receivable.

Cash used in, or provided by, investing activities relates to the purchase of property and equipment as well as capitalized costs associated with securing intellectual property rights and, in 2014, the sale of Luna s medical shape sensing business and, in 2013, the sale of SCC. Luna s overall cash provided by investing activities was $10.4 million in 2014, consisting of a cash inflow of $10.9 million from the sale of Luna s medical shape sensing business in January 2014 and cash outflows of $0.3 million for the purchase of equipment and $0.3 million in patent costs associated with certain intangible assets, primarily associated with Luna s fiber optic platform.

Luna s overall cash provided by investing activities was $4.7 million in 2013, consisting of a cash inflow of $5.1 million from the sale of SCC in March 2013, partially offset by cash outflows of $0.2 million for the purchase of equipment and $0.3 million in patent costs associated with certain intangible assets, primarily associated with Luna s fiber optic platform.

Cash used in financing activities for the year ended December 31, 2014 was $1.4 million, compared to cash used in financing activities of $1.4 million in 2013.

During 2014, Luna repaid $1.5 million to SVB for principal on Luna s Term Loan. Luna also paid approximately $67,000 for leased equipment and received approximately $232,000 from the exercise of options and warrants.

During 2013, Luna repaid $1.5 million to SVB for principal on Luna s Term Loan. Luna also paid approximately $57,000 for leased equipment and received approximately $112,000 from the exercise of options and warrants.

Summary of Contractual Obligations

The following table sets forth information concerning Luna s known contractual obligations as of December 31, 2014 that are fixed and determinable.

	Total	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years
Long-term debt obligations (1)	$ 625,000	$ 625,000	$	$	$
Operating facility leases (2)	4,522,547	995,312	1,666,058	1,381,014	480,163
Other leases (3)	110,307	102,601	7,706		
Purchase order obligation (4)	451,536	451,536			
Other liabilities (5)	1,510,000	320,000	750,000	440,000	
Total	$ 7,219,390	$ 2,494,449	$ 2,423,764	$ 1,821,014	$ 480,163

(1) Amounts due under Luna s debt obligations to SVB are payable in monthly installments, plus accrued interest, through May 2015.

(2) Luna leases Luna facilities in Blacksburg, Charlottesville and Roanoke, Virginia under operating leases that as of December 31, 2014, are scheduled to expire between December 2015 and December 2020. In January 2015, Luna amended the lease for its current Roanoke office to terminate the lease effective April 30, 2015. Accordingly, Luna s minimum payments under this lease and the amounts of operating facility lease obligations in the table above, will be reduced by $0.3 million for 2015, $0.6 million for 2016-2017 and $0.3 million for 2018-2019. In January 2015, Luna amended the lease for the Blacksburg facility to increase the allowance for leasehold improvements and to extend the term of the lease for an additional four years, which will increase Luna s minimum payments under this lease, and the amounts of operating

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facility lease obligations in the table above, by $2.6 million for the period beyond 2019. Upon expiration of Luna s office leases, Luna may exercise certain renewal options as specified in the leases. Rental payments associated with these option periods are not included in the table above.

(3) In February 2011 and August 2013, Luna executed leases in the amounts of $274,000 and $50,100, respectively, for equipment for Luna offices in Roanoke, Blacksburg and Charlottesville, Virginia. These equipment leases expire in February 2016 and August 2018, respectively.

(4) In the fourth quarter of 2013, the Luna Technologies subsidiary executed two non-cancelable purchase orders in the amounts of $0.9 million and $0.5 million for multiple shipments of tunable lasers to be delivered over an 18-month period beginning in December of 2013. The amount set forth in the table above represents Luna s remaining obligation as of December 31, 2014.

(5) Other liabilities include remaining amounts payable for minimum royalty payments for certain licensed technologies payable over the remaining patent terms of the underlying technology.

The table above does not reflect any contractual obligations of API that Luna will assume upon completion of the Merger, which obligations will materially affect Luna s contractual obligations for the periods set forth above.

Off-Balance Sheet Arrangements

Luna has no off-balance sheet arrangements as defined in Regulation S-K, Item 303(a)(4)(ii).

Inflation

Luna does not believe that inflation has had a material effect on Luna s business, financial condition or results of operations.

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INFORMATION ABOUT API

General

API was incorporated under the laws of the State of Delaware in June 1988. API is engaged in the development and manufacture of optoelectronic devices and value-added sub-systems and systems. API serves a variety of global Original Equipment Manufacturers (OEMs) in four primary markets. API supports its customers from the initial concept and design phase of the product, through testing to full-scale production. API has two manufacturing facilities located in Camarillo, California and Ann Arbor, Michigan.

Products and Technology

API s Business

API is a leading test and measurement company that packages optoelectronic semiconductors into high-speed optical receivers (HSOR products), custom optoelectronic subsystems (Optosolutions products) and Terahertz instrumentation (THz products), serving a variety of global markets. API s HSOR transmission products are deployed in the internet infrastructure to enable the high-speed bandwidth necessary to support video and data for your TV, computer, tablet or smart phone anytime and anywhere. API s communication test and measurement products (Comtest) are used to develop, manufacture and test optical communication equipment used in the telecom infrastructure. API s Optosolutions products are sold to a number of scientific instrumentation manufacturers for various applications such as metrology, currency validation, flame monitoring, solar panel quality, temperature sensing, particle detection, color sensing, infrared detection and many other applications that can only be done through optical sensing. API s T-Gauge® systems are used to measure and verify physical properties on-line and in real-time to reduce raw materials and rework costs in manufacturing processes as well as conduct quality control monitoring. API s established and growing patented Terahertz technology has allowed API to expand from the laboratory market into the 24/7 industrial process and quality control manufacturing, military/aerospace, and security markets.

API supports its customer from the initial concept and design of the semiconductor, hybridization of support electronics, packaging and signal conditioning or processing from prototype through full-scale production and validation testing. The target markets served by API are Test and Measurement, Military/Aerospace, Telecom Transmission, and Medical.

Technology and Manufacturing Capabilities

API s basic technologies and manufacturing capabilities include the following:

- Optoelectronic semiconductor design and micro fabrication of III-V compound semiconductor (Indium Phosphide or InP and Gallium Arsenide or GaAs) and Silicon (Si) devices including photodetectors and Terahertz transmitters/receiver antenna,

- Molecular Beam Epitaxy (MBE) growth of high-speed III-V compound semiconductor material including GaAs, InAlAs(Indium Aluminum Arsenide)and InP,

High speed semiconductor analog amplifier specification, evaluation and design for outside fabrication,

Photonic integrated circuit (PIC) coherent mixers and delay line interferometer (DLI) specification, evaluation, post processing, and design for outside fabrication for use in 40Gb/s and 100 Gb/s line side optical receivers,

Opto-electronic hybrid packaging of semiconductor devices combining opto-electronic devices with high-speed electronics and fiber optics,

Vapor deposition and/or ion implantation for Silicon based Positive Intrinsic Negative (PIN) photo-detectors, Avalanche Photonic Detectors (APD s) and Large Area Avalanche Photo Detectors (LAAPD),

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Terahertz systems, subsystems, transmitters and receivers, transceivers and motion control hardware and software,

Femtosecond laser specification, valuation, design and manufacture, and

Chromatic dispersion, polarization dispersion and optical delay management in complex optical systems.

Core Products

The core product technologies used in the majority of API s products are opto-electronic semiconductor devices, including photodiodes and antennae made of Si or III-V compound semiconductor material and high speed semiconductor analog amplifiers. Photodiodes and antennae sense light of varying wavelengths and intensity and convert that light and/or Terahertz wave into electrical signals. Analog amplifiers increase the converted electrical signals output power to a level required to communicate with follow on electrical components. API manufactures photodiodes of varying complexity, from basic PIN photodiode to the more sophisticated APD and antennae that transmit and receive Terahertz signals. The APD is a specialized photodiode capable of detecting very low light levels due to an internal gain phenomenon known as avalanching. All photodiode and THz devices are designed by API s experienced engineering staff, and most are fabricated in API s state-of-the-art clean rooms. Some of API s analog amplifiers are specified and tested by its engineering staff, designed by subcontractors and fabricated by outside suppliers. API s products include the following:

High Speed Optical Receivers (2.5 Gigabytes per second or Gb/s, 10Gb/s, 40Gb/s & 100Gb/s) packaged with InP, InAlAs, or GaAs PIN and/or APD photodiodes, electrical amplifiers and PIC s.

PIN and APD photodiodes and arrays in Si and III-V materials (InP, InAlAs, GaAs).

Packaged PIN and APD photodiodes in Si and III-V materials (InP, InAlAs, GaAs).

Packaged Si APD components, with and without thermo-electric coolers.

Packaged Si LAAPD components.

Packaged Si photodiodes with patented FILTRODE® technology integrating optical filters directly on photodiode chips.

Terahertz Systems & subsystems utilizing III-V materials for Terahertz transmitters &/or receivers.

Terahertz Technology

One of the high growth technologies API is pursuing is Terahertz based on API s T-Ray® product platforms. THz is a region of the electromagnetic spectrum that lies between microwave and infrared waves and is in the early stages of adoption. While microwaves and infrared waves have been explored and commercialized for decades, THz waves are in the early stages of being explored and commercialized due to the fact that they have historically been very difficult to generate and detect. Recent advances in femtosecond lasers and ultra-fast semiconductor and electro-optic devices combined with fiber-optic packaging technologies have enabled the development of practical T-Ray® instrumentation for the research market with increasing adoption in the industrial, military and aerospace markets as a result of API s growing group of value added resellers application and market development efforts. THz can be used to look through and beneath materials with high 2-dimensional (2-D) and 3-dimensional (3-D) spatial resolution roughly equivalent to the resolution of the human eye or better. It can also uniquely identify the chemical composition of many hidden or subsurface objects using non-ionizing radiation, which is not harmful to humans at the power levels commonly used today. THz imaging and spectroscopy market applications include industrial quality control through non-destructive testing (including aerospace and pharmaceutical markets); homeland security and defense screening of people, packages and bags for weapons and weapons of mass destruction; medical imaging and other scientific applications.

API has had significant Terahertz technology and product development since 1997, resulting in 135 patents or patents pending to date. In 2001, API sold the first commercial THz product, the T-Ray2000®, as a laboratory bench top instrument for application development with spectroscopy and imaging capabilities targeted at the

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research and development and off-line diagnostic markets. In 2004, API sold the first T-Ray® Manufacturing Inspection System (QA1000) for on-line, real-time inspection to NASA for the space shuttle fuel tank inspection in the Return to Flight Program. In March 2008, API shipped its next generation THz imaging and spectroscopy system (T-Ray 4000®). The T-Ray 4000® is significantly smaller, lighter, and more powerful than previous THz generations and incorporates significant technological advancements. The system weighs 55 pounds and is the size of a briefcase, which is a significant reduction from the 800 pound refrigerator size QA1000. In 2012, API introduced its fifth generation product called T-Gauge®, which weighs 35 pounds. This product is targeted at the industrial, NDT and process quality control market. API has established and continues to develop a value added reseller (VAR) network to accelerate adoption in vertical industrial markets, initially targeting the nuclear gauge replacement market. To date, API has entered into VAR agreements with three established industrial process and quality control companies and a purchase agreement with an OEM in a vertical market.

Markets

API s products serve customers in a variety of global markets, typically North America, Asia, Europe and Australia. The target markets and applications served by API are as follows:

Test and Measurement:

- Manufacturing, process and quality control
- Instrumentation
- Currency Validation
- Comtest
- Industrial

Telecommunications:

- Long Haul/Metro Transmission
- Enterprise/Access and Fiber to the premises Transmission
- Government

Military:

Space

Defense

Medical:

Diagnostic & Monitoring

Ophthalmic Equipment

Medical Imaging

Raw Materials

API s principal raw materials used in the manufacture of its products are silicon and III-V material (InP, GaAs) wafers, chemicals, gases and metals used in processing wafers, gold wire, solders, electronic components, high speed specialized semiconductor amplifiers, PIC s, and a variety of packages and substrates, including metal, printed circuit board, flex circuits, ceramic and plastic packages. All of these raw materials can be obtained from several suppliers. However, API depends on suppliers whose components have been qualified into API s products and who could disrupt its business if they stop, decrease or delay shipments or if the components they ship have quality or consistency issues. From time to time, particularly during periods of increased industry-wide

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demand, silicon wafers, III-V wafers (InP, GaAs), certain metal packages and other materials have been in short supply. During the early part of API s fiscal 2013, API and its customers were adversely affected by the lingering effect of supply chain disruptions caused by the tsunami in Japan and flooding in Thailand. In the second half of fiscal 2013, API was affected by limitations in supply of a critical component used in API s 100G HSOR product which limited its revenues. In the press release dated June 7, 2013, API announced that these supplier bottlenecks had been alleviated. In the future, any significant increase in lead times or shortage in supply on critical components could reduce future growth.

Research and Development

Since API s inception in June 1988, API has incurred material research and development (R&D) expenses, with the intent of commercializing these investments into profitable new standard and custom product offerings. During the first six months of fiscal 2015 and fiscal years ended in 2014 and 2013, research and development expenses were $2.0 million, $5.0 million and $5.7 million, respectively, which API believes were adequate to maintain the necessary investment in API s future growth platforms. API will continue to pursue government funded, as well as internally funded, research and development projects when they are in support of API s development objectives. During the first six months of fiscal 2015, fiscal years 2014 and 2013, approximately $0.1 million, $0.8 million and $2.2 million, respectively, of API s R&D spending was government funded, respectively.

As API begins the new 2015 fiscal year, the following research and development projects are currently underway:

HSOR next generation photodiodes and high-speed optical receivers for the 10G, 40G and 100G telecommunications market:

- Next generation 100G DP-QPSK coherent receivers for long haul and metro markets.
- 1st generation 28Gb/s APD s for the 100G enterprise/access market.
- 4th generation integrated 40G NRZ for the enterprise/access market.
- 2nd generation 2.5G APD for the fiber to the premises (FTTx).
- 2nd generation 10G APD chip and ROSA package for the fiber to the premises (FTTx).
- 2nd generation high speed multi mode receivers for testing 32Gb/s fiber channel and 100Gb/s Ethernet products.

Terahertz applications and enhancements to support market penetration:

Application and software development utilizing the T-Gauge®, product platform for industrial quality and process control markets.

T-Gauge®, platform cost reduction initiatives.

Next generation multi-channel systems to support various vertical market requirements.

Custom Optoelectronics PIN and subassembly developments:

Medical monitoring subsystem product.

Productization of a tunable light source for medical and test and measurement applications.

Environmental Regulations

The photonics industry, as well as the semiconductor industry in general, is subject to governmental regulations for the protection of the environment, including those relating to air and water quality, solid and hazardous waste handling, and the promotion of occupational safety. Various federal, state and local laws and regulations require that API maintains certain environmental permits. API believes it has obtained all necessary environmental permits required to conduct API s manufacturing processes. Changes in the aforementioned laws and regulations or the enactment of new laws, regulations or policies could require increases in operating costs and additional capital expenditures and could possibly entail delays or interruptions of operations.

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Backlog and Customers

API s sales are made primarily pursuant to standard purchase orders for delivery of products. A substantial portion of API s revenues are derived from sales to OEMs pursuant to individual purchase orders with short lead times. However, by industry practice, orders may be canceled or modified at any time. Accordingly, API does not believe that the backlog of undelivered product under these purchase orders is a meaningful indicator of API s future financial performance. When customers cancel an order, they are responsible for all finished goods, all incurred costs, direct and indirect, as well as a reasonable allowance for anticipated profits. No assurance can be given that API will receive these amounts after cancellation.

Customers normally purchase API s products and incorporate them into products that they in turn sell in their own markets on an ongoing basis. As a result, API s sales are dependent upon the success of its customers products and API s future performance is dependent upon API s success in finding new customers and receiving new orders from existing customers.

Marketing

In the United States and Canada, API markets its products through a mix of technical sales engineers, salesmen, value added resellers, and independent sales representatives. International sales, including Europe, the Middle East, Far East and Asia, are conducted directly by the technical sales engineers and at times in conjunction with foreign distributors, value added resellers and representatives. API s products are primarily sold as components or sub-assemblies to OEMs and API markets its products and capabilities through industry specific channels, including the Internet, industry trade shows, and in print through trade journals.

Competition

In API s target markets, API competes with different companies in each of its three major product platforms: custom optoelectronic, high-speed optical receiver and THz systems. API believes that its principal competitors for sales of custom optoelectronic products are small and medium size private companies and medium size public companies such as First Sensor, Excelitas, a division of Illinois Tool Works (ITW), and a division of OSI Systems (OSIS). In the high-speed optical receiver market, certain product lines compete against some mix of the following competitors; JDS Uniphase (JDSU), Neophotonix (NPTN), Finisar, Avago, a division of Fujitsu (FOC), a division of Nippon Electric (NEL) and several other smaller companies. Because the THz product offering includes developing technology applications and markets, API believes the competition is mainly from several early stage small private companies like Menlo Systems supported by research institutions like the Fraunhofer Institute in Germany, Teraview, Advantest and the use of alternative technologies, mainly nuclear gauges that are bundled with other process control equipment within divisions of several larger public companies.

Because API specializes in devices requiring a high degree of engineering expertise to meet the requirements of specific applications, API generally does not compete with other large United States, European or Asian manufacturers of standard off the shelf optoelectronic components or silicon photodetectors.

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Proprietary Technology

API utilizes proprietary design rules and processing steps in the development and fabrication of API s PIN and APD photodiodes, THz transmitters and receivers, fiber-coupled THz subsystems/systems, and THz applications. API has a significant number of patents pending and owns the following patents and registered trademarks:

Patents and Trademarks Issued During the First Six Months of Fiscal 2015

Patent/Trademark

#	Title	Issue Date
1354304	Picosecond Optical Delay	Jan-14
1620899	Pin Photodetector	Mar-14
5501565	Picosecond Optical Delay	Mar-14
2528216	Pin Photodetctor	Apr-14
2586112	System and Method reducing fiber stretch induced timing errors in fiber optic coupled time domain terahertz systems	Jul-14
201080024036	High Speed Ingaas Photoconductive device	Jul-14

Patents and Trademarks Issued in Prior Years

Patent/Trademark

#	Title	Issue Date
8,436,310	System and method reducing fiber stretch induced timing errors in fiber optic coupled time domain	May-13
8,457,915	System and method to measure the transit time position(s) of pulses in a time domain data	Jun-13
2509530	Precision Fiber Attachment	Jul-13
5022032	Pin Photodetector	Jun-12
1332068	Terahertz imaging system for examining particles	Nov-13
8,390,910	Picosecond Optical Delay	March-13
5166024	Terahertz Imaging System for examining particles	Nov-13
4,218,098	Trademark for T-Gauge	Dec-12
5021888	Enhanced Photodetector	Jun-12
4980238	High Speed Ingaas Photoconductive Device	Apr-12
2474560	Planar Avalance Photodiode	Mar-12
1131650	Pin Photodetector	Mar-12
200580041877.4	HIGH SPEED INGASS PHOTOCONDUCTIVE DEVICE (CHINA)	Apr-11
1,034,433	PRECISION FIBER ATTACHMENT (SOUTH KOREA)	May-11
HK1106330	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (HONG KONG)	May-11
4,755,341		Jun-11

	HIGHLY DOPED P-TYPE CONTACT FOR HIGH SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (JAPAN)	
200580023058.7	TERAHERTZ IMAGING SYSTEM FOR EXAMINING ARTICLES (CHINA)	Jun-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (SOUTH KOREA)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (AUSTRIA)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (GR BRITAIN)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (FRANCE)	Jul-11

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Patent/Trademark

#	Title	Issue Date
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (ITALY)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (NETHERLANDS)	Jul-11
2,025,077	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (SPAIN)	Jul-11
602007015950.4	DISPERSION & NONLINEAR COMPENSATOR FOR OPTICAL DELIVERY FIBER (GERMANY)	Jul-11
2,467,400	FOCUSING FIBER OPTIC (CANADA)	Sep-11
4,833,478	METHOD & APPARATUS TO MONITOR PHASE CHANGES IN MATTER WITH TERAHERTZ RADIATION (JAPAN)	Sep-11
4,938,221	PLANAR AVALANCHE PHOTODIODE	Mar-12
142,195	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (US)	Apr-05
660,471	HIGHLY-DOPED P-TYPE CONTRACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (KOREA)	Apr-06
726,387	TRADEMARK APPLICATION FOR T-RAY (CANADA)	Oct-08
765,715	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (AUSTRIA)	Jan-04
766,174	ENHANCED PHOTODETECTOR (KOREA)	Oct-07
809,655	METHOD AND APPARATUS TO MONITOR PHASE CHANGES IN MATTER WITH TERAHERTZ RADIATION (KOREA)	Feb-08
811,365	PLANAR AVALANCHE PHOTODIODE (KOREA)	Feb-08
817,638	FOCUSING FIBER OPTIC (KOREA)	Mar-08
934,665	TRADEMARK APPLICATION FOR T-RAY TRADEMARK (MADRID PROTOCOL)	Aug-07
934,665	TRADEMARK APPLICATION FOR T-RAY TRADEMARK (AUSTRALIA)	Aug-07
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (EUROPE)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (AUSTRIA)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (FRANCE)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (GERMANY)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (ITALY)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (NETHERLANDS)	Oct-10
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (SPAIN)	Oct-10

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Patent/Trademark

#	Title	Issue Date
1,090,282	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (GREAT BRITAIN)	Oct-10
1,113,520	PLANAR AVALANCHE PHOTODIODE (HONG KONG)	Mar-10
1,113,604	OPTICAL DELAY (HONG KONG)	Jan-11
1,115,504	PICOSECOND OPTICAL DELAY (HONG KONG)	Nov-09
1,116,280	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (EP)	Oct-07
1,116,280	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (FRANCE)	Oct-07
1,116,280	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (GREAT BRITAIN)	Oct-07
1,116,280	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (ITALY)	Oct-07
1,116,280	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (GERMANY)	Oct-07
1,230,578	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (EP)	Aug-06
1,230,578	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (AUSTRIA)	Aug-06
1,230,578	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (FRANCE)	Aug-06
1,230,578	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (ITALY)	Aug-06
1,230,578	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (GREAT BRITAIN)	Aug-06
1,454,173	FOCUSING FIBER OPTIC (EP)	May-09
1,454,173	FOCUSING FIBER OPTIC (FRANCE)	May-09
1,454,173	FOCUSING FIBER OPTIC (GERMANY)	May-09
1,454,173	FOCUSING FIBER OPTIC (ITALY)	May-09
1,454,173	FOCUSING FIBER OPTIC (NETHERLANDS)	May-09
1,454,173	FOCUSING FIBER OPTIC (GREAT BRITAIN)	May-09
1,570,306	PRECISION FIBER ATTACHMENT (EP)	Aug-08
1,570,306	PRECISION FIBER ATTACHMENT (ITALY)	Aug-08
1,570,306	PRECISION FIBER ATTACHMENT (FRANCE)	Aug-08
1,570,306	PRECISION FIBER ATTACHMENT (GREAT BRITAIN)	Aug-08
1,570,306	PRECISION FIBER ATTACHMENT (AUSTRIA)	Aug-08
1,570,306	PRECISION FIBER ATTACHMENT (GERMANY)	Aug-08
1,794,558	PICOSECOND OPTICAL DELAY (EP)	Sep-09
1,794,558	PICOSECOND OPTICAL DELAY (FRANCE)	Sep-09
1,794,558	PICOSECOND OPTICAL DELAY (GERMANY)	Sep-09
1,794,558	PICOSECOND OPTICAL DELAY (ITALY)	Sep-09
1,794,558	PICOSECOND OPTICAL DELAY (GREAT BRITAIN)	Sep-09
1,794,558	PICOSECOND OPTICAL DELAY (NETHERLANDS)	Sep-09
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (AUSTRIA)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (FRANCE)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (GERMANY)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (ITALY)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (NETHERLANDS)	Jan-11

1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (SPAIN)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (GREAT BRITAIN)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (HONG KONG)	Jan-11
1,820,219	HIGH SPEED INGAAS PHOTOCONDUCTIVE DEVICE (EUROPE)	Jan-11
1,963,580	PICOMETRIX TRADEMARK	Mar-96

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#	Title	Issue Date
2,345,153	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE (CANADA)	Mar-04
2,350,065	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GERNERATION AND DETECTION SYSTEM (CANADA)	Jan-11
2,396,695	METHOD AND APPARATUS TO MONITOR PHASE CHANGES IN MATTER WITH TERAHERTZ RADIATION (CANADA)	Apr-10
3,561,696	TRADEMARK T-RAY	Jan-09
3,561,697	TRADEMARK T-RAY 2000	Jan-09
3,561,698	TRADEMARK T-RAY 4000	Jan-09
4,180,824	COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM (JAPAN)	Sept-08
4,436,915	PRECISION FIBER ATTACHMENT (JAPAN)	Jan-10
4,717,946	THIN LINE JUNCTION PHOTODIODE (by Predecessor Co.)	Jan-88
4,782,382	HIGH QUANTUM EFFICIENCY PHOTODIODE DEVICES (by Predecessor Co.)	Nov-88
5,021,854	SILICON AVALANCHE PHOTODIODE ARRAY	Jun-91
5,057,892	LIGHT RESPONSIVE AVALANCHE DIODE	Oct-91
5,146,296	DEVICES FOR DETECTING AND/OR IMAGING SINGLE PHOTOELECTRON	Sep-92
5,308,989	TRADEMARK APPLICATION FOR T-GAUGE (JAPAN)	Mar-10
5,311,044	AVALANCHE PHOTOMULTIPLIER TUBE	May-94
5,477,075	SOLID STATE PHOTODETECTOR WITH LIGHT RESPONSIVE REAR FACE	Dec-95
5,757,057	LARGE AREA AVALANCHE ARRAY	May-98
5,801,430	SOLID STATE PHOTODETECTOR WITH LIGHT RESPONSIVE REAR FACE	Sep-98
6,005,276	SOLID STATE PHOTODETECTOR WITH LIGHT RESPONSIVE REAR FACE	Dec-99
6,029,988	COMPACT FIBER PIGTAILED TERAHERTZ IMAGING SYSTEM (GREAT BRITAIN)	Aug-06
6,111,299	ACTIVE LARGE AREA AVLANCHE PHOTODIODE ARRAY	Aug-00
6,262,465	HIGHLY-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	Jul-01
6,320,191	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GENERATION AND DETECTION SYSTEM	Nov-01
6,816,647	COMPACT FIBER PIGTAILED TERAHERTZ IMAGING SYSTEM	Nov-04
6,849,852	SYSTEM AND METHOD FOR MONITORING CHANGES IN STATE OF MATTER WITH TERAHERTZ RADIATION	Feb-05
6,936,821	AMPLIFIED PHOTOCONDUCTIVE GATE	Aug-05
7,039,275	FOCUSING FIBER OPTIC	May-06
7,078,741	HIGH-SPEED ENHANCED RESPONSIVITY PHOTO DETECTOR	Jul-06
7,263,266	PRECISION FIBER ATTACHMENT	Aug-07
7,348,607	PLANAR AVALANCHE PHOTODIODE	Mar-08
7,348,608	PLANAR AVALANCHE PHOTODIODE	Mar-08
7,449,695	TERAHERTZ IMAGING SYSTEM FOR EXAMINING ARTICLES	Nov-08
7,468,503	PIN PHOTODETECTOR	Dec-08
7,572,021	TRADEMARK APPLICATION FOR T-GAUGE (CHINA)	Feb-11
8,452,427	TRADEMARK APPLICATION FOR T-GAUGE	Mar-10

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Patent/Trademark

#	Title	Issue Date
8,493,256	TRADEMARK APPLICATION FOR T-RAY 4000	Feb-10
602005016704.8	PICOSECOND OPTICAL DELAY (GERMANY)	Sep-09
602005026049.8	HIGH SPEED INGASS PHOTOCONDUCTIVE DEVICE (GERMANY)	Jan-11
ZL02825106.7	FOCUSING FIBER OPTIC (CHINA)	Apr-09
ZL03803039.X	ENHANCED PHOTODETECTOR (CHINA)	Apr-09
ZL2003801087.X	PRECISION FIBER ATTACHMENT (CHINA)	Mar-09
ZL200480015226	PIN PHOTODETECTOR (JAPAN)	Jun-09
ZL200480043236	PLANAR AVALANCHE PHOTODIODE (CHINA)	May-09
ZL200580033244	PICOSECOND OPTICAL DELAY (CHINA)	Jan-10
HK1085841	ENHANCED PHOTODETECTOR (HONG KONG)	Dec-09
HK1086340	FOCUSING FIBER OPTIC (HONG KONG)	Feb-10
HK1090282	PIN PHOTODETECTOR (HONG KONG)	Oct-10
HK1095637	PRECISION FIBER ATTACHMENT (HONG KONG)	Apr-10
HK1097957	PIN PHOTODETECTOR (HONG KONG)	Mar-10

There can be no assurance that any issued patents will provide API with significant competitive advantages, or that challenges will not be instituted against the validity or enforceability of any patent, or, if instituted, that such challenges will not be successful. The cost of litigation to uphold the validity and to prevent the infringement of a patent could be substantial. Furthermore, there can be no assurance that API s technology will not infringe on patents or rights owned by others, the licenses to which might not be available to API at all or on reasonable terms. Based on limited patent searches, contacts with others knowledgeable in the field of API s technology, and a review of the published materials, API believes that its competitors hold no patents, licenses or other rights to technology which would preclude API from pursuing API s intended operations.

In some cases, API may rely on trade secrets to protect its innovations. There can be no assurance that trade secrets will be established, that secrecy obligations will be honored or that others will not independently develop similar or superior technology. To the extent that consultants, key employees or other third parties apply technological information independently developed by them or by others to API s projects, disputes might arise as to the proprietary rights to such information which may not be resolved in API s favor.

Employees

As of February 2, 2015, API had approximately 127 full time employees including 4 officers. Included are 33 engineering and development personnel, 10 sales and marketing personnel, 69 operations personnel, and 15 general and administrative personnel. API may, from time to time, engage personnel to perform consulting services and to perform research and development under third party funding. In certain cases, the cost of such personnel may be included in the direct cost of the contract rather than in payroll expense. None of API s employees are covered by a collective bargaining agreement. API believes its relations with its employees are good.

Silonex Net Asset Purchase

On March 1, 2013, API, through its newly formed Advanced Photonix Canada, Inc. subsidiary, acquired substantially all the operating assets and assumed certain liabilities of Silonex s business for $900,000 in cash. Silonex designed, manufactured and marketed optoelectronic devices and sensor solutions for various vertical markets, including Industrial Controls, Banking, Vending, Medical and Telecommunications. The products, customers and business

operations are complimentary to and have minimal overlap with API s Optosolutions product line and the acquisition of the Silonex business broadened API s overall supply channel due to Silonex s existing relationships with Chinese manufacturers.

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ADVANCED PHOTONIX, INC. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of API s financial condition and results of operations should be read in conjunction with API s consolidated financial statements and the related notes to those statements included elsewhere in this joint proxy statement/prospectus. In addition to historical financial information, the following discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. API s actual results and timing of selected events may differ materially from those anticipated in these forward-looking statements as a result of many factors, including those discussed under Risks Relating to API s Business and elsewhere in this joint proxy statement/prospectus.

Overview

API is a leading test and measurement company that packages optoelectronic semiconductors into high-speed optical receivers (HSOR products), custom optoelectronic subsystems (Optosolutions products) and Terahertz (THz products) instrumentation, serving a variety of global markets. API s HSOR transmission products are deployed in the internet infrastructure to enable the high-speed bandwidth necessary to support video and data for your TV, computer, tablet or smart phone anytime and anywhere. API s HSOR Comtest products are used to develop, manufacture and test optical communication equipment used in the telecom infrastructure. API s Optosolutions products are sold to a number of scientific instrumentation manufacturers for various applications such as metrology, currency validation, flame monitoring, solar panel quality, temperature sensing, particle detection, color sensing, infrared detection and many other applications that can only be done through optical sensing. API s T-Gauge® systems are used to measure and verify physical properties on-line and in real-time to reduce raw materials and rework costs in manufacturing processes as well as conduct quality control monitoring. API s established and growing patented Terahertz technology has allowed API to expand from the laboratory market into the 24/7 industrial process and quality control manufacturing, military and aerospace markets.

API supports the customer from the initial concept and design of the semiconductor, hybridization of support electronics, packaging and signal conditioning or processing from prototype through full-scale production and validation testing. The target markets served by API are Test and Measurement, Military/Aerospace, Telecom Transmission, and Medical.

Pending Merger; Liquidity Concerns

On January 30, 2015, API entered into the Merger Agreement. At the Effective Time of the Merger, the stockholders of API will receive 0.31782 of a share of Luna common stock for each share of API s Class A common stock owned by them. The closing of the transaction is subject to the approval of the stockholders of each of Luna and API and other customary closing conditions. API expects the transaction to close by late spring or early summer 2015. Prior to the closing of the Merger, and absent such a closing, API s near-term liquidity is dependent on its meeting its debt covenants, which management expects it to do based on current forecasts. However, if the Merger is not approved by stockholders or does not proceed to a timely closing and projected revenue increases do not occur as forecasted, then API may need to seek additional funding sources to meet its obligations, which would include the alternatives of raising more capital, restructuring existing debt or exploring strategic options, which could include the sale of a portion or all of API. There can be no assurances that additional capital, if needed, will be available to API or the terms under which capital would be available to API. If adequate financing is not available, or is not available on favorable terms, API s business, financial position and results of operations will be adversely affected.

After the announcement of the Merger, three separate putative class action complaints were filed in Michigan and Delaware, against members of API s board of directors, API, Luna and API Merger Sub, alleging that API s board of directors breached its fiduciary duties to API s stockholders by, among other things, (a) agreeing to sell API to Luna at an inadequate price, (b) implementing an unfair process, (c) agreeing to certain provisions of the

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Merger Agreement that are alleged to favor Luna and deter alternate bids, and/or (d) omitting material information from the Registration Statement on Form S-4 filed with the SEC on February 9, 2015 by Luna. The plaintiffs seek, among other things, an injunction against the consummation of the Merger and an award of costs and expenses, including a reasonable allowance for attorneys and experts fees. The outcome of these lawsuits cannot be predicted with any certainty. An adverse judgment for monetary damages could have a material adverse effect on the operations and liquidity of API. A preliminary injunction could delay or jeopardize the completion of the Merger, and an adverse judgment granting permanent injunctive relief could indefinitely enjoin the completion of the Merger. API, API s board of directors and Luna believe that the claims asserted against them in the lawsuits are without merit and are vigorously defending against them. Additional lawsuits arising out of or relating to the Merger Agreement or the Merger may be filed in the future.

Critical Accounting Policies and Estimates

The discussion and analysis of API s financial condition and results of operations is based on the condensed consolidated financial statements, which have been prepared in conformity with U.S. GAAP. The preparation of these condensed consolidated financial statements requires API to make judgments and estimates that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statement and the reported amount of revenues and expenses during the reporting period. API bases its estimates on historical experience and on various other assumptions that API believes are reasonable under the circumstances. Actual results may differ from such estimates under different assumptions or conditions.

Application of Critical Accounting Policies

Application of API s accounting policies requires management to make certain judgments and estimates about the amounts reflected in the financial statements. API uses historical experience and all available information to make these estimates and judgments, although differing amounts could be reported if there are changes in the assumptions and estimates. Estimates are used for, but not limited to, the accounting for the allowance for doubtful accounts, inventory cost adjustments, impairment costs, depreciation and amortization, warranty costs, taxes and contingencies. API has identified the following accounting policies as critical to an understanding of API s financial statements and/or as areas most dependent on management s judgment and estimates.

Revenue Recognition

Revenue is derived principally from the sales of API s products. API recognizes revenue when persuasive evidence of an arrangement exists, usually in the form of a purchase order, when shipment has occurred since title and risk of loss passes at that time, or when services have been rendered, the price is fixed or determinable and collection is reasonably assured in terms of both credit worthiness of the customer and there are no post shipment obligations or uncertainties with respect to customer acceptance.

API sells certain of its products to customers with a product warranty that provides warranty repairs at no cost. The length of the warranty term is one year from date of shipment. API accrues the estimated exposure to warranty claims based upon historical claim costs. API reviews these estimates on a regular basis and adjusts the warranty provisions as actual experience differs from historical estimates or as other information becomes available.

API does not provide price protection or a general right of return. API s return policy only permits product returns for warranty and non-warranty repair or replacement and requires pre-authorization by API prior to the return. Credit or discounts, which have been historically insignificant, may be given at API s discretion and are recorded when and if determined.

API predominantly sells directly to original equipment manufacturers with a direct sales force with limited sales through representatives, value added resellers (VAR) and distributors. Distributor and VAR sales represented approximately 19% of total revenue for the nine months ended December 26, 2014 and approximately 11% of

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total revenue for the year ended March 31, 2014. Significant terms and conditions of distributor agreements include transfer of title upon shipment, net 30 days payment terms, with no return and limited exchange rights, and no price protection. Since the product transfers title to the distributor at the time of shipment by API, the products are not considered inventory on consignment.

Revenue is also derived from technology research and development contracts. API recognizes revenue from these contracts as services and/or materials are provided.

Impairment of Goodwill and Long-Lived Assets

As of December 26, 2014, March 31, 2014 and March 31, 2013, the consolidated balance sheet included $4.6 million of goodwill. Goodwill represents the excess purchase price over amounts assigned to tangible or identifiable intangible assets acquired and liabilities assumed from API s business acquisitions.

Goodwill and intangible assets that are not subject to amortization are tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired. In API s annual assessment of goodwill impairment, API has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying value before performing the two step quantitative impairment test. If after assessing the totality of events or circumstances, API determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two step impairment test is not necessary. Step one of the two step impairment test is to compare the fair value of the reporting with the unit s carrying amount, including goodwill. Fair value of each reporting unit is determined by weighting fair values using a combination of a discounted cash flow approach, and observed enterprise values to revenue multiples and precedent sales transaction multiples for companies in the reporting unit s peer group. If this test indicates that the fair value is less than the carrying value, then step two is required to compare the implied fair value of the reporting unit s goodwill with the carrying amount of the reporting unit s goodwill. If the carrying amount of the goodwill exceeds its implied fair value, an impairment loss shall be recognized in an amount equal to that excess. API has selected March 31 as the date for the annual impairment test.

API continues to meet the criteria to report as a single reportable segment. In fiscal 2013 and prior years, API had one reporting unit which was the aggregation of API s three product lines. In fiscal 2014, as a result of the change from a shared manufacturing process for the three product lines and certain restructuring changes internally, API concluded it could no longer aggregate API s three product lines into one reporting unit for goodwill impairment purposes but instead considered there to be two reporting units as photodiode production remains common for the HSOR and THZ products and the types and classes of customers are similar as well. API tests goodwill annually unless there are qualitative indications that it is more likely than not that the asset is impaired. Given API s current market capitalization and the results in fiscal 2015, API concluded further impairment analysis on goodwill was not necessary.

The carrying value of other long-lived assets, including amortizable intangibles, leasehold improvements and equipment, are evaluated whenever events or changes in circumstances indicate that a potential impairment has occurred relative to a given asset or assets. Impairment is deemed to have occurred if projected undiscounted cash flows associated with an asset (asset group) are less than the carrying value of the asset (asset group). The estimated cash flows include API s assumptions of cash inflows and outflows directly resulting from the use of that asset, or group of assets used in conjunction with the specific asset or assets, in operations. The amount of the impairment loss recognized is equal to the excess of the carrying value of the asset, or asset group, over its then estimated fair value. Given the current fiscal year s results, API has concluded that testing for impairment on API s long lived assets was not necessary.

Accounting for Income Taxes

Income tax provisions and benefits are made for taxes currently payable or refundable, and for deferred income taxes arising from future tax consequences of events that were recognized in API s financial statements or tax

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returns and tax credit carry forwards. The effects of income taxes are measured based on enacted tax laws and rates applicable to periods in which the differences are expected to reverse. If necessary, a valuation allowance is established to reduce deferred income tax assets to an amount that will more likely than not be realized in accordance with FASB guidance pertaining to accounting for income taxes.

As part of API s assessment of the need for a valuation allowance, API considers all available evidence, both positive and negative, including API s recent operating results and forecasting process. API forecasts taxable income through API s budgeting and planning process each year. The process takes into account existing contracts, firm sales backlog, and projected sales based upon customer supplied forecasts of product purchases, resources needed to fulfill these customers requirements, and extraordinary expenses that may be part of long-term initiatives to increase stockholder value through revenue growth and efficiency improvements leading to profit improvement. API has substantial history, more than 10 years in most cases, with customers and markets on which forecasts are based.

At March 31, 2014, API had NOL carry forwards of approximately $25.4 million for federal income tax purposes and $6.5 million for state income tax purposes that expire at various dates between 2017 and 2034. The tax laws related to the utilization of loss carry forwards are complex and the amount of API s loss carry forward that will ultimately be available to offset future taxable income may be subject to annual limitations under Internal Revenue Code Section 382 resulting from changes in the ownership in API s common stock.

API performed an analysis to determine whether an ownership change under Section 382 of the Internal Revenue Code had occurred. The effect of an ownership change would be the imposition of an annual limitation on the use of the NOL carry forwards attributable to periods before the change. As of March 31, 2014, API believed there were no limitations on the use of these Federal NOLs.

At March 31, 2014, API s net deferred tax asset before consideration of a valuation allowance was approximately $12.6 million, mainly consisting of NOL carry forwards which expire at various amounts over an approximate 20 year period. In assessing the realizability of deferred tax assets, API has determined that at this time it is more likely than not that deferred tax assets will not be realized, primarily due to uncertainties related to API s ability to utilize the NOL carry forwards before they expire based on the negative evidence of API s recent years history of losses over the past three years, outweighing the positive evidence of income projections in future years. The ultimate realization of these deferred tax assets is dependent upon the generation of future taxable income during those periods in which those temporary differences become deductible or within the periods before NOL carry forwards expire. As of both March 31, 2014 and 2013, API recorded a full valuation allowance on API s net deferred tax assets.

The calculation of federal income taxes involves dealing with uncertainties in the application of complex tax regulations. API recognizes liabilities for uncertain tax positions based on a two-step process. The first step involves evaluating the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step involves estimating and measuring the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. It is inherently difficult and subjective to estimate such amounts, as API has to determine the probability of various possible outcomes. API s evaluation of uncertain tax positions is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Such a change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision. API has taken no tax positions which would require disclosure.

Inventories

Inventories, which include material, labor and manufacturing overhead, are stated at the lower of cost (on a first in first out basis) or market. Slow moving and obsolete inventories are reviewed throughout the year to assess whether a cost adjustment is required. API s review of slow moving and obsolete inventory begins with a listing

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of all inventory items which have not moved regularly within the past twelve months. In addition, any residual inventory, which is customer specific and remaining on hand at the time of contract completion, is included in the list. The complete list of slow moving and obsolete inventory is then reviewed by the production, engineering and/or purchasing departments to identify items that can be utilized in the near future. These items are then excluded from the analysis and the remaining amount of slow-moving and obsolete inventory is then further assessed and a write down is recorded when warranted. Additionally, non-cancelable open purchase orders for parts API is obligated to purchase where demand has been reduced may also be written down. Impairments for open purchase orders where the market price is lower than the purchase order price are also recorded. The impairments established for excess, slow moving, and obsolete inventory create a new cost basis for those items. The cost basis of these parts is not subsequently increased if the circumstances which led to the impairment change in the future. If a product that had previously been impaired is subsequently sold, the amount of reduced cost basis is reflected as cost of goods sold.

Warrant Valuations

API has warrants outstanding exercisable into 1,462,196 shares of Series A Common Stock with an estimated fair value of $178,000 as of December 26, 2014 and an estimated fair value of $409,000 as of March 31, 2014. API computes the fair value of the warrants using the Monte Carlo model, which is generally a preferred model when instruments contain non-standard features. When a warrant may have different share exercise assumptions such as those issued in February 2013 to Partners for Growth III, L.P. and affiliates, API weighs various values based on the estimated probability of each outcome as of the valuation date. The value derived from the model is therefore sensitive to changes in API s weighting and also changes in the inputs regarding the current stock price, the contractual term, volatility, risk free interest rates and expected dividend rate.

Results of Operations

Three Months Ended December 26, 2014 Compared to Three Months Ended December 27, 2013 and Nine Months Ended December 26, 2014 Compared to Nine Months Ended December 27, 2013

Revenues

API predominantly operates in one industry segment, light and radiation detection devices, and sells to four major markets including test and measurement, telecommunications, military and aerospace, and medical. Revenues by market consisted of the following (*in thousands*):

	Three months ended				Nine months ended			
	December 26, 2014		December 27, 2013		December 26, 2014		December 27, 2013	
Revenues								
Test and Measurement	$ 3,823	66%	$ 5,191	70%	$ 12,950	61%	$ 14,311	65%
Telecommunications	771	13%	1,692	22%	5,177	24%	4,645	21%
Military/Aerospace	905	16%	439	6%	2,381	11%	2,196	10%
Medical	306	5%	128	2%	749	4%	912	4%
Total Revenues	**$ 5,805**	**100%**	**$ 7,450**	**100%**	**$ 21,257**	**100%**	**$ 22,064**	**100%**

API s revenues for the quarter ended December 26, 2014 were $5.8 million, a decrease of 22% (or $1.6 million) from revenues of $7.4 million for the quarter ended December 27, 2013. On a year to date basis, API s revenues were $21.3 million, a decrease of $807,000 or 4% from revenues of $22.1 million for the nine months ended December 27, 2013. Sequentially, revenues decreased 25% or $2.0 million from the quarter ended September 26, 2014. API experienced revenue increases in its Military/Aerospace and Medical markets for the quarter and revenue increases in the Military/Aerospace and Telecommunications markets for the nine months ending December 26, 2014 when compared to the prior year period.

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The Test and Measurement market revenue was approximately $3.8 million and $13.0 million in the third quarter and first nine months of fiscal 2015, respectively, a decrease of $1.4 million over each of the related prior year periods. In the third quarter of fiscal 2015, Comtest customers significantly reduced their purchases relative to the last year comparable quarter and the second quarter of fiscal 2015 as major carriers pushed out capital spending in their infrastructures to direct some of the cash savings to finance significant merger and acquisition activity. These conditions appear to have also dampened the outlook for API s quarter ending March 31, 2015.

Telecommunications revenues in the third quarter and nine months of fiscal 2015 were $771,000 and $5.2 million, respectively, a decrease of 54% from the prior year s three months and an increase of 11% from the prior year s nine month period. The lower three month revenue was primarily due to major carriers pushing out 100G capital spending in their infrastructures to direct some of the cash savings to finance significant merger and acquisition activity. From API s second quarter of fiscal 2015 to the third quarter of fiscal 2015, API saw a $1.2 million drop in telecom sales mostly due to the timing of deliveries for 100G customers. API expects the 100G market to rebound starting late in its quarter ending March 31, 2015. These market conditions have caused API to lower its outlook for its quarter ending March 31, 2015 and as noted below, for the full year.

Military/Aerospace market revenues in the third quarter and first nine months of fiscal 2015 were $905,000 and $2.4 million, respectively, an increase of 106% from the comparable prior year third quarter and a 8% increase over the prior year nine month activity. The third quarter improved by 9% over the second quarter of 2015. This is predominately due to long lived Optosolutions missile programs that have ramped up relative to prior periods.

Medical market revenues in the third quarter and first nine months of fiscal 2014 were $306,000, and $749,000, respectively, a $178,000 increase and a $163,000 decrease from the prior year periods. These fluctuations in revenue are mainly due to the timing of shipments related to one customer.

Given the pause in government spending experienced in the quarter that delayed expected Terahertz contract awards and the current capital spending approach of major carriers, API has revised its forecasted fiscal year 2015 revenues to be down by approximately 5% relative to the prior year. The proposed merger with Luna is expected to provide API s stockholders the ability to realize the value added associated with a larger company and to execute API s growth plans over the near term.

Gross Profit

Gross profit for the third quarter of fiscal 2015 was $1.9 million similar to the third quarter of fiscal 2014 as the effect of the drop in volume in the current year s quarter was offset by the absence of $652,000 in restructuring costs incurred in last year s third quarter. Year to date gross profit was $7.4 million down from $7.6 million in the first nine months of fiscal 2014. The lower gross profit dollars has been driven by the decline in Terahertz contract revenue.

Gross profit percentage was 32% for the third quarter of fiscal 2015 compared to 25% in the third quarter of fiscal 2014 and 34% in the second quarter of fiscal 2015. The fiscal 2015 third quarter gross margin rate improved year over year given the absence of the silicon fabrication shutdown costs incurred in fiscal 2014 but declined sequentially given the large decline in HSOR volume in the quarter.

Operating Expenses

Total operating expenses for the quarter and first nine months of fiscal 2015 were $2.6 million and $8.5 million, a decrease of $624,000 and $1.5 million, respectively, over the comparable fiscal 2014 periods. Total operating expenses for the third quarter of fiscal 2015 decreased by $321,000 when compared to the second quarter of fiscal

2015. Operating expenses in all categories have been trimmed to lower API s breakeven point.

Research, Development and Engineering (RD&E) expenses decreased by $205,000 in the third quarter of fiscal 2015 compared to the third quarter of fiscal 2014 given lower headcount and prototype part spend as API has

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completed several major projects. RD&E expenses decreased by $871,000 in the first nine months of fiscal 2015 relative to the first nine months of fiscal 2014 given lower headcount, prototype part spending and use of outside contractors on Terahertz development contracts.

Sales and Marketing (S&M) expenses decreased by $105,000 (or 16%) in the third quarter of fiscal 2015 compared to the prior year third quarter and decreased $185,000 (or 10%) in the first nine months of fiscal 2015 versus the same period in fiscal 2014. The decreases were primarily attributable to reduced headcount and commissions.

General and Administrative (G&A) expenses decreased $207,000 and $170,000 for the third quarter and first nine months of fiscal 2015 when compared to prior year periods. The decrease was primarily attributable to lower legal and personnel costs.

Amortization expense decreased $107,000 to $153,000 compared to the third quarter of fiscal 2014 expense of $260,000. For the first nine months of fiscal 2015 versus fiscal 2014, the amortization expense declined by $230,000. API utilizes the cash flow amortization method on the majority of its intangible assets which means lower amortization as the assets near the end of their lives.

The non-cash expensing of stock option and restricted stock grants included in operating expenses was $15,000 and $52,000 for the three and nine month period ended December 26, 2014 compared to $40,000 and $110,000 for the three and nine month period ended December 27, 2013 as stock awards have been limited over the past year.

Other Income (Expense), net

Interest expense in the third quarter and first nine months of fiscal 2015 was $124,000 and $434,000, respectively. This decrease of $29,000 and $44,000 in expense relative to prior year periods is due to the decrease in total debt as equity proceeds of $2.9 million received in June 2014 were used to pay down debt.

The fair value of the warrant liability discussed in Note 6 to the Condensed Consolidated Financial Statements is determined using a Monte Carlo option pricing model, and is affected by changes in inputs to that model including API s stock price, expected stock price volatility and contractual term. To the extent that the fair value of the warrant liability increases or decreases, API records an expense or income in its consolidated statements of operations. The income of $140,000 for the current quarter and $231,000 for the nine months ended December 26, 2014 are attributed to the change in the warrant liability driven primarily by the change in the stock price at quarter end. This is in contrast to expense of $124,000 and $213,000 in the prior year quarter and year to date periods.

Net Loss

API realized a net loss for the third quarter of fiscal 2015 of $701,000 ($0.02 per share), as compared to a net loss of $1,618,000 ($0.05 per share) in the third quarter of fiscal 2014. Year to date API realized a net loss of $1,337,000 ($0.04 per share) in fiscal 2015 relative to a net loss of $3,121,000 ($0.10 per share) in fiscal 2014. The improvement is the result of reduced operating expenses and favorable warrant liability adjustments for the comparable periods.

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Fiscal Year Ended March 31, 2014 Compared to Fiscal Year Ended March 31, 2013

Revenues

Revenues by market consisted of the following:

	Year ended			
	March 31, 2014		**March 31, 2013**	
Test and Measurement	$ 18,640,000	64%	$ 15,121,000	64%
Telecommunications	6,517,000	23%	3,413,000	14%
Military/Aerospace	2,738,000	9%	4,176,000	18%
Medical	1,146,000	4%	939,000	4%
Total Revenues	$ 29,041,000	100%	$ 23,649,000	100%

API s total revenues for fiscal 2014 were $29.0 million, an increase of approximately $5.4 million, or 23%, from revenues of $23.6 million for fiscal 2013. Three of API s four market segments showed growth in fiscal 2014 relative to fiscal 2013.

Test and Measurement market revenues were $18.6 million in fiscal 2014, an increase of 23%, or $3.5 million, from fiscal 2013 revenues of $15.1 million due to the full year of activity from the newly acquired net operating assets of Silonex (now known as Advanced Photonix Canada or APC). API s Test and Measurement revenue in the fourth quarter of the current year decreased 7%, or $327,000, from the comparable prior year quarter primarily due to completion of Terahertz contract on the F-35 program. Revenues in this market during the fourth quarter of the current year decreased approximately 17%, or $862,000, from the third quarter of the current year given completion of the Terahertz contracts and a pause in Comtest activity.

Telecommunications sales were $6.5 million, an increase of $3.1 million, or 90%, from fiscal 2013. The increase in API s telecommunications revenues for fiscal 2014 was the result of resolution of supply chain disruptions that allowed API to regain market share at major 100G customers. API s Telecommunications revenue in the fourth quarter increased approximately 388%, or $1.5 million, from the prior year fourth quarter and increased approximately 11%, or $180,000, from the third quarter of the current year although this was muted by the annual contract price reductions with a major customer. Market share improvements, market growth, and new awards in China to improve their internet infrastructure explain the improved business conditions.

Military/Aerospace market revenues were $2.7 million in fiscal 2014, a decrease of 34%, or $1.4 million, from the comparable prior year revenues of $4.2 million. API s military/aerospace market revenue in the fourth quarter of the current year decreased 25%, or $182,000, from the prior year fourth quarter. Both decreases occurred due to completion of the F-35 development contract in these respective periods. API s military/aerospace market revenues increased 24%, or $103,000, from the third quarter of the current year with the start of shipments under an Optosolutions missile program award given nine months ago and delayed by the prime contractor.

Medical market revenues increased $207,000, or 22%, to $1.1 million from the prior year revenue of $939,000. API s medical market revenue in the fourth quarter of the current year was similar to the prior year fourth quarter and were up by $105,000 from the third quarter of the current year. These fluctuations are the primary result of the shipment pattern from one customer.

At the time API filed the Form 10-K, revenue forecasts indicated a growth of more than 20% for fiscal year 2015 relative to the prior year on the strength of HSOR and Terahertz products. Those levels of revenue growth exceeded API breakeven point thereby generating positive adjusted EBITDA and the needed liquidity to remain in compliance with lender covenants. As the fiscal year 2015 revenue profile unfolded, there were delays in capital spending by major carriers in API s 100G products and government spending on the F-35 program that have caused API to revise its revenue guidance to be down 5% for the year.

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Gross Profit

Gross Profit was $9.6 million, or 33% of revenue, compared to the prior year of $8.8 million, or 37% of revenue, an increase of $782,000. Gross profit dollars increased given the higher volumes from the telecom market and the Silonex acquisition and was muted since API shutdown its silicon fabrication activities in the third quarter of fiscal year 2014 incurring special charges of $667,000. The lower gross profit rate was due primarily to the lower volume of THz contracts during the year. Gross profit in the fourth quarter of fiscal 2014 was $2.0 million, or 29% of revenue, versus $2.2 million, or 36% of revenue, during the prior year fourth quarter given the mix shift out of Terahertz contracts. Gross profit was $1.9 million, or 25% of revenue, in the third quarter of fiscal 2014 and improved by approximately $116,000 in the fourth quarter of fiscal 2014 to $2.0 million despite the 6% lower sales volume. The third quarter gross margin was adversely affected by the silicon fabrication shutdown costs.

Operating Expenses

API s Research and Development expenses decreased approximately 12%, or $708,000, over the prior year. Research and Development expenses of $5.0 million for fiscal 2014 compared to $5.7 million in fiscal 2013 were 17% and 24% of sales, respectively. In fiscal 2013, API continued spending to develop and qualify certain HSOR products, and fulfill certain THz development contracts. Early in fiscal 2014, API reduced its engineering headcount to bring API s spending more in line with API s revenue profile as these projects were completed.

Sales and Marketing expenses increased $469,000, or 22%, to $2.6 million, or 9% of sales, in fiscal 2014 compared to $2.1 million, or 9% of sales, in fiscal 2013. The increase was attributable to the acquisition of the Silonex business which brought certain ongoing sales and marketing costs and an increase in HSOR product line sales which drove higher commissions for the year.

General and Administrative expenses increased $228,000 to approximately $4.5 million, or 15% of sales, for fiscal 2014, as compared to $4.3 million, or 18% of sales, for fiscal 2013. The increase was due to reduced tax credits obtained in fiscal 2014 when compared to the prior year and higher bank fees.

Amortization expense decreased approximately $152,000 to $1.0 million compared to the prior year of approximately $1.2 million. API uses the cash flow amortization method on the majority of API s intangible assets which results in a declining expense profile over the life of the assets.

Financing and Other Income (Expense), net

Interest income for fiscal 2014 was approximately $8,000, compared to $10,000 for fiscal 2013.

Interest expense for fiscal 2014 was $652,000 as compared to $202,000 in fiscal 2013, an increase of $450,000, due to higher rates on API s loans with SVB, a $2.1 million increase in borrowings under API s line of credit with SVB, non-cash amortization of $254,000, and issuance of the Partners for Growth (PFG) loan for $2.5 million in February 2013 to assist in financing the Silonex business net operating asset purchase as well as provide additional liquidity.

For the year ended March 31, 2014, there was an increase in the fair value of the warrant liability that triggered expense of $117,000 which compared to other income of $168,000 for the year ended March 31, 2013. FASB guidance requires API s outstanding warrants to be recorded as a liability at fair value with subsequent changes in fair value recorded in earnings. The fair value of the warrant is determined using a Monte Carlo option pricing model, and is affected by changes in inputs to that model including API s stock price, expected stock price volatility and contractual term. When a warrant may have different share exercise assumptions such as those issued in February

2013 to PFG and affiliates, API weighs various values based on the estimated probability of each outcome as of the valuation date. The expense of $117,000 related to the change in fair value of the warrant liability for fiscal 2014 is primarily due to the increase in API s stock price.

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Net loss for fiscal 2014 was $4.3 million, or $0.14 per share, as compared to net loss of $4.4 million, or $0.14 per share, in fiscal 2013, a decrease in the loss of approximately $123,000. The decrease in losses for the year were primarily attributable to the higher gross margin realized of $782,000 and lower operating expense spend of $163,000 partially offset by higher interest and warrant related expense.

Fluctuation in Operating Results

API s operating results may fluctuate from period to period and will depend on numerous factors, including, but not limited to, customer demand and market acceptance of API s products, new product introductions, product obsolescence, component price fluctuation, manufacturing inefficiencies, varying product mix, and other factors. If demand does not meet API s expectations in any given quarter, the sales shortfall may result in an increased impact on operating results due to API s inability to adjust operating expenditures quickly enough to compensate for such shortfall. API s result of operations could be materially adversely affected by changes in economic conditions, governmental or customer spending patterns for the markets API serves. The current turbulence in the global financial markets and its potential impact on global demand for API s customers products and their ability to finance capital expenditures could materially affect API s operating results. In addition, any significant reduction in defense spending as a result of a change in governmental spending patterns could reduce demand for API s product sold into the military market.

Liquidity and Capital Resources

At December 26, 2014, API had cash and cash equivalents of $110,000, a decrease of $10,000 from the March 31, 2014 balance. The lower balance, as of December 26, 2014, is attributable to cash used in operating activities of $1,197,000, cash used in investing activities of $348,000, and cash provided by financing activities of $1,535,000. Given the minimal cash on hand, API is dependent on its line of credit with SVB in order to maintain its liquidity and compliance with its debt covenants so that lenders do not demand payment on existing debt outstanding.

As of December 26, 2014, API was in compliance with the required liquidity and adjusted EBITDA covenant with its lenders; however API experienced a $2.1 million dollar reduction in HSOR revenues in the third quarter relative to the second quarter which was more than forecasted in November 2014 when API last reset its covenants with its major lenders. As a result, API sought and on February 5, 2015 obtained further covenant relief from its lenders by reducing the rolling six month adjusted EBITDA requirement for January through June 2015 to a negative $1,250,000, $1 of adjusted EBITDA required in July 2015 and $100,000 each month thereafter until maturity with up to $150,000 in merger transaction costs carved out of the calculation. The parties also agreed to reduce the minimum liquidity ratio to 1.30 to 1.00 from January 2015 until the maturity of each party s respective debt. API is required to pay in the aggregate $20,000 in fees plus associated legal costs for the amendments with an added $30,000 payable upon the maturity or payoff of the loans. Should API experience a reduction in revenue or an increase in expenses from its most recent forecast which was the basis of the February 5, 2015 covenants, the loans would be callable creating a liquidity issue.

As noted above (see Advanced Photonix, Inc. Management s Discussion and Analysis of Financial Condition and Results of Operations Pending Merger; Liquidity Concerns) on January 30, 2015 API entered into a merger agreement with Luna Innovations Incorporated and API Merger Sub. API expects the transaction to close by late spring or early summer 2015. Prior to the closing of the Merger, and absent such a closing, API s near-term liquidity is dependent on its meeting its debt covenants, which management expects it to do based on current forecasts. However, if the Merger is not approved by stockholders or does not proceed to a timely closing and projected revenue increases do not occur as forecasted, then API may need to seek additional funding sources to meet its obligations, which would include the alternatives of raising more capital, restructuring existing debt or exploring strategic options, which could include the

sale of a portion or all of API. There can be no assurances that additional capital, if needed, will be available to API or the terms under which capital would be available to API. If adequate financing is not available, or is not available on favorable terms, API s business, financial position and results of operations will be adversely affected.

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Operating Activities

The decrease of $1,197,000 in cash resulting from operating activities for the nine months ended December 26, 2014 was split between net cash used in operations of $422,000 and a use of net working capital of $775,000. The pause in revenue growth and the related drop in accounts payable in the current quarter explained much of the cash used for working capital. Cash used in operations of $422,000 resulted from the net loss of $1,337,000 less non-cash charges of $915,000 in depreciation, amortization, stock-based compensation and change in fair value of the warrant liability.

Investing Activities

For the nine months ended December 26, 2014, API used $348,000 in investing activities comprised of capital expenditures of $198,000, patent expenditures of $275,000 and $125,000 in proceeds from the sale of equipment.

Financing Activities

For the nine months ended December 26, 2014, approximately $1.5 million was provided by financing activities since API received net proceeds of $2.9 million from a placement of 6.2 million shares of Class A Common Stock in June 2014. This amount was offset by payments of principal on API s loans with PFG, SVB and its capital lessors.

In summary, API funded operating losses of $0.4 million, financed added working capital of $0.8 million, spent $0.3 million on patents and equipment and reduced term debt by $1.4 million with the $2.9 million in proceeds from its common stock placement.

Debt

Bank Debt

On January 31, 2012, API entered into a Loan and Security Agreement with Silicon Valley Bank (SVB and such agreement as amended from time to time, the SVB Loan Agreement) and a related Loan and Security Agreement (Ex-IM Loan Facility) with SVB (as amended from time to time, the SVB Ex-Im Loan Agreement , and together with the SVB Loan Agreement, the SVB Loan Agreements) that provided for a three-year $1 million term loan that, as amended through June 2014, expires in March 2015, and a $5 million line of credit with a $3 million export-import facility sublimit that, as amended through June 2014, expires in June 2016. Subsequent to the execution of the original SVB Loan Agreements, there have been ten amendments that have modified the financial covenants, allowed for the acquisition of substantially all of the operating assets of Silonex, Inc. (Silonex), allowed API to enter into the loan agreement with Partners for Growth III, L.P. (PFG and such agreement as amended from time to time as the PFG Loan Agreement) as described below and extended the maturity date of the line of credit from January 2014 to June 2016.

The interest rates on the SVB term loan and line of credit as of March 31, 2014 were 7.75% and 7.25%, respectively. API had approximately $2.1 million outstanding on the SVB line of credit with approximately $2.0 million in borrowing capacity as of March 31, 2014. As of June 24, 2014, API has paid off the entire outstanding balance of the line of credit.

The EX-IM loan facility is guaranteed by API s subsidiaries and all borrowings under the SVB Loan Agreements are secured by a first priority security interest granted to SVB over substantially all of API s respective assets.

The SVB Loan Agreements as amended contained December 2013 and January 2014 financial covenants that required API to maintain a minimum liquidity ratio of 2.25 to 1.00 and a minimum trailing three month adjusted EBITDA, measured monthly of (1) a negative $300,000 for each fiscal month during the period July through October 2013, and (2) $1 for each fiscal month during the period November 2013 through February 2014.

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As of December 27, 2013 and January 24, 2014, API was not in compliance with the then existing minimum adjusted EBITDA covenant of $1 for the three months ended December 27, 2013 and January 31, 2014, respectively, and as of January 31, 2014, API was also not in compliance with the then existing minimum liquidity ratio of 2.25 to 1.00. In addition, the foregoing defaults triggered the cross-default provisions under each of the SVB Loan Agreements and the loan with PFG under the PFG Loan Agreement. Consequently, under the terms of each agreement, SVB and PFG were both entitled to proceed against the collateral provided as security for the loans issued thereunder upon an event of default subject, in PFG s case, to any rights that SVB may have in that same collateral.

On February 10, 2014, API entered into separate Forbearance Agreements with SVB and PFG pursuant to which and subject to certain exceptions, each of SVB and PFG agreed not to proceed against the collateral securing their respective loans until February 28, 2014. On March 5, 2014, API entered into separate amendment agreements with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of API s $5 million line of credit to May 31, 2014; (ii) the minimum trailing three month adjusted EBITDA covenant was reset to a negative $1.2 million for the fiscal month ended February 28, 2014, a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014 and a positive $1 for the fiscal month ending May 31, 2014; (iii) the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of February 28, 2014, and 2.25 to 1.00 for each month thereafter through May 2014; and (iv) each of SVB and PFG waived the existing defaults. In addition to the payment of an amendment fee, API agreed to pay each of SVB and PFG additional fees of up to $50,000 and $75,000, respectively, no later than May 31, 2014 (the Tail Fees).

As of March 31, 2014, API was in compliance with the related liquidity and adjusted EBITDA covenants with SVB based on the agreement as of that date.

On April 30, 2014, API entered into separate amendment agreements with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of the $5 million line of credit to July 31, 2014; (ii) the trailing three month adjusted EBITDA covenant was reset to a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014, a negative $250,000 for the fiscal months ending May 31, 2014 and June 30, 2014 and a positive $1 for the fiscal month ending July 31, 2014; and (iii) the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of March 31, 2014 through May 31, 2014, and 2.00 to 1.00 for each month thereafter through July 2014. In addition to the payment of an amendment fee, API agreed to pay each of SVB and PFG their respective Tail Fee and, commencing with the month ended May 31, 2014, an additional fee of $15,000 and $20,000, respectively, for each month that the liquidity ratio is less than 2.00 to 1.00 as of the last day of the month under measurement.

On June 6, 2014, API received approximately $2,657,000 in proceeds before expenses from a secondary placement of 5,391,304 shares of Class A Common Stock through a firm underwriting by B. Riley & Co., LLC. On June 10, 2014, the underwriter exercised the option on an additional 808,696 shares of Class A Common Stock for proceeds before expenses of $398,606. The net proceeds were used to pay down the existing line of credit with SVB and certain related fees. On June 20, 2014, API signed separate amendments with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of API s line of credit to June 2016, (ii) all parties agreed to a six month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $850,000 through June 2014, negative $300,000 for July through September 2014, a positive $1 for October through December 2014 and $100,000 each month thereafter subject to reset upon the submission of the fiscal 2016 budget but no lower than $100,000 on a rolling six month basis, (iii) all parties agreed to adjust the minimum liquidity ratio, as defined, to be 1.30 to 1.00 for months ending prior to June 2014 and 2.00 to 1.00 for all months on or after June 2014 as measured at each month end, and (iv) SVB restored an interest rate matrix based on the covenant performance that results in an interest rate on the line of credit to range from prime rate plus 50 basis points up to prime rate plus 400 basis points and an interest rate on the term loan to range from prime plus 75 basis points up to prime plus 450 basis points. The agreements

confirmed the obligation to pay the previously agreed Tail Fees of $50,000 and $75,000 to SVB and PFG, respectively, associated attorney fees for the amendment, but waived the added tail fees for May 2014 of $15,000 and $20,000, respectively.

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On November 10, 2014, API signed an amendment to the Loan Agreements with SVB where, among other things, (i) all parties agreed to a six month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $800,000 through March of 2015, negative $300,000 for April through June of 2015, and $100,000 each month thereafter, (ii) all parties agreed to adjust the minimum liquidity ratio, as defined, to be 2.00 to 1.00 through February of 2015 with a reduction to 1.50 to 1.00 for each month thereafter, (iii) all parties agreed to continue the existing interest rate matrix. The amendments provided for a reimbursement of legal expenses and a modification fee of $12,500 with an additional $12,500 payable if API s March 2015 quarterly adjusted EBITDA is less than one dollar.

The interest rates on the SVB term loan and line of credit as of December 26, 2014 were 3.75% and 4.25%, respectively. API had approximately $1.5 million outstanding on the SVB line of credit with approximately $2.1 million in borrowing capacity as of December 26, 2014. However, given the liquidity covenant of 2.00 to 1.00 required by SVB, an advance in excess of $630,000 of the available line of credit would cause API to be in violation of the liquidity covenant with SVB.

As of December 26, 2014, API was in compliance with the revised liquidity and adjusted EBITDA covenants with SVB. API experienced a $2.1 million dollar reduction in HSOR revenues in the third quarter relative to the second quarter which was more than forecasted in the November 2014 covenant reset. As a result, API obtained further covenant relief on February 5, 2015 from SVB by reducing the rolling six month adjusted EBITDA requirement for January through June 2015 to a negative $1,250,000, $1 of adjusted EBITDA required in July 2015 and $100,000 each month thereafter until maturity with up to $150,000 in merger transaction costs carved out of the calculation. The parties also agreed to reduce the minimum liquidity ratio to 1.30 to 1.00 for January 2015 until the maturity of the term loan. Pursuant to the amendment, the interest rate was changed to prime plus 5%, or 8.25%, per annum for the line of credit. API is required to pay a $10,000 bank fee plus associated legal costs for the amendment with an added $15,000 payable upon the maturity or payoff of the line of credit. Should API experience a reduction in revenue or an increase in expenses compared to its most recent forecast which was the basis of the February 5, 2015 covenants, the loan would be callable creating a liquidity issue.

On January 30, 2015, API entered into the Merger Agreement. At the Effective Time of the Merger, the stockholders of API will receive 0.31782 of a share of Luna common stock for each share of API s Class A common stock owned by them. The closing of the transaction is subject to the approval of the stockholders of each of Luna and API and other customary closing conditions. API expects the transaction to close by late spring or early summer 2015. Prior to the closing of the Merger, and absent such a closing, API s near-term liquidity is dependent on its meeting its debt covenants, which management expects it to do based on current forecasts. However, if the Merger is not approved by stockholders or does not proceed to a timely closing and projected revenue increases do not occur as forecasted, then API may need to seek additional funding sources to meet its obligations, which would include the alternatives of raising more capital, restructuring existing debt, or exploring strategic options, which could include the sale of a portion or all of API. There can be no assurances that additional capital, if needed, will be available to API or the terms under which capital would be available to API. If adequate financing is not available, or is not available on favorable terms, API s business, financial position and results of operations will be adversely affected.

Total interest payments made to API s bank lenders during the nine months ended December 26, 2014 and December 27, 2013 were $63,000 and $57,000, respectively. Total interest payments made to API s bank lenders during the three months ended December 26, 2014 and December 27, 2013 were $10,000 and $21,000, respectively.

Partners for Growth Secured Debt

On February 8, 2013, API entered into a $2.5 million secured Loan and Security Agreement with PFG that is subordinated to the SVB Loan Agreements. Pursuant to the terms of the agreement, API is obligated to make monthly

principal payments of $59,524, plus accrued interest at 11.75% through maturity in August 2016. As

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part of the consideration for and as a closing condition to the PFG Loan Agreement, API agreed to grant PFG and certain of its affiliates warrants to purchase up to 1,195,000 shares of API s Class A Stock (the Warrants) in a private placement pursuant to Section 4(a)(2) of the Securities Act. 995,000 of the shares issuable under the Warrants were granted at an initial strike price equal to $0.50 per share (the Tier 1 Warrants), and the remaining 200,000 shares issuable under the Warrants were granted at an initial strike price equal to $1.00 per share ($1.00 Warrants). Included in the PFG Loan Agreement were certain revenue and adjusted EBITDA goals which if hit would have reduced the interest rate from 11.75% to 9.75% and cancelled 200,000 of the warrants. API did not achieve those goals during the year and so the interest rate for the remaining life of the loan remains at 11.75% and 1,195,000 warrants remain outstanding as of March 31, 2014.

The Warrants contain full-ratchet anti-dilution provisions that will result in proportional adjustments to the exercise price and the number of shares issuable under the PFG Warrant Agreements in the event that API conducts a stock split, subdivision, stock dividend or combination, or similar transaction. The PFG Warrant Agreements also include a net exercise provision pursuant to which warrant holders will receive the number of shares equal to (x) the product of (A) the number of Warrants exercised multiplied by (B) the difference between

(1) the fair market value of a share of Class A Stock (with fair value generally being equal to the highest closing price of API s Class A Stock during the 45 consecutive trading days prior to the date of exercise) and (2) the strike price of the Warrant, (y) divided by the fair market value of a share of Class A Stock. In addition, in the event API is acquired, liquidates, conducts a public offering, or the Warrants expire, each warrant holder will have the right to put its Warrants to API in exchange for a per share cash payment that varies with the number of shares issuable under each Warrant, but in the aggregate will not exceed $250,000.

The PFG Loan Agreements, as amended through December 2013 and January 2014, contained financial covenants that required API to maintain a minimum liquidity ratio of 2.25 to 1.00 and a minimum trailing three month adjusted EBITDA, measured monthly of (1) a negative $300,000 for each fiscal month during the period July through October 2013; and (2) $1 for each fiscal month during the period November 2013 through February 2014.

As of December 27, 2013 and January 24, 2014, API was not in compliance with the then existing adjusted minimum EBITDA covenant of $1 for the three months ended December 27, 2013 and January 24, 2014, respectively, and as of January 24, 2014, API was also not in compliance with the then existing minimum liquidity ratio of 2.25 to 1.00. In addition, the foregoing defaults triggered the cross-default provisions under each of the SVB Loan Agreements and the loan with PFG. Consequently, under the terms of each agreement, SVB and PFG were both entitled to proceed against the collateral provided as security for the loans issued thereunder upon an event of default subject, in PFG s case, to any rights that SVB may have in that same collateral.

On February 10, 2014, API entered into separate Forbearance Agreements with SVB and PFG pursuant to which and subject to certain exceptions, each of SVB and PFG agreed not to proceed against the collateral securing their respective loans until February 28, 2014. On March 5, 2014, API entered into separate amendment agreements with SVB and PFG where, among other things, the minimum trailing three month adjusted EBITDA covenant was reset to a negative $1.2 million for the fiscal month ended February 28, 2014, a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014 and a positive $1 for the fiscal month ending May 31, 2014; the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of February 28, 2014, and 2.25 to 1.00 for each month thereafter through May 2014; and each of SVB and PFG waived the existing defaults. In addition to the payment of an amendment fee, API agreed to pay each of SVB and PFG additional fees of up to $50,000 and $75,000, respectively, no later than May 31, 2014 (the Tail Fees).

API was in compliance with its loan covenants with PFG as of March 31, 2014 which were substantially the same as with SVB as of that date.

On April 30, 2014, API entered into separate amendment agreements with SVB and PFG where, among other things the trailing minimum three month adjusted EBITDA covenant was reset to a negative $800,000 for the

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fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014, a negative $250,000 for the fiscal months ending May 31, 2014 and June 30, 2014 and a positive $1 for the fiscal month ending July 31, 2014; and the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of March 31, 2014 through May 31, 2014, and 2.00 to 1.00 for each month thereafter through July 2014. In addition to the payment of an amendment fee, API agreed to pay each of SVB and PFG their respective Tail Fee and, commencing with the month ended May 31, 2014, an additional fee of $15,000 and $20,000, respectively, for each month that the liquidity ratio is less than 2.00 to 1.00 as of the last day of the month under measurement.

On June 20, 2014, API signed separate amendments with SVB and PFG where, among other things, both parties agreed to a minimum six month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $850,000 through June 2014, negative $300,000 for July through September 2014, a positive $1 for October through December 2014 and $100,000 each month thereafter subject to reset upon the submission of the fiscal 2016 budget but no lower than $100,000 on a rolling six month basis, both parties agreed to adjust the minimum liquidity ratio, as defined, to be 1.30 to 1.00 for months ending prior to June 2014 and 2.00 to 1.00 for all months on or after June 2014 as measured at each month end. The agreements confirmed the obligation to pay the previously agreed Tail Fees of $50,000 and $75,000 to SVB and PFG, respectively, associated attorney fees for the amendment, but waived the added tail fees for May of $15,000 for SVB and $20,000 for PFG.

On November 10, 2014, API signed an amendment to the Loan Agreements with PFG where, among other things, (i) all parties agreed to a six month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $800,000 through March of 2015, negative $300,000 for April through June of 2015, and $100,000 each month thereafter, (ii) all parties agreed to adjust the minimum liquidity ratio, as defined, to be 2.00 to 1.00 through February of 2015 with a reduction to 1.50 to 1.00 for each month thereafter, (iii) all parties agreed to continue the existing interest rate matrix. The amendments provided for a reimbursement of legal expenses and a modification fee of $12,500 with an additional $12,500 payable if API s March 2015 quarterly adjusted EBITDA is less than one dollar.

As of December 26, 2014, API was in compliance with the revised liquidity and adjusted EBITDA covenants with PFG. API experienced a $2.1 million dollar reduction in HSOR revenues in the third quarter relative to the second quarter which was more than forecasted in the November 2014 covenant reset. As a result, API obtained further covenant relief on February 5, 2015 from PFG by reducing the rolling six month adjusted EBITDA requirement for January through June 2015 to a negative $1,250,000, $1 of adjusted EBITDA required in July 2015 and $100,000 each month thereafter until maturity with up to $150,000 in merger transaction costs carved out of the calculation. The parties also agreed to reduce the minimum liquidity ratio to 1.30 to 1.00 for January 2015 until the maturity of the term loan. Pursuant to the amendment, the interest rate remained at 11.75% per annum on the term loan. API is required to pay a $10,000 bank fee plus associated legal costs for the amendment with an added $15,000 payable upon the maturity or payoff of the term loan. Should API experience a reduction in revenue or an increase in expenses compared to its most recent forecast which was the basis of the February 5, 2015 covenants, the loan would be callable creating a liquidity issue.

On January 30, 2015, API entered into the Merger Agreement. On the Effective Time of the Merger, the stockholders of API will receive 0.31782 of a share of Luna common stock for each share of API s Class A common stock owned by them. The closing of the transaction is subject to the approval of the stockholders of each of Luna and API and other customary closing conditions. API expects the transaction to close by late spring or early summer 2015. Prior to the closing of the Merger, and absent such a closing, API s near-term liquidity is dependent on its meeting its debt covenants, which management expects it to do based on current forecasts. However, if the Merger is not approve by stockholders or does not proceed to a timely closing and projected revenue increases do not occur as forecasted, then API may need to seek additional funding sources to meet its obligations, which would include the alternatives of raising more capital, restructuring existing debt, or exploring strategic options, which could include the sale of a

portion or all of API. There can be no assurances that additional capital, if needed, will be available to API or the terms under which capital would be available to API. If adequate financing is not available, or is not available on favorable terms, API s business, financial position and results of operations will be adversely affected.

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MEDC/MSF Loans

In fiscal years 2005 and 2006, API entered into two unsecured loan agreements that are currently held by the Michigan Economic Development Corporation (MEDC and such agreement the MEDC Loan Agreement) and a MEDC affiliate, the Michigan Strategic Fund (MSF and such agreement the MSF Loan Agreement) pursuant to which API borrowed an aggregate of amount of $2.2 million. As amended, payments on the approximately $327,000 in principal outstanding as of March 31, 2014, under each of the MEDC Loan Agreement and MSF Loan Agreement are deferred until they mature on December 1, 2014 and November 1, 2014, respectively, at which time the entire remaining balance under each loan agreement becomes due and payable. The interest rate under both of the loans was 5.00% as of March 31, 2014.

As amended on December 9, 2014, payments on the approximately $654,000 in remaining principal outstanding in aggregate under the MEDC Loan Agreement and MSF Loan Agreement are deferred along with accrued interest at a rate of 6% per annum. Beginning on November 1, 2015 and for 11 months thereafter, the total principal and accrued interest are to be paid in monthly installments along with each month s earned interest at a 6% per annum rate.

Capital Leases

During fiscal 2014, API purchased certain equipment through several capital leases with monthly principal payments of $1,700 plus interest with some maturities extending to 2019. The leases are collateralized by the associated equipment.

The March 31, 2014 debt principal and maturities of all outstanding debt are included in the table below. The PFG loan balance below reflects the remaining principal on the amortizing term loan but is shown net of a debt discount of $218,000 on API s balance sheet. However, as described above, certain maturity dates have been amended as of February 5, 2015.

Debt Maturity Table (in 000 s)

		Debt Maturities					
	Balance 3/31/14	**FY2015**	**FY2016**	**FY2017**	**FY2018**	**FY2019**	**FY2020 & Beyond**
Credit Line Silicon Valley Bank	$ 2,147	$ 2,147	$	$	$	$	$
Term Loan Silicon Valley Bank	306	306					
Partners for Growth Loan	1,726	714	714	298			
MEDC/MSF loans	654	654					
Capital Leases	56	20	11	11	12	2	
TOTAL	$ 4,889	$ 3,841	$ 725	$ 309	$ 12	$ 2	$

Liquidity Outlook

During the past two years, API has been consuming cash because API has been operating at revenue levels below API s cash breakeven point (as measured on an EBITDA basis calculated based on API s lending agreements), API had business needs to purchase certain equipment and continue patent activities, and has had to pay principal on

amortizing term debt. To fund this activity, API has steadily drawn down API s cash balance, liquidated working capital into cash and used API s available line of credit with SVB. As mentioned in the Debt section, the lack of positive EBITDA pursuant to API s lending agreement in December 2013 and the line of credit levels in January 2014 caused API to violate API s loan covenants. To improve API s liquidity position, API evaluated many alternatives for the lowest cost of capital and eventually settled on a secondary offering which was done on a firm underwritten basis by B. Riley & Co., LLC in June 2014. The net proceeds after expenses of approximately $2.9 million were received in June 2014 and were used to pay down API s existing line of credit

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with SVB. With this cash infusion, API s lenders were comfortable extending API s line of credit out two years until June 2016. As the fiscal year 2015 revenue profile unfolded, there were delays in capital spending by major carriers in API s 100G products and government spending on the F-35 program that have caused API to revise its revenue guidance to be down 5% for the year. Consequently, API has had to work with its lenders to amend its lending covenants on November 10, 2014 and February 5, 2015. Should API experience a reduction in revenue or an increase in expenses from its most recent forecast which was the basis of the February 5, 2015 covenants, the loans would be callable creating a liquidity issue.

Prior to the closing of the Merger, and absent such a closing, API s near-term liquidity is dependent on its meeting its debt covenants which API expects to do based on its current forecasts. However, if the Merger is not approved by stockholders or does not proceed to a timely closing and projected revenue increases do not occur as forecast, then API may need to seek additional funding sources to meet its obligations which would include the alternatives of raising more capital, restructuring existing debt, or exploring strategic options which could include the sale of a portion or all of its product lines. There can be no assurances that additional capital, if needed, will be available to API or the terms under which capital would be available. If adequate financing is not available, or is not available on favorable terms, then API s business, financial position and results of operations will be adversely affected.

Summary of Contractual Obligations

The following table sets forth API s contractual obligations at March 31, 2014. However, as described above, certain payment dates have been amended as of February 5, 2015.

Contractual Obligations	**Payments due by period**				
	Total	**FY 2015**	**FY 2016-2018**	**FY 2019-2021**	**FY 2022 & later**
Bank line of credit	$ 2,147,000	$ 2,147,000	$	$	$
Bank term loan	306,000	306,000			
Partners for Growth loan	1,726,000	714,000	1,012,000		
MEDC/MSF loans	654,000	654,000			
Capital leases	56,000	20,000	34,000	2,000	
Subtotal Balance Sheet	**$ 4,889,000**	**$ 3,841,000**	**$ 1,046,000**	**$ 2,000**	**$**
Expected interest expense on current debt obligations	313,000	232,000	81,000		
Operating lease obligations	5,055,000	892,000	2,583,000	1,580,000	
Purchase obligations	2,602,000	2,602,000			
Total	**$ 12,859,000**	**$ 7,567,000**	**$ 3,710,000**	**$ 1,582,000**	**$**

The Bank line of credit has been shown as due in fiscal year 2015 since this balance was paid with the proceeds of the equity offering completed in June 2014. SVB has extended API s line of credit through June of 2016 and API expects to begin using the line of credit again in fiscal year 2015. Partners for Growth debt is shown at face value in the above table while the balance sheet reflects a debt discount related to the warrants issued of $218,000 as of March 31, 2014. Purchase obligations represent an estimate of all open purchase orders and contractual obligations in the ordinary course of business for which API has not yet received the goods or services. API enters into agreements with suppliers that allow them to procure inventory based upon agreements defining API s material and services requirements. Although open purchase orders are considered enforceable and legally binding, the terms generally allow API the option to cancel, reschedule and adjust API s requirements based on API s business needs prior to the delivery of goods or the performance of services.

Off-Balance Sheet Arrangements

API identifies and discloses all significant off-balance sheet arrangements and related party transactions. API does not utilize special purpose entities or have any known financial relationships with other companies special purpose entities.

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Operating Leases

API enters into operating leases where the economic climate is favorable. The liquidity impact of operating leases is not material.

Purchase Commitments

API has purchase commitments for materials, supplies, services, and property, plant and equipment as part of the normal course of business. Commitments to purchase inventory at above-market prices have been reserved. Certain supply contracts may contain penalty provisions for early termination. Based on current expectations, API does not believe that it is reasonably likely to incur any material amount of penalties under these contracts.

Other Contractual Obligations

API does not have material financial guarantees that are reasonably likely to affect liquidity.

Combined with the recently revised covenants with both SVB and PFG, expected cash flow (as measured by API s bank EBITDA calculation), and the current SVB line of credit, API believes that its existing cash and cash equivalents will be sufficient for the next twelve months. Positive cash flow from operations is highly dependent on increasing revenue levels. API has had and may continue to experience supply limitations that could hamper API s ability to achieve the levels of HSOR revenue and the related gross margin previously enjoyed. API may therefore need additional financing to fund API s operations in the future and there can be no assurance that additional funds will be available, especially if API experiences operating results below expectations, or, if financing is available, there can be no assurance as to the terms on which funds might be available. If adequate financing is not available as required, or is not available on favorable terms, API s business, financial position and results of operations will be adversely affected.

Recent Pronouncements and Accounting Changes

In May 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-09 *Revenue from Contracts with Customers* (ASU 2014-09), which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, more judgment and estimates may be required with the revenue recognition process than are required under existing U.S. GAAP.

The standard is effective for annual periods beginning after December 15, 2016, and interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii)a retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption (which includes additional footnote disclosures). API is currently evaluating the impact of adopting ASU 2014-09 on API s consolidated financial statement and API has not yet determined the method by which API will adopt the standard in fiscal 2018.

In August 2014, the FASB issued ASU 2014-15, *Disclosure of Uncertainties about an Entity s Ability to Continue as a Going Concern*, which provides guidance on determining when and how to disclose going concern uncertainties in the financial statements. The new standard requires management to perform interim and annual assessments of an entity s ability to continue as a going concern within one year of the date the financial are issued. An entity must provide certain disclosures if conditions or events raise substantial doubt about the entity s ability to continue as a going concern.

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ASU 2014-15 is effective for annual periods ending after December 15, 2016, and for interim periods within annual periods beginning after December 15, 2016. API is currently evaluating the impact of adopting ASU 2014-15 on the consolidated financial statements and has not yet determined the impact the standard may have on the fiscal 2017 disclosures.

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DESCRIPTION OF LUNA CAPITAL STOCK

Authorized Capital

As of February 28, 2015, the authorized capital stock of Luna consists of 100,000,000 shares of common stock, $0.001 par value, and 5,000,000 shares of preferred stock, $0.001 par value, of which 1,321,514 shares of preferred stock are designated as Series A Convertible Preferred Stock.

Common Stock

As of February 28, 2015, there were 15,095,017 shares of Luna common stock outstanding and held of record by approximately 74 stockholders. Holders of Luna common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Subject to limitations contained in the Delaware General Corporation Law and the amended and restated certificate of incorporation, the Luna board of directors may declare and pay dividends upon the shares of capital stock of the corporation, which dividends may be paid either in cash, securities of the corporation or other property. In the event of a liquidation, dissolution or winding up of Luna, the holders of Luna common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior liquidation rights of Luna preferred stock, if any, then outstanding. The Luna common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the Luna common stock. All outstanding shares of Luna common stock are fully paid and non-assessable, and the shares of Luna common stock to be issued in connection with the Merger will be fully paid and non-assessable.

Preferred Stock

As of February 28, 2015, there were 1,321,514 shares of Luna Series A Convertible Preferred Stock outstanding held of record by one stockholder. Luna s board of directors has the authority to issue the shares of Luna preferred stock in one or more series. The board of directors, without further approval of the stockholders, is authorized to fix the designations, powers, preferences and rights and the qualifications, limitations or restrictions thereof, of any series of preferred stock, including, without limitation, the dividend rights, the dividend rates, voting rights, redemption rights and terms, redemption prices and liquidation preferences applicable to each series of preferred stock. Although it presently has no intention to do so, Luna s board of directors, without stockholder approval, can issue preferred stock with voting and conversion rights which could adversely affect the voting power of the holders of Luna common stock. The issuance of Luna preferred stock may have the effect of delaying, deterring or preventing a change in control of Luna.

Transfer Agent

American Stock Transfer & Trust Company is the transfer agent and registrar for Luna common stock.

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PRINCIPAL STOCKHOLDERS OF LUNA

The following table sets forth certain information with respect to beneficial ownership of Luna common stock, as of February 28, 2015, by:

- each person known by Luna to be a beneficial owner of 5% or more of the outstanding shares of Luna s common stock;
- each of Luna s directors;
- each of Luna s named executive officers; and
- all of Luna s currently serving executive officers and directors as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. Except as indicated by the footnotes below, Luna believes, based on the information furnished to Luna, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of the common stock that they beneficially own, subject to applicable community property laws. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of common stock subject to options, restricted stock units, warrants or other exercisable or convertible securities held by that person that are currently exercisable or convertible or exercisable or convertible within 60 days of February 28, 2015 are deemed outstanding, but are not deemed outstanding for purposes of computing the percentage ownership of any other person. Unless otherwise indicated, these shares do not include any stock, options or restricted stock units awarded after February 28, 2015. A total of 15,095,017 shares of Luna s common stock were outstanding as of February 28, 2015.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Luna Innovations Incorporated, 1 Riverside Circle, Suite 400, Roanoke, Virginia 24016.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percent of Class
Carilion Clinic (1) c/o Carilion Roanoke Memorial Hospital First Floor Roanoke, Virginia 24033	4,329,687	25.2%
Hansen Medical, Inc. 800 East Middlefield Road Mountain View, CA 94043	1,389,369	9.2%
Perlus MicroCap Fund LP Fifth Floor, 37 Esplanade	1,209,157	8.0%

St. Helier, Jersey Channel Islands JE12TR		
Advanced Photonix, Inc. (2)	3,893,726	21.6%
My E. Chung (3)	618,848	4.0%
Dale E. Messick (4)	460,808	3.0%
Scott A. Graeff (5)	503,750	3.3%
John B. Williamson, III (6)	303,647	2.0%
Warner Dalhouse (7)	305,518	2.0%
Richard W. Roedel (8)	746,167	4.7%
Michael W. Wise (9)	609,633	4.0%
Neil D. Wilkin, Jr. (10)	154,407	1.0%
All current directors and executive officers as a group (9 persons) (11)	3,893,726	21.6%

* Represents less than 1% of the outstanding shares of common stock.

(1) Includes 1,321,514 shares of Series A Convertible Preferred Stock, which are currently convertible into an equivalent number of shares of common stock, as well as 393,277 shares of common stock payable as

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accrued dividends on the Series A Convertible Preferred Stock that will be issued upon the holder s request. Includes 366,000 shares of common stock underlying warrants that are exercisable within 60 days of February 28, 2015. Nancy Agee, Don Lorton and Rob Vaughan share voting and investment power over the shares beneficially owned by Carilion Clinic.

(2) Such beneficial ownership is based solely on the Luna Voting Agreements dated February 28, 2015 by and among Luna, API and each of Luna s directors and executive officers. API disclaims beneficial ownership of all such shares. API s business address is 2925 Boardwalk Drive, Ann Arbor, MI 48104.

(3) Consists of (i) 349,348 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015 and (ii) 210,000 shares of restricted stock that are not vested, and will not vest, within 60 days of February 28, 2015 (Mr. Chung is deemed to have voting, but not dispositive, power over such shares).

(4) Includes (i) 352,336 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015 and (ii) 51,705 shares of restricted stock that are not vested, and will not vest, within 60 days of February 28, 2015 (Mr. Messick is deemed to have voting, but not dispositive, power over such shares).

(5) Includes (i) 398,216 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015; and (ii) 51,750 of restricted stock that are not vested, and will not vest, within 60 days of February 28, 2015 (Mr. Graeff is deemed to have voting, but not dispositive, power over such shares).

(6) Includes 210,920 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015 and 84,727 shares of common stock issuable pursuant to restricted stock units held under Luna s Non-Employee Director s Deferred Compensation Plan that are payable under circumstances within the control of the holder.

(7) Includes 210,920 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015 and 84,398 shares of common stock issuable pursuant to restricted stock units held under Luna s Non-Employee Director s Deferred Compensation Plan that are payable under circumstances within the control of the holder.

(8) Includes 646,921 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015, and 94,722 shares of common stock issuable pursuant to restricted stock units held under Luna s Non-Employee Director s Deferred Compensation Plan that are payable under circumstances within the control of the holder.

(9) Includes 156,564 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015, and 40,229 shares of common stock issuable pursuant to restricted stock units held under Luna s Non-Employee Director s Deferred Compensation Plan that are payable under circumstances within the control of the holder. Also includes 12,840 shares held by Mr. Wise s family members over which Mr. Wise shares voting and investment power.

(10) Includes 116,648 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015 and 33,259 shares of common stock issuable pursuant to restricted stock units held under Luna s Non-Employee Director s Deferred Compensation Plan that are payable under circumstances within the control of the holder.

(11) Includes an aggregate of: (i) 337,335 shares of common stock issuable pursuant to restricted stock units issued under Luna s Non-Employee Director s Deferred Compensation Plan that are payable under circumstances within the control of the holders; (ii) 2,563,608 shares of common stock issuable under stock options that are immediately exercisable or exercisable within 60 days of February 28, 2015 (this total includes 121,735 shares issuable under stock options held by Talfourd H. Kemper, Jr., an executive officer of Luna who is not a named executive officer); and (iii) 261,750 shares of restricted stock that are not vested, and will not vest, within 60 days of February 28, 2015 (this total includes 51,750 shares of restricted stock held by Mr. Kemper).

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PRINCIPAL STOCKHOLDERS OF API

The following table sets forth, as of February 28, 2015 the number of shares of Common Stock owned beneficially by any persons API knows to be beneficial owners of more than five percent (5%) of API s outstanding shares of Common Stock, each of API s directors, each of API s named executive officers (consisting of API s president and chief executive officer and API s next three most highly compensated executive officers for API s fiscal year ended March 31, 2014), and all of API s directors and executive officers as a group. The percentage of ownership is calculated based upon 37,381,413 shares of Common Stock issued and outstanding as of February 28, 2015.

Name & Address of Beneficial Owner	Number of Shares Owned	Shares Underlying Options/Warrants (1)	Percent of Class (2)
Named Executive Officers and Directors*			
Richard D. Kurtz	246,018	269,684(3)	1.4%
Robin Risser	980,599	319,327(4)	3.4%
Steven Williamson	1,947,200(5)	400,500(6)	6.2%
Jeff Anderson (7)	143,993	145,000(3)	0.8%
M. Scott Farese	189,360	91,805(3)	0.8%
Stephen P. Soltwedel	229,016	91,805(3)	0.9%
Lance Brewer	119,683	116,805(3)	0.6%
Donald Pastor	166,283(8)	116,805(3)	0.8%
Directors & Executive Officers as a Group	4,022,152	1,551,731(9)	14.3%
5% Stockholders			
Luna Innovations Incorporated (10)	4,022,152	1,551,731(9)	14.3%

* Each Named Executive Officer and Director has an address c/o Advanced Photonix, Inc., 2925 Boardwalk, Ann Arbor, Michigan 48104.

(1) Represents shares issuable pursuant to stock options and stock purchase warrants that are exercisable within 60 days of February 28, 2015.

(2) Represents percentage of issued and outstanding shares of API s Common Stock, assuming the beneficial owner (and no other beneficial owner) exercises all stock purchase warrants and stock options which are exercisable within 60 days of February 28, 2015.

(3) Represents shares underlying stock options.

(4) Includes 230,263 shares underlying stock options and 89,064 shares underlying stock purchase warrants.

(5) Includes 1,883,200 shares of API s common stock owned by Steven L. Williamson Trust made on May 15, 2014, which Mr. Williamson, as sole trustee, has voting and dispositive power (the Trust).

(6) Includes 222,368 shares underlying stock options and 178,132 shares underlying stock purchase warrants.

(7) On March 22, 2015, Mr. Anderson notified API of his intention to resign as API s chief financial officer effective April 3, 2015.

(8) Includes 150,283 shares of API s Common Stock that are jointly held by Donald Pastor and his wife, Diane Pastor.

(9) Includes 1,284,535 shares underlying stock options and 267,196 shares underlying stock purchase warrants.

(10) Such beneficial ownership is based solely on the API Voting Agreements dated February 28, 2015 by and among Luna, API and each of API s directors and executive officers and the Trust. Luna disclaims beneficial ownership of all such shares. Luna s business address is One Riverside Circle, Suite 400 Roanoke, Virginia 24016.

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MANAGEMENT OF LUNA BEFORE THE MERGER AND MANAGEMENT OF THE COMBINED COMPANY FOLLOWING THE MERGER

Directors and Executive Officers of Luna Before the Merger

The names of Luna s current directors and officers, their ages as of February 28, 2015, and certain other information about them are set forth below. There are no family relationships among Luna s directors or executive officers.

Director	Age	Position(s)
Richard W. Roedel	65	Chairman of the Board of Directors
Michael W. Wise	64	Director
John B. Williamson, III	60	Director
Warner Dalhouse	80	Director
Neil D. Wilkin, Jr.	51	Director
My E. Chung	62	Director, President and Chief Executive Officer
Dale E. Messick	51	Chief Financial Officer
Scott A. Graeff	48	Chief Strategy Officer and Treasurer
Talfourd H. Kemper, Jr.	46	Vice President, General Counsel and Secretary

Richard W. Roedel has served as a member of Luna s board of directors since 2005 and as chairman of Luna s board of directors since January 2010. Mr. Roedel also serves as a director of publicly held companies IHS, Inc., Lorillard, Inc. and Six Flags Entertainment Corporation. Mr. Roedel serves as chairman of the audit committee of Lorillard, a member of the audit committees of IHS and Six Flags and Chairman of the Risk Committee of IHS. He served as a director of Broadview Network Holdings, Inc., a private company with publicly traded debt until 2012. Mr. Roedel was a director of Sealy Corporation from 2006 to 2013, when Sealy was acquired by Tempur-Pedic International Inc. Mr. Roedel was a director of Brightpoint, Inc. from 2002 until 2012, when Brightpoint was acquired by Ingram Micro. Mr. Roedel served in various capacities at Take-Two Interactive Software, Inc. from 2002 until 2005, including chairman and chief executive officer. Mr. Roedel is a member of the National Association of Corporate Directors (NACD) Risk Oversight Advisory Council and a member of the board of directors of the Association of Audit Committee Members, Inc., a non-profit organization dedicated to strengthening the audit committee by developing best practices. Mr. Roedel was appointed to a three year term, beginning January 1, 2014, on the Standing Advisory Group of the Public Company Accounting Oversight Board (PCAOB). From 1971 through 2000, he was employed by BDO Seidman LLP, becoming an audit partner in 1980, later being promoted in 1990 to managing partner in Chicago and then managing partner in New York in 1994, and finally, in 1999, to chairman and chief executive officer. Mr. Roedel holds a B.S. degree in accounting from The Ohio State University and is a Certified Public Accountant. Mr. Roedel s public accounting experience and his status as an authority on issues facing audit committees, his extensive service on public company boards and committees and his deep familiarity with Luna make him a valuable member of the board of directors.

Michael W. Wise has served as a member of Luna s board of directors since May 2011. Mr. Wise currently serves as the Chief Financial Officer of Corvesta, Inc., an insurance and technology holding company, and Chief Financial Officer of its subsidiary Delta Dental of Virginia. Mr. Wise serves on the boards of directors and as treasurer of several additional Corvesta portfolio companies, including OneMind Health, a provider of cloud-based enterprise software for the dental industry, Corvesta Life Insurance Company, a life and health insurance company, and Corvesta Services Software Solutions India, an offshore information technology services company. Prior to joining Delta Dental of Virginia as its Chief Financial Officer in 1996, Mr. Wise owned and managed several small businesses. He also currently serves and has in the past served on numerous boards of directors of local non-profit organizations. He

received a B.S. degree in business administration accounting from West Virginia University and was previously a Certified Public Accountant. Mr. Wise s accounting and financial background, his experience in funding and managing technology companies through growth periods, his

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experience as an entrepreneur and his local and community leadership make him a valuable member of Luna s board of directors. Mr. Wise is also one of Luna s largest stockholders, which evidences his commitment to the long-term interests of Luna s stockholders.

John B. Williamson, III has served as a member of Luna s board of directors since January 2010. He served as Chairman and Chief Executive Officer of RGC Resources, Inc., a publicly held energy distribution and services holding company from 2003-2014. He currently serves as Chairman of RGC Resources, Inc. Mr. Williamson is a member of the boards of directors of Bank of Botetourt, Inc., a publicly held local bank, where he serves as chairman of the Nominating and Corporate Governance Committee, Optical Cable Corporation, a publicly held optical fiber manufacturer, where he serves as the chairman of the audit committee and a member of the nominating and corporate governance committee, and Corning Natural Gas Corporation, a publicly held natural gas company, where he serves as chairman of the audit committee and serves on the compensation committee. He currently serves as a member of the Botetourt County Board of Supervisors in Virginia. He was formerly a board member of NTELOS, Inc., a publicly held telecommunications company, where he also served as chairman of the audit committee. Mr. Williamson also formerly served in government executive capacities, including as County Administrator for Botetourt and Nelson Counties in Virginia. He earned a bachelor s degree in business administration and management from Virginia Commonwealth University and an M.B.A. degree from the College of William and Mary. Mr. Williamson s public company chief executive officer experience, his experience as audit committee chairman of other public companies and his local and community leadership will enable him to continue to make valuable contributions to the Luna board of directors.

Warner Dalhouse has served as a member of Luna s board of directors since January 2010. Prior to his retirement, he served as Chairman and Chief Executive Officer of Dominion Bankshares Corporation, which later became First Union National Bank of Virginia. He currently serves as a director and chairman of the corporate governance committee of HomeTown Bankshares Corporation, a publicly held local bank, as well as a director of the Virginia Tech Carilion School of Medicine. He received a B.S. degree in commerce from the University of Virginia and attended the Rutgers University Stonier Graduate School of Banking. Mr. Dalhouse s local leadership, extensive executive and director experience, banking background and compensation committee experience allow him to make valuable contributions to the Luna board of directors.

Neil D. Wilkin, Jr. has served as a member of Luna s Board of Directors since May 2012 and is a member of the Audit Committee. Mr. Wilkin is chairman of the board of directors, president and chief executive officer of Optical Cable Corporation (OCC), a publicly held optical fiber and copper data communications cable and connectivity manufacturer based in Roanoke, Virginia. He was named chairman of the board and chief executive officer of OCC in September 2003, in addition to his previously held positions as president and as a member of the board of directors. Mr. Wilkin first became a director and was named chief financial officer and senior vice president of OCC in September 2001, assuming the role of president in addition to his position as chief financial officer in December 2001. Prior to joining OCC, Mr. Wilkin served as chief financial officer of a nationally licensed, internet-based real estate brokerage company. Prior to that, Mr. Wilkin practiced law concentrating on mergers and acquisitions, corporate finance, and general corporate matters. He worked at two law firms: McGuireWoods LLP in Richmond, Virginia and Kirkland & Ellis in Washington, D.C. Mr. Wilkin practiced with Coopers & Lybrand (a predecessor to PricewaterhouseCoopers) as a Certified Public Accountant before returning to graduate business school and law school. Mr. Wilkin earned his MBA from the Darden School at the University of Virginia, is a graduate of the University of Virginia School of Law, and received his undergraduate degree from the McIntire School of Commerce at the University of Virginia. Mr. Wilkin s experience as the president and chief executive officer of a public company in the optical fiber industry uniquely qualifies him to provide valuable insights to the Luna board of directors.

My E. Chung has served as Luna s President and Chief Executive Officer and as a member of Luna s board of directors since April 2011. He previously served as Senior Vice President of Worldwide Sales for Sunrise

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Telecom, a publicly held provider of communications test and measurement solutions for telecom, cable and wireless networks, from September 2009 to March 2011. In 2005, Mr. Chung was appointed as President and Chief Executive Officer of Circadiant Systems, an optical testing company, and served in that role until Luna s acquisition by JDS Uniphase Corporation in November 2008, and continued as senior director of the Circadiant business unit of the combined company until June 2009. From 1998 to 2004, he served as Group President of Spirent Communications, a division of Spirent PLC, a publicly held provider of communications test equipment, and served on Spirent PLC s board of directors as Executive Director from 2001 to 2004. Previously, he was Division President of Acterna, formerly known as Telecommunications Techniques Corporation, or TTC. Having joined TTC in 1987 as National Sales Manager, Mr. Chung later became Director of Sales and Vice President of U.S. Sales. In 1992, he became Division President with responsibility for the Network Services Division focusing on products used in the installation and maintenance of networks at customer premises. His responsibilities included product development, marketing, manufacturing and accounting. He was involved in setting TTC s strategic direction through a number of strategic partnerships and acquisitions. Mr. Chung s earlier career was spent at Agilent, formerly Hewlett-Packard Company, where he spent 11 years in sales and sales management. Mr. Chung received a bachelor s degree in electrical engineering from New Jersey Institute of Technology. Mr. Chung s position as Luna s President and Chief Executive Officer and his prior management experience with technology companies will enable him to continue to make valuable contributions to Luna s board of directors.

Dale E. Messick has served as Luna s Chief Financial Officer since August 2006, except during the period from August 2010 to April 2011 when he served as Luna s interim President and Chief Operating Officer. Prior to joining Luna, Mr. Messick served in various capacities at Worldspan, L.P., a provider of transaction processing and information technology services to the global travel industry, including as Chief Financial Officer from 1997 to 2004 and Senior Vice President Finance from 2004 to 2005. At Worldspan, Mr. Messick managed a staff of 160 people in the United States, Mexico, and Europe and was responsible for accounting, financial reporting, budgeting, financial planning and analysis, and internal audit operations. Previously, Mr. Messick worked in the audit practice of PricewaterhouseCoopers. Mr. Messick received a B.B.A. degree in accounting from the College of William and Mary and is a Certified Public Accountant.

Scott A. Graeff has served as Luna s Chief Strategy Officer since July 2012, and as Luna s Treasurer since July 2005. He previously served as Luna s Chief Commercialization Officer from May 2010 to July 2012. He also served as Luna s interim Chief Financial Officer during the period from August 2010 to April 2011. He previously served as Luna s Chief Operating Officer from March 2009 to May 2010, as Luna s Chief Commercialization Officer from August 2006 to March 2009, and as Luna s Chief Financial Officer and Executive Vice President, Corporate Development, from July 2005 to August 2006. Mr. Graeff was also a member of Luna s board of directors from August 2005 until March 2006. From 1999 to 2001, Mr. Graeff served as Chief Financial Officer of Liquidity Link, a software development company. From 2001 to 2002, Mr. Graeff served as President and Chief Financial Officer of Autumn Investments. From 2002 until 2005, Mr. Graeff served as a Managing Director for Gryphon Capital Partners, a venture capital investment group. From 2003 until July 2005, Mr. Graeff also served as the Acting Chief Financial Officer of Luna Technologies, Inc., which Luna acquired in September 2005. Mr. Graeff holds a B.S. degree in commerce from the University of Virginia.

Talfourd H. Kemper, Jr. has served as Luna s Vice President, General Counsel and Secretary since November 2008. Prior to joining Luna, Mr. Kemper was an equity Principal with the law firm of Woods Rogers PLC in Roanoke, Virginia from 2003 until 2008, where his legal practice focused on corporate and securities law, venture capital financing, mergers and acquisitions and intellectual property and licensing. Mr. Kemper received an A.B. degree in economics from Duke University and a J.D. degree from the University of Virginia School of Law, where he served on the Editorial Board of the *Virginia Law Review*.

Directors and Executive Officers of the Combined Company Following the Merger

Pursuant to the terms of the Merger Agreement, the board of directors of the combined company will consist of seven directors, including four current members of Luna s board of directors, one current member of API s board

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of directors and two directors designated by API. Accordingly, the following two of Luna s current six directors will resign effective upon completion of the Merger: Neil D. Wilkin, Jr. and Warner Dalhouse.

Upon completion of the Merger, My E. Chung, Luna s current president and chief executive officer, will serve as the president and chief executive officer of the combined company, Dale E. Messick, Luna s current chief financial officer, will serve as the chief financial officer of the combined company, Scott A. Graeff, Luna s current chief strategy officer and treasurer will serve as the chief strategy officer and treasurer of the combined company and Talfourd H. Kemper, Jr., Luna s current vice president, general counsel and secretary, will serve as the vice president, general counsel and secretary of the combined company. Further, Richard W. Roedel, Luna s current chairman of the board of directors, will serve as chairman of the board of directors of the combined company.

The table below lists the names and ages as of February 28, 2015 and positions of the individuals will serve as directors and executive officers of the combined company upon completion of the Merger. There are no family relationships among Luna s directors or executive officers.

Names	Age	Position(s)
Richard W. Roedel (1)	65	Chairman of the Board of Directors
Michael W. Wise (2)	64	Director
John B. Williamson, III (3)	60	Director
My E. Chung (4)	62	President, Chief Executive Officer and Director
Donald Pastor	61	Director
Gary Spiegel	64	Director
Ed J. Coringrato Jr.	56	Director
Dale E. Messick (5)	51	Chief Financial Officer
Scott A. Graeff (6)	48	Chief Strategy Officer and Treasurer
Talfourd H. Kemper, Jr. (7)	46	Vice President, General Counsel and Secretary

(1) Richard Roedel is currently a director of Luna and his biographical information appears under Directors and Executive Officers of Luna Before the Merger on page 189.

(2) Michael M. Wise is currently a director of Luna and his biographical information appears under Directors and Executive Officers of Luna Before the Merger on page 189.

(3) John B. Williamson, III, is currently a director of Luna and his biographical information appears under Directors and Executive Officers of Luna Before the Merger on page 190.

(4) My E. Chung is currently an officer and director of Luna and his biographical information appears under Directors and Executive Officers of Luna Before the Merger on page 190.

(5) Dale E. Messick is currently an officer of Luna and his biographical information appears under Directors and Executive Officers of Luna Before the Merger on page 191.

(6) Scott A. Graeff is currently an officer of Luna and his biographical information appears under Directors and Executive Officers of Luna Before the Merger on page 191.

(7) Talfourd H. Kemper, Jr. is currently an officer of Luna and his biographical information appears under Directors and Executive Officers of Luna Before the Merger on page 191.

Donald Pastor has served as a director of API since July 2005 and assumed the role of non-executive chairman of the board of directors in October 2012. Mr. Pastor is also the President of DP Business Services, a consulting firm which he founded in January 2012. From 1986 through June 2012, he served as the President Electronics

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Systems Division of Telephonics Corporation. In addition, Mr. Pastor previously served as the Chief Executive Officer of TLSI, a wholly owned subsidiary of Telephonics Corporation, and as the Chief Financial Officer of Telephonics Corporation. For the past thirty years, Mr. Pastor has held a variety of financial, administrative and operational positions in high technology and defense related industries. Mr. Pastor holds a B.S. degree in marine engineering from the U.S. Merchant Marine Academy and an M.B.A. from Loyola University Maryland. Mr. Pastor s extensive experience in financial, administrative and operational positions in high technology and defense related industries qualifies him for service on Luna s board of directors.

Gary Spiegel has more than 35 years of experience in the photonics industry. He has held positions of Vice President, Sales and Marketing, Senior Vice President, Sales and Business Development. and Senior Vice President, Business Development at Newport Corporation from 2002 to 2013. Mr. Spiegel retired from Newport Corporation in 2014 and is currently a business development consultant. He has a Bachelor s Degree in Industrial Marketing from Baruch College of the City University of New York. He also sits on the Board of Telescent Inc., an early stage technology company focused on software defined network cross connect technology and is a member of the SPIE Financial Advisory Committee and a member of the OSA Corporate Associate Committee. Mr. Spiegel s extensive experience in the photonics industry qualifies him to serve on Luna s board of directors.

Ed J. Coringrato Jr. has served as a Senior Adviser to Nanowave Technologies, Inc., a manufacturer of microwave and millimeter-wave components and high power solid state transmit/receive subsystems for commercial aerospace, defense, medical, communications and industrial applications, since January 2014. Prior to that, he served as President and Chief Executive Officer and a board member of CyOptics, Inc. from January 2005 until its sale to Avago Technologies in June 2013. Prior to that he was CyOptics s Vice President of Business Development from February 2003 through December 2004. From 2000 until 2003, Mr. Coringrato was co-founder and served as Chief Financial Officer of CENiX, Inc., an optical start-up that developed high-speed optical modules using an automated manufacturing platform. Mr. Coringrato also worked for 18 years at AT&T and Lucent Technologies, where he held positions in engineering, marketing and sales, strategic planning, business development and product management. Mr. Coringrato holds a B.S. degree in Industrial Engineering and Systems Management and an M.B.A. from The Pennsylvania State University. Mr. Coringrato s extensive experience with technology companies will enable him to make valuable contributions to Luna s board of directors.

Director Independence

Prior to completion of the Merger, the Luna board of directors will affirmatively determine which of the seven individuals that will serve as directors of the combined company is an independent director as defined under the NASDAQ listing rules. As required under the NASDAQ listing rules, a majority of the members of a listed company s board of directors must qualify as independent, as affirmatively determined by the board of directors. Luna s board of directors consults with legal counsel to ensure that the board s determinations are consistent with relevant securities and other laws and regulations regarding the definition of independent, including those set forth in pertinent NASDAQ listing standards, as in effect from time to time.

Based on information provided by the directors and by Luna and API with regard to each of the seven individuals expected to serve as a member of the board of directors of the combined company and such individual s business and personal activities as they may relate to Luna, API and the combined company, it is anticipated that all of the individuals that will serve as directors of the combined company will be independent other than Mr. Chung. Mr. Chung is not independent, as he is currently employed as Luna s President and Chief Executive Officer.

Board Committees Before and After the Merger

The Luna board of directors has a standing audit, nominating and governance, and compensation committee, each of which is comprised solely of independent directors, and is described more fully under Proposal No. 3 Election of Directors on page 226. Upon completion of the Merger, the composition of these committees will change, as described below.

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Audit Committee

The Audit Committee is currently composed of Messrs. Williamson, Wilkin and Wise. Mr. Williamson is the chairman of the committee. Upon completion of the Merger, Mr. Wilkin will resign from the committee, and it is expected that Mr. Coringrato will join the committee. It is expected that Mr. Williamson will continue to serve as chairman of the committee.

Nominating and Governance Committee

The Nominating and Governance Committee currently consists of Messrs. Roedel, Dalhouse and Williamson. Mr. Roedel serves as chairman of the committee. Upon completion of the Merger, Mr. Dalhouse will resign from the committee, and it is expected that Mr. Pastor will join the committee. It is expected that Mr. Roedel will continue to serve as chairman of the committee.

Compensation Committee

The Compensation Committee is currently composed of Messrs. Dalhouse, Wise and Roedel. Mr. Dalhouse serves as the chairman of the committee. Upon completion of the Merger, Mr. Dalhouse will resign from the committee, and it is expected that Mr. Spiegel and Mr. Pastor will join the committee. It is expected that Mr. Pastor will assume the role of chairman of the committee.

Director Compensation

It is anticipated that the compensation to be paid to the combined company s directors following the Merger will be substantially similar to the compensation currently paid to members of the Luna board of directors.

Director Compensation Table Combined Company Directors from Luna

The following table sets forth certain information concerning cash and non-cash compensation earned by the non-employee members of the Luna board of directors in 2014 who will be a director of the combined company. The compensation paid to My E. Chung, Luna s president and chief executive officer, is described below under Executive Compensation. Mr. Chung does not receive any additional compensation for his service as a director.

Name	Fees Earned or Paid in Cash (1)(2)($)	Option Awards (3)($)	Total ($)
John B. Williamson, III	25,000	164,400(4)	189,400
Richard W. Roedel	15,000		15,000
Michael W. Wise	15,000	164,400(4)	179,400

(1) Represents the cash retainer for board and, as applicable, committee chair service for calendar year 2014. Pursuant to Luna s non-employee director compensation policy, the annual retainer for board service is paid prospectively on July 1 of each year in respect of board service for the following twelve-month period. In 2014, the annual retainer for board service was $15,000. The annual cash retainer for committee chair service was

$10,000 (except for the Nominating and Governance Committee, which had an annual cash retainer for chair service of $5,000 and for which Mr. Roedel foregoes any retainer as Chair). These retainers are paid prospectively in quarterly installments of $2,500.

(2) During 2014, all of Luna s non-employee directors elected to receive payment of their fees for board and committee chair service in restricted stock units pursuant to Luna s non-employee directors deferred compensation plan. Restricted stock units are convertible into shares of Luna s common stock on a one-for-one basis upon specified events as described below. In lieu of the cash payment of the annual board retainer payable on July 1, 2014, each of Messrs. Williamson, Roedel and Wise received 10,869 restricted stock units under the deferred compensation plan,

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in each case with a grant date fair value of $15,000. Also during 2014, Mr. Williamson received an aggregate of 7,235 restricted stock units under the deferred compensation plan, with a grant date fair value of $10,000, representing the $10,000 annual retainer for service as chairman of the Audit Committee. As of December 31, 2014, Luna non-employee directors held the following equity compensation awards:

Name	Restricted Stock Units	Shares Underlying Stock Options
John B. Williamson, III	84,727	294,356
Richard W. Roedel	94,722	734,017
Michael W. Wise	40,229	240,000

(3) Amounts represent the aggregate grant date fair value for stock options granted in 2014, as calculated in accordance with ASC Topic 718, but excluding the effect of estimated forfeitures. The fair value of the awards was determined using the valuation methodology and assumptions described in Note 8 of the Notes to Luna s Consolidated Financial Statements included in Luna s annual report on Form 10-K for the fiscal year ended December 31, 2013. The options granted during 2014 have an exercise price equal to the closing price of Luna s common stock on the NASDAQ Capital Market on the date of grant and generally vest over a period of three years from the date of grant or through the end of their current term as a director.

(4) Upon his re-election as a director in May 2014, Mr. Williamson and Mr. Wise were each granted an option to purchase 120,000 shares of common stock at an exercise price of $1.37 per share. As of December 31, 2014, Mr. Williamson held outstanding options to purchase 294,356 shares of Luna s common stock at a weighted average price of $2.68 per share. As of December 31, 2014, Mr. Wise held outstanding options to purchase 240,000 shares of Luna s common stock at a weighted average exercise price of $1.71 per share.

Luna also reimburses Luna s non-employee directors for all reasonable out-of-pocket expenses incurred in the performance of their duties as directors, which expense reimbursements are not included in the foregoing table.

Retainers and Meeting Fees.

During fiscal year 2014, the chairmen of the standing committees of Luna s board of directors were paid retainers as follows: $10,000 per year for the chairman of Luna s Audit Committee, $10,000 per year for the chairman of Luna s Compensation Committee, $5,000 per year for the chairman of Luna s Nominating and Governance Committee. Mr. Roedel, as chairman of the Nominating and Governance Committee, elected to forego any compensation in such capacity for the fiscal year 2014. These retainers were paid quarterly.

Under the terms of Luna s non-employee directors deferred compensation plan, the number of restricted stock units issued to a director is equal to the amount of the annual retainer divided by the closing price of Luna s common stock on July 1. Restricted stock units represent rights to receive shares of Luna s common stock at a later date. A participating director may elect to receive up to the number of shares of Luna s common stock equal to the number of whole restricted stock units then credited to that director s restricted stock unit account, in either (i) a lump sum or (ii) substantially equal annual installments over a period not to exceed five years. Participating directors may elect to receive their common stock due under the plan upon either (a) separation from service with Luna, (b) a change of control, (c) an unforeseen emergency or (d) a time or fixed schedule as specified at the time of their initial deferral election.

Other Equity-Based Compensation.

Non-employee directors are also eligible to receive restricted stock awards and option grants under Luna s 2006 Equity Incentive Plan. Under this plan, newly elected independent directors are eligible to receive an option to purchase up to 120,000 shares of Luna s common stock upon election to the board, of which one-third vests on the first anniversary of the grant date and the remaining two-thirds vests in 24 equal monthly installments thereafter. Non-employee directors who are re-elected for a new term also receive an option to purchase 120,000 shares of common stock, which vests in 36 equal monthly installments from the date of grant, unless they were

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initially elected for a partial term, in which case they are treated as follows. The Nominating and Governance Committee believes that directors should have stock options vesting over each month of service, so that stock options should be granted to any director whose current stock options will become fully vested prior to the expiration of his term. Therefore, a new director elected to a partial term is initially granted an option for 120,000 shares, the vesting of which would conclude at some point during the director s second term, if re-elected. A pro-rata stub period option is then granted to such a director so that the director has stock options vesting over each month of service during his second term. If re-elected again to a third term, such a director then would receive an additional option to purchase 120,000 shares of common stock, which vests in 36 equal monthly installments from the date of grant.

All options issued to directors are granted with an exercise price equal to the closing price of Luna s common stock on the NASDAQ Capital Market on the grant date.

Director Compensation Table Combined Company Directors from API

The following table shows, for the API director who will be a director of the combined company, information concerning annual compensation earned for services in all capacities during API s fiscal year ended March 31, 2014.

Name	Fees Earned or Paid in Cash ($)	Total ($)
Donald Pastor	107,031	107,031

Director Fees

API s non-employee directors were entitled to receive the following standard compensation arrangements: a $40,650 annual retainer fee for services as a director, a fee of $1,000 for each board of directors meeting attended in person, $500 for each board of directors meeting attended telephonically and $750 for each committee meeting attended, a $250 quarterly retainer for the chairman of the compensation committee, a $625 quarterly retainer for the chairman of the audit committee, and reimbursement for expenses associated with travel to any board of directors or committee meeting incurred by any out-of-town non-employee director. In addition, the chairman of the board of directors was entitled to receive a monthly retainer of $7,000, reimbursement of reasonable business expenses incurred in connection with API s business, and equity awards at the discretion of the compensation committee.

API s non-employee directors voluntarily waived 25% and 20% of the fees that that would otherwise be payable with respect to the periods commencing March 1, 2014 and ending May 31, 2014 and March 1, 2013 and ending July 31, 2013, respectively, to assist API in meeting certain liquidity requirements under API s credit facilities with SVB and PFG.

EXECUTIVE COMPENSATION

It is anticipated that at least initially the compensation to be paid to the combined company s executive officers after the Merger will be substantially similar to the compensation currently paid to such individuals by Luna.

Luna Compensation Discussion and Analysis

The following discussion and analysis of Luna s compensation arrangements with Luna s named executive officers should be read together with the compensation tables and related disclosures set forth elsewhere in this joint proxy statement/prospectus.

For 2014, Luna s named executive officers consisted of:

My E. Chung, Luna s President and Chief Executive Officer;

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Dale E. Messick, Luna s Chief Financial Officer; and

Scott A. Graeff, Luna s Chief Strategy Officer.

Executive Summary

Luna seeks to closely align the interests of Luna s named executive officers with the interests of Luna s stockholders. Luna s compensation programs are designed to reward Luna s named executive officers for the achievement of short-term and long-term strategic and operational goals and financial performance, without encouraging unnecessary or excessive risk-taking. Luna s performance-oriented compensation program consists of base salary, annual cash bonuses, long-term equity incentives, such as restricted stock awards and stock option grants, benefits and, for certain senior executive officers, severance and termination protection.

For 2014, Luna s primary corporate goals related to Luna s adjusted operating income or loss for the year and the achievement of a strategic objective. Luna s executive compensation policies for the year were, therefore, designed to incentivize Luna s executive officers to execute against performance objectives and to focus on creation of value for Luna s stockholders. Luna sought to incentivize this performance primarily through cash incentives that were based on Luna s financial performance and, to a lesser extent, stock options.

The highlights of Luna s 2014 executive compensation were as follows:

Luna s named executive officers received 3% salary increases from 2013 levels, except that Mr. Graeff received a 10% increase.

Luna established a 2014 senior management incentive plan, which rewarded Luna s named executive officers for Luna s corporate financial performance, specifically whether Luna achieved a specified strategic goal or specified financial performance metrics. The amount of the bonus was to be determined based upon the timing of the achievement of the strategic goal or the achievement of adjusted operating income (loss) exceeding a specified amount. The completion of the Merger will be deemed to satisfy the specified strategic goal.

In May 2014, Luna granted a total of 209,000 shares of restricted stock to Luna s named executive officers as a part of periodic equity grants to these executives.

Overview of Compensation Philosophy

Luna s overall compensation philosophy is to provide executive compensation packages that enable Luna to attract, retain and motivate highly qualified executive officers to achieve Luna s short-term and long-term business goals. Consistent with this philosophy, the following elements provide a framework for Luna s executive compensation program: base salary; a cash bonus program designed to reinforce desired performance goals; and non-cash compensation intended to align the interests of Luna s executives with those of Luna s stockholders.

Role of Compensation Committee and Compensation Consultant

Luna s executive compensation program is approved and monitored by the Compensation Committee of Luna s board of directors. During 2014, the members of the Compensation Committee were Warner Dalhouse, Richard W. Roedel and Michael W. Wise. Mr. Dalhouse served as chairman of the committee. All of the members of Luna s Compensation Committee are independent, non-employee directors. Under the terms of its charter, the Compensation Committee is responsible for reviewing and approving compensation granted to Luna s executive officers, including Luna s Chief Executive Officer, or CEO, and those executive officers who report directly to the CEO and any other officers as determined under Section 16 of the Securities Exchange Act of 1934, as amended. In particular, the Compensation Committee reviews and approves for the CEO and the other executive officers the following components of compensation:

annual base salary;

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cash and equity bonuses, including the specific goals and amount;

other equity compensation, if any;

employment agreements, severance arrangements, and change in control provisions, as applicable;

signing bonus or payment of relocation costs, above normal Company policy, if applicable; and

any other material benefits, other than those provided to all employees.

The Compensation Committee also serves as the administrator for Luna s equity incentive plans. All stock-based awards, including new grants to existing employees and executive officers, as well as grants to new employees, are approved by the Compensation Committee. The Compensation Committee is also responsible for annually evaluating the performance of Luna s executive officers.

Luna generally attempts to align Luna s overall executive compensation with other publicly-traded peer companies who share similar characteristics. Because of Luna s diversified product and service offerings, Luna believes Luna s peer group includes a broad range of technology and growth companies with whom Luna competes for executive talent. Data on compensation practices at such companies has historically been gathered for Luna by Luna s compensation consultant, Radford, through searches of publicly available information, including subscription databases and Securities and Exchange Commission filings. Luna uses such information primarily to help guide decisions on base salary, target bonuses and equity-based awards.

The Compensation Committee has the authority to retain its own compensation consultant and to obtain advice and assistance from internal or external legal, accounting or other advisors as it sees fit. The Compensation Committee engaged an independent third-party compensation consultant, Radford, in 2013 to conduct a competitive peer group analysis of Luna s current executive compensation program to provide Luna with insights and market data on executive and director compensation matters, both generally and within Luna s industry. In 2013, Radford compared the salary, target cash incentives, and equity compensation of Luna s executive officers against an identified peer group of publicly traded companies. As a result of its analysis, in 2013, Radford made recommendations to the Compensation Committee that were intended to bring the compensation elements paid to Luna s executive officers towards the median of the identified peer companies. In 2014, the Compensation Committee considered Radford s 2013 analysis in its deliberations but did not retain Radford.

Executive Compensation Program

As described above, Luna s performance-oriented compensation program consists of base salary, annual cash bonuses, long-term equity incentives, such as restricted stock awards and stock option grants, benefits and, for certain senior executive officers, severance and termination protection. Luna believes that appropriately balancing the total compensation package and ensuring the viability of each component of the package is necessary in order to provide compensation that is competitive and to attract and retain talent. As a small company, Luna also tries to optimize the mix of components to make such compensation programs cost effective for it.

The Compensation Committee intends for Luna s compensation program to provide basic elements that ensure that management is fairly remunerated and has reasonable security so that the management team can perform at its best

and take prudent risks. The committee believes that it does not use highly leveraged short-term incentives that drive high risk investments at the expense of Luna s long-term value.

Luna s Compensation Committee typically evaluates the performance of each executive officer annually, based on the achievement of both corporate goals and individual qualitative performance objectives and makes its compensation decisions accordingly. Total compensation for Luna s executive officers may vary significantly from year to year based on Company, divisional and individual performance. Further, the value of equity-based awards to Luna s executives will vary based on fluctuation in Luna s stock price from time to time.

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The following is a more detailed explanation of the primary components of Luna s executive compensation program.

Base Salary

Base salary is generally determined by considering competitive salary data and individual job performance. In determining base salary, Luna primarily relies on factors such as job performance, skill set, prior experience, past levels of compensation, seniority, pay levels of similarly situated positions internally, alternative opportunities that may be available to executives, retention, and market conditions generally. Base salaries for executive officers are reviewed at least annually. In each case, Luna takes into account the results achieved by the executive, his future potential, the scope of the officer s responsibilities and the depth of his experience. Luna does not apply specific formulas to determine annual pay increases, if any, and Luna s Compensation Committee attempts to make decisions regarding changes in base salary in the context of other short-term and long-term compensation components. Approved increases in base salary are effective upon approval by the Compensation Committee, generally in the first quarter of the year.

In May 2014, the Compensation Committee approved annual increases in base salaries, for the named executive officers as follows:

Name	2013 Base Salary*	2014 Base Salary*	% Increase
My E. Chung, Chief Executive Officer	$ 324,500	$ 334,235	3%
Dale E. Messick, Chief Financial Officer	$ 226,600	$ 233,400	3%
Scott A. Graeff, Chief Strategy Officer	$ 216,500	$ 238,150	10%

* These base salaries represent the salaries in effect following the Compensation Committee s annual salary determinations for the respective year. Because the increases in base salaries resulting from these determinations, in each case, were effective mid-year, the named executive officers actual salaries for 2013 and 2014, as reflected in the Summary Compensation Table, are less than the base salaries reflected above.

Cash Incentive Bonuses

In February 2014, Luna s Compensation Committee adopted a senior management incentive plan for fiscal year 2014. Under the terms of the incentive plan, certain of Luna s employees were eligible to receive bonus payments based upon a target percentage equal to 50% of their respective salaries for 2014. The 2014 senior management incentive plan was based upon whether Luna achieved a specified strategic goal or specified financial performance metrics. The amount of the bonus was to be based upon the timing of the closing of a strategic transaction or the achievement of adjusted operating income (loss) exceeding a specified amount. The Compensation Committee selected these metrics because the committee believed them to be the appropriate indicators of success in the execution of Luna s strategic and operating plans and achievement of key corporate goals and because these factors are critical to increasing the value of Luna s common stock.

For the adjusted operating income (loss) objective, minimum, target and maximum levels of achievement were possible. At the minimum level of achievement, the officer would receive a payout of 10% of the target percentage. At the target level of achievement, the officer would receive a payout of 100% of the target percentage. At the maximum level of achievement, the officer would receive a payout of 150% of the target percentage. For financial performance

values falling between the minimum and target levels, or between the target and maximum levels, award amounts would be interpolated on a linear basis. The minimum, target, maximum and actual levels of achievement are reflected in the table below.

Metric	Minimum Achievement Level (5% of salary)	Target Achievement Level (50% of salary)	Maximum Achievement Level (75% of salary)	Actual Performance Level
Operating loss	$ 4.2 million	$ 3.8 million	$ 3.0 million	$ 4.5 million

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For the strategic transaction objective, target and maximum levels of achievement were possible, based upon the timing of closing the strategic transaction. At the target level of achievement, which was a closing by early March 2015, the officer would receive a payout of 100% of the target percentage. At the maximum level of achievement, which was a closing by September 30, 2014, the officer would receive a payout of 150% of the target percentage.

Luna s Compensation Committee determined that Luna will have achieved its strategic goal under the 2014 plan upon the completion of the Merger, by virtue of the Merger Agreement being executed in January 2015. Because stockholder approval is required, the Merger requires a substantial delay between execution of the Merger Agreement and closing. Accordingly, in the event of the completion of the Merger, bonus payments will be awarded to Luna s named executive officers under the 2014 plan at the target level. The following table sets forth the bonus payments approved by Luna s Compensation Committee for Luna s named executive officers subject to the completion of the Merger:

Name	Bonus Payable
My E. Chung, Chief Executive Officer	$ 165,292
Dale E. Messick, Chief Financial Officer	$ 115,425
Scott A. Graeff, Chief Strategy Officer	$ 115,016

Equity Incentives

Consistent with Luna s compensation philosophy, Luna s Compensation Committee believes that equity awards can be a significant motivator in attracting, retaining and rewarding the success of management employees by providing compensation with long-term vesting requirements and linking the ultimate value of those awards to stockholder returns. This component may include both grants of restricted common stock and stock options. Similar to base salary increases, options may also be granted in connection with promotions or significant changes in responsibility. Although grants of stock-based awards can impact Luna s operating results, Luna believes that long-term equity-based compensation can be an important element of Luna s overall compensation program because it helps focus Luna s executives on Luna s long-term financial and operational performance and also aligns the interests of Luna s executives with those of Luna s stockholders. The potential financial value offered through such options is also an important retention tool.

For stock options granted prior to February 2012, the grants typically vested over a period of five years, with 40% vesting on the two-year anniversary of the date of grant, and the remaining 60% vesting in 36 monthly installments thereafter. This vesting schedule was intended to help Luna maintain eligibility for Small Business Innovative Research, or SBIR, grants and also to minimize the short-term dilution to Luna s stockholders caused by the exercise of employee stock options. To maintain Luna s eligibility for SBIR grants, Luna must be at least 51% owned and controlled by U.S. citizens or permanent resident aliens, among other conditions.

In February 2012, the Compensation Committee determined, following consultation with Radford, that future employee stock options should vest monthly over a period of four years (thus with no cliff vesting) in order for Luna to better incentivize and retain Luna s employees. Stock options generally expire ten years from the date of the grant. Stock options are granted with an exercise price equal to the closing price of Luna s stock on the grant date, except for incentive stock options granted to employees who are beneficial owners of more than 10% of Luna s common stock. Any incentive stock options granted to a holder of greater than 10% of Luna s outstanding common stock have an exercise price equal to 110% of the closing price on the date of grant.

Since 2009, Luna s Compensation Committee has typically approved stock option grants to new hires and relied predominantly on cash-based annual incentive programs for future incentive compensation, rather than making further equity grants to Luna s named executive officers. As part of its advice to the Compensation Committee in 2013, Radford recommended that Luna continues making periodic equity grants to Luna s executives as part of

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moving total compensation toward the median for Luna s peer group and that Luna make the grants in the form of restricted stock. In May 2014, the Compensation Committee granted a total of 209,000 shares of restricted stock to Luna s named executive officers, as follows:

Name	Shares of Restricted Stock
My E. Chung, Chief Executive Officer	140,000
Dale E. Messick, Chief Financial Officer	34,500
Scott A. Graeff, Chief Strategy Officer	34,500

These shares of restricted stock vest annually over a four-year period.

Luna does not time the granting of Luna s restricted stock relative to any favorable or unfavorable news that Luna releases. Restricted stock or stock options for new employees, including executive officers, are generally awarded at the first regular meeting of the Compensation Committee following the employee s hire date, or, in certain limited cases, at the first regular meeting of the Compensation Committee following the prospective employee s written acceptance of an employment offer. In the latter case, the grant date of the stock options is the date of the employee s first day of employment, with the exercise price equal to the closing price of the stock that day. All other restricted stock or option awards are also made at regularly scheduled committee meetings. The Compensation Committee s regular meeting schedule is established several months in advance of each meeting. Thus, proximity of any option or stock award to an earnings announcement or other market events is coincidental.

Luna does not have any requirements for Luna s named executive officers to hold minimum amounts of Luna s common stock.

Change in Control Benefits and Severance

The Compensation Committee believes that change in control and severance benefits play an important role in attracting and retaining valuable executives. The payment of such benefits also ensures a smooth transition in management following a change in control by giving the named executive officer the incentive to remain with Luna through the transition period, and, in the event the officer s employment is terminated as part of the transition, by compensating the officer with a degree of financial and personal security during a period in which he is likely to be unemployed. As a result, Luna has historically maintained employment agreements with Luna s named executive officers that provide for severance payments, continuation of group benefits and accelerated vesting of certain unvested equity awards if Luna s named executive officers employment is terminated by Luna without cause or by the named executive officers for good reason, including in circumstances involving a change in control of Luna. Additionally, pursuant to the standard terms of Luna s restricted stock awards under Luna s 2006 Equity Incentive Plan, any unvested shares of restricted stock that Luna grants to Luna s named executive officers similarly are subject to accelerated vesting if Luna s named executive officers employment is terminated by Luna without cause or by the named executive officers for good reason.

In March 2012, Luna entered into amended and restated employment agreements with each of Luna s named executive officers to increase the benefits to the named executive officers in the event that Luna complete or, in certain circumstances, contemplate but do not complete, a change in control transaction. The Compensation Committee believed that these provisions were appropriate in order to encourage stability among Luna s senior management in the event that explore one or more strategic transactions in order to maximize stockholder value. The material additional

benefits provided to Luna s named executive officers by these amended and restated employment agreements are as follows:

- acceleration of unvested equity awards was increased from 12 months of additional vesting to full vesting in the event of the named executive officer s termination of employment without cause or for good reason (each, as defined in the employment agreements) within 12 months following a change in control transaction;

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payment of a retention bonus equal to one-half of the named executive officer s then current annual salary and target bonus in the event that Luna s board of directors engages an investment bank or similar firm for purposes that include exploring a change in control transaction, but no such transaction is consummated within 24 months thereafter; and

payment of a change in control bonus equal to the named executive officer s then current annual salary and target bonus in the event of a change in control transaction, which change in control payment would be partially reduced if the change in control occurs within one year after the named executive officer s receipt of a retention bonus, as described above.

The Compensation Committee s analysis indicates that the change in control and severance provisions of Luna s amended employment agreements with Luna s named executive officers are consistent with the provisions and benefit levels of Luna s peer companies, and it believes these arrangements to be reasonable.

Other Benefits

In general, Luna s practice is to provide commensurate benefits to employees at all levels of Luna s organization. Consistent with this practice, the following are the primary benefits provided to Luna s full-time employees, including Luna s named executive officers:

health, vision and dental insurance including, at the employee s option, Flexible Spending Accounts and/or a Health Savings Account;

term life insurance and optional supplemental life insurance;

optional supplemental health coverage;

short- and long-term disability benefits;

401(k) plan, under which Luna matches 25% of an employee s contributions up to 10% of the employee s total cash compensation, which match vests over a period of three years; and

paid time off and holidays.

Luna believes that these benefits are consistent with those offered by other companies and specifically with those companies with which Luna competes for employees.

Future Trends

Luna intends to continue Luna s strategy of paying competitive short-term cash compensation and offering long-term incentives through equity-based compensation programs that align individual compensation with corporate financial performance. Luna believes that Luna s total compensation package is reasonable in the aggregate. Luna also believes

that, in light of Luna s compensation philosophy, total compensation for Luna s executives should continue to consist of base salary, annual bonus awards (consisting of cash, stock or a combination of both), long-term equity based compensation, and certain other benefits.

Luna anticipates that the competitive posture of Luna s total direct compensation will vary year to year as a result of Luna s performance, as well as the performance of peer group companies and the market as a whole. Accordingly, the magnitude and weighting of different compensation components will likely evolve over time.

Tax Considerations

Section 162(m).

Limitations on deductibility of compensation may occur under Section 162(m) of the Internal Revenue Code, which generally limits the tax deductibility of compensation paid by a public company to its chief executive officer and certain other highly compensated executive officers to $1 million in the year the compensation becomes taxable to the executive officer. There is an exception to the limit on deductibility for performance-based compensation that meets certain requirements.

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The portion of the compensation taxable to Luna s Chief Executive Officer and other executive officers in 2013 that did not qualify for an exemption from Section 162(m) did not exceed the $1 million limit per officer. Luna periodically reviews the potential consequences of Section 162(m) and may structure the performance-based portion of Luna s executive compensation to qualify for an exemption from Section 162(m). However, Luna reserves the right to use Luna s judgment to authorize compensation payments that do not comply with the exemptions in Section 162(m) when Luna believes that such payments are appropriate and in the best interests of Luna s stockholders, after taking into account changing business conditions or the officer s performance.

Section 409A.

Under Section 409A of the Internal Revenue Code, if a named executive officer is entitled to non-qualified deferred compensation benefits that are subject to Section 409A, and such benefits do not comply with Section 409A, the officer would be subject to adverse tax treatment, including accelerated income recognition (in the first year that benefits are no longer subject to a substantial risk of forfeiture) and a 20% penalty tax pursuant to Section 409A. With respect to equity and cash compensation, Luna generally seeks to structure such awards so that they do not constitute deferred compensation under Section 409A, thereby avoiding penalties and taxes on such compensation applicable to deferred compensation.

Luna Summary Compensation Table

The following table sets forth the summary information concerning compensation earned during the last three completed fiscal years by all persons who served as Luna s principal executive officer during 2014 and Luna s two next most highly compensated executive officers during 2014 who were serving as executive officers as of December 31, 2014. Luna refers to these persons as Luna s named executive officers elsewhere in this joint proxy statement/prospectus. The following table includes all compensation earned by the named executive officers for the respective periods, regardless of whether such amounts were actually paid during the period.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
My E. Chung,	2014	330,584		196,000(8)		167,117(5)	14,450(2)(3)	708,151
President and Chief Executive	2013	319,749		176,400(7)		159,677(4)	14,328(2)(3)	670,154
Officer	2012	313,333			232,050(1)		19,042(2)(3)	564,425
Dale E. Messick,	2014	230,850		48,300(8)		116,700(5)	6,143(2)	401,693
Chief Financial Officer	2013	223,300		43,470(7)		111,513(4)	4,755(2)	383,038
	2012	218,334			58,012(1)		4,972(2)	281,318
Scott A. Graeff,	2014	230,031		48,300(8)		119,075(5)	4,760(2)	402,166
Chief Strategy Officer	2013	213,350	50,000(6)	43,470(7)		106,544(4)	4,738(2)	418,102
	2012	209,500			58,012(1)		4,939(2)	272,451

(1) Amounts represent the aggregate grant date fair value of grants made in the indicated year, as calculated in accordance with ASC Topic 718 and as further described in Note 8 of the Notes to Luna s Consolidated Financial

Statements included elsewhere in this joint proxy statement/prospectus.

(2) Represents or includes Luna s 401(k) plan matching contributions and policy premiums paid for life insurance for the benefit of the officer.

(3) All Other Compensation for Mr. Chung for 2012, 2013 and 2014 includes $15,330, $13,908 and $14,030, respectively, paid to Mr. Chung as a housing allowance.

(4) Represents amounts paid to the officer under Luna s 2013 senior management incentive plan upon achievement of a specified strategic objective.

(5) Represents amounts to be paid to the officer under Luna s 2014 senior management incentive plan based on the assumption that the Merger will be completed.

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(6) Luna awarded a special bonus of $50,000 to Scott Graeff, Luna s Chief Strategy Officer, in recognition of his efforts in consummating the sale of Luna s Secured Computing and Communications group to MacAulay-Brown, Inc.

(7) In March 2013, Luna granted a total of 243,500 shares of restricted stock to Luna s named executive officers as a part of periodic equity grants to these executives. Each of Mr. Messick and Mr. Graeff received 34,500 shares, which is equal to $43,470 divided by $1.26 per share, the closing price of Luna s common stock as reported on the NASDAQ Capital Market on March 28, 2013, the date of grant. Mr. Chung received 140,000 shares, which is equal to $176,400 divided by $1.26 per share, the closing price of Luna s common stock as reported on the NASDAQ Capital Market on March 28, 2013, the date of grant. In accordance with SEC rules, this amount is reported in the Stock Awards column for 2013 in the table above.

(8) In May 2014, Luna granted a total of 209,000 shares of restricted stock to Luna s named executive officers as a part of periodic equity grants to these executives. Each of Mr. Messick and Mr. Graeff received 34,500 shares, which is equal to $48,300 divided by $1.40 per share, the closing price of Luna s common stock as reported on the NASDAQ Capital Market on May 19, 2014, the date of grant. Mr. Chung received 140,000 shares, which is equal to $196,000 divided by $1.40 per share, the closing price of Luna s common stock as reported on the NASDAQ Capital Market on May 19, 2014, the date of grant. In accordance with SEC rules, this amount is reported in the Stock Awards column for 2014 in the table above.

Luna Grants of Plan-Based Awards for 2014

The following table provides information with regard to potential cash bonuses for 2014 payable under Luna s senior management incentive plan and equity awards made in 2014.

		Estimated Possible Payouts Under Non-Equity Incentive Plan Awards (1)			All Other Stock Awards: Number of Shares of Stock or Units (#)	Grant Date Fair Value of Stock and Option Awards ($) (2)
Name	**Grant Date**	**Threshold $**	**Target $**	**Maximum $**		
My Chung		16,711	167,117	250,676		
	5/19/2014				140,000	196,000
Dale E. Messick		11,670	116,700	175,050		
	5/19/2014				34,500	48,300
Scott A. Graeff		11,908	119,075	178,613		
	5/19/2014				34,500	48,300

(1) In the table above, the Threshold column represents the smallest total bonus that would have been paid for 2014 to each named executive officer if Luna had achieved the threshold level of operating loss for 2014 and did not achieve the strategic objective, which would have resulted in a bonus equal to 5% of each officer s 2014 salary. The Target column represents the amount that would be paid to each named executive officer if, for the year, an operating loss for 2014 had been attained or Luna achieves its strategic objective. The Maximum column represents the largest total bonus that could have been paid to each named executive officer if, for the year, an Out Perform level of operating loss for 2014 was achieved or, alternatively, if Luna completed its strategic objective by September 30, 2014, resulting in a payout of 150% of the target percentage. In the event the Merger is completed, the strategic objective will be deemed to have been met and the bonuses payable at the target level

irrespective of achievement of operating loss.

(2) Amounts represent the aggregate grant date fair value of stock awards, as calculated in accordance with ASC Topic 718 and as further described in Note 8 of the Notes to Luna s Consolidated Financial Statements included elsewhere in this joint proxy statement/prospectus.

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Luna Outstanding Equity Awards at December 31, 2014

The following table shows all outstanding unexercised stock options and unvested stock awards held by Luna s named executive officers as of December 31, 2014.

	Option Awards				Stock Awards	
	Number of Securities Underlying Unexercised Options (#)		Option Exercise Price	Option Expiration	Number of Shares that have not vested	Market Value of Shares that have not vested
Name	Exercisable	Unexercisable	($)	Date	(#)	($)
My E. Chung	220,001	79,999(1)	2.16	4/25/2021		
	97,386	40,289(2)	1.68	2/28/2022		
					105,000(3)	149,100
					140,000(4)	198,800
Dale E. Messick	150,000		5.47	8/29/2016		
	75,000		3.42	12/20/2016		
	100,000		1.70	2/24/2019		
	24,459	10,072(2)	1.68	2/28/2022		
					25,875(3)	36,743
					34,500(4)	48,990
Scott A. Graeff	56,524		0.35	5/20/2015		
	22,610		0.35	6/3/2015		
	56,524		0.35	7/1/2015		
	90,437		0.35	8/1/2015		
	84,785		1.77	2/8/2016		
	10,000		3.69	2/27/2017		
	50,000		0.82	5/12/2019		
	24,459	10,072(2)	1.68	2/28/2022		
					25,875(3)	36,743
					34,500(4)	48,990

(1) Represent an option granted on April 25, 2011, the date on which Mr. Chung s employment commenced. This option vests with respect to 40% of these shares on the two-year anniversary of the grant date, with the remaining 60% vesting in 36 equal monthly installments thereafter.

(2) Represent unvested shares underlying an option granted on February 28, 2012. This option vests over four years in forty-eight equal monthly installments.

(3) Represents unvested shares underlying a restricted stock award issued on March 28, 2013. The restricted stock will vest annually over a four year period.

(4) Represents unvested shares underlying a restricted stock award issued on May 19, 2014, which will vest annually over a four year period.

Luna Option Exercises and Stock Vested During 2014

The table below sets forth information concerning the vesting of restricted stock for each named executive officer during 2014. Luna s named executive officers did not exercise any stock options during 2014.

	Stock Awards	
Name	**Number of Shares Acquired on Vesting (#)**	**Value Realized on Vesting ($)**
My E. Chung	35,000	49,700
Dale E. Messick	8,630	12,255
Scott A. Graeff	8,630	12,255

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Luna Employment Agreements and Potential Payments upon Termination or Change-In-Control

Luna currently has employment agreements with each of Luna s named executive officers as described below.

Employment Agreement with My E. Chung

In connection with his appointment as President and CEO, Luna entered into an employment agreement with Mr. Chung in April 2011. Pursuant to the employment agreement, Mr. Chung received a starting bonus of $50,000. In March 2012, Luna entered into an amended and restated employment agreement with Mr. Chung. This employment agreement, which had an initial term through March 31, 2013, automatically renewed on March 31, 2013 and March 31, 2014 for additional one-year periods and will continue to automatically renew for additional one year periods unless terminated by either party on 90 days prior notice.

Under the terms of the employment agreement, Mr. Chung is eligible to participate in Luna s senior management incentive plan for an annual discretionary cash bonus of at least 50% of his then current base salary, subject to the achievement of individual and corporate performance criteria to be determined by Luna s board of directors or Luna s Compensation Committee and set forth in the incentive plan.

The employment agreement provides that, in the event that his employment is terminated by Luna without cause or by him for good reason (each as defined in the employment agreement), subject to his entering into and not revoking a release in a form acceptable to Luna, he will be entitled to receive:

- a severance payment equal to the sum of his then current annual salary plus annual target bonus or 150% of such sum if the termination occurs within 12 months following a change in control transaction (as defined in the employment agreement);
- if he timely elects and remains eligible for continued coverage under COBRA, an amount equal to the health insurance premiums that Luna was paying on his behalf and on behalf of his covered dependents prior to the date of termination for a period of 12 months, or 18 months if the termination occurs within 12 months following a change in control transaction;
- acceleration of vesting of unvested stock options equal to the number of shares that would have vested if employment had continued for 12 months following the termination (or, if the termination occurred following a change in control transaction, all outstanding unvested stock options held by Mr. Chung will vest); and
- a cash payment for any unvested company matching contributions in his account under Luna s 401(k) plan and for any accrued but unpaid vacation.

Mr. Chung s employment agreement also provides for a retention payment equal to one-half of the sum of his then current annual salary plus annual target bonus, if Luna s board of directors engages an investment bank or similar firm for purposes that include exploring a change in control transaction, but no such transaction is consummated within 24 months thereafter. This retention payment would be payable in shares of Luna s common stock, if necessary to avoid a credit default.

In addition to the severance and retention payments described above, in the event a change in control occurs due to a sale of Luna s assets or a merger of Luna or an acquisition of Luna via tender offer, the employment agreement also provides that Mr. Chung will receive a payment equal to the sum of his annual salary plus annual target bonus. If this change in control occurs within one year after he has received a retention payment (as described above), however, then this change in control payment shall be subject to partial reduction.

In addition, the employment agreement provides for a temporary housing allowance to Mr. Chung for a period up to 24 months, which the Luna board of directors has extended to May 2016.

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Employment Agreement with Dale E. Messick

Luna previously entered into an employment agreement with Dale E. Messick to serve as Luna s Chief Financial Officer. In March 2012, Luna entered into an amended and restated employment agreement with Mr. Messick. This employment agreement, which had an initial term through March 31, 2013, automatically renewed on March 31, 2013 and March 31, 2014 for additional one-year periods and will continue to automatically renew for one year periods unless terminated by either party on 90 days prior notice.

Under the terms of the employment agreement, Mr. Messick is eligible to participate in Luna s senior management incentive plan for an annual discretionary cash bonus of at least 50% of his then current base salary, subject to the achievement of individual and corporate performance criteria to be determined by Luna s board of directors or Luna s Compensation Committee and set forth in the incentive plan.

The employment agreement provides that, in the event that his employment is terminated by Luna without cause or by him for good reason (each as defined in the employment agreement), subject to his entering into and not revoking a release in a form acceptable to Luna, he will be entitled to receive:

- a severance payment equal to 75% of the sum of his then current annual salary plus annual target bonus or equal to such sum if the termination occurs within 12 months following a change in control transaction (as defined in the employment agreement);
- if he timely elects and remains eligible for continued coverage under COBRA, an amount equal to the health insurance premiums that Luna was paying on his behalf and on behalf of his covered dependents prior to the date of termination for a period of nine months, or 12 months if the termination occurs within 12 months following a change in control transaction;
- acceleration of vesting of unvested stock options equal to the number of shares that would have vested if employment had continued for 12 months following the termination (or, if the termination occurred following a change in control transaction, all outstanding unvested stock options held by Mr. Messick will vest); and
- a cash payment for any unvested company matching contributions in his account under Luna s 401(k) plan and for any accrued but unpaid vacation.

Mr. Messick s employment agreement also provides for a retention payment equal to one-half the sum of his then current annual salary plus annual target bonus if Luna s board of directors engages an investment bank or similar firm for purposes that include exploring a change in control transaction, but no such transaction is consummated within 24 months thereafter. This retention payment would be payable in shares of Luna s common stock, if necessary to avoid a credit default.

In addition to the severance and retention payments described above, in the event a change in control occurs due to a sale of Luna s assets or a merger of Luna or an acquisition of Luna via tender offer, the employment agreement also provides that Mr. Messick will receive a payment equal to the sum of his annual salary plus annual target bonus. If this change in control occurs within one year after he has received a retention payment (as described above), however,

then this change in control payment shall be subject to partial reduction.

Employment Agreement with Scott A. Graeff

On July 14, 2006, Luna entered into an employment agreement with Scott A. Graeff as Luna s Chief Financial Officer. This agreement was subsequently amended and restated, effective as of January 1, 2007, to reflect a change to Mr. Graeff s base compensation and a previous change to Mr. Graeff s title to Chief Commercialization Officer. In March 2012, Luna entered into an amended and restated employment agreement with Mr. Graeff. This employment agreement, which had an initial term through March 31, 2013, automatically renewed on March 31, 2013 and March 31, 2014 for additional one-year periods and will continue to automatically renew for additional one-year periods unless terminated by either party on 90 days prior notice.

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Under the terms of the employment agreement, Mr. Graeff is eligible to participate in Luna s senior management incentive plan for an annual discretionary cash bonus of at least 50% of his then current base salary, subject to the achievement of individual and corporate performance criteria to be determined by Luna s board of directors or Luna s Compensation Committee and set forth in the incentive plan.

The employment agreement provides that, in the event that his employment is terminated by Luna without cause or by him for good reason (each as defined in the employment agreement), subject to his entering into and not revoking a release in a form acceptable to Luna, he will be entitled to receive:

- a severance payment equal to 75% of the sum of his then current annual salary plus annual target bonus or equal to such sum if the termination occurs within 12 months following a change in control transaction (as defined in the employment agreement);
- if he timely elects and remains eligible for continued coverage under COBRA, an amount equal to the health insurance premiums that Luna was paying on his behalf and on behalf of his covered dependents prior to the date of termination for a period of nine months, or 12 months if the termination occurs within 12 months following a change in control transaction;
- acceleration of vesting of unvested stock options equal to the number of shares that would have vested if employment had continued for 12 months following the termination (or, if the termination occurred following a change in control transaction, all outstanding unvested stock options held by him will vest); and
- a cash payment for any unvested company matching contributions in his account under Luna s 401(k) plan and for any accrued but unpaid vacation.

Mr. Graeff s employment agreement also provides for a retention payment equal to one-half the sum of his then current annual salary plus annual target bonus if Luna s board of directors engages an investment bank or similar firm for purposes that include exploring a change in control transaction, but no such transaction is consummated within 24 months thereafter. This retention payment would be payable in shares of Luna s common stock, if necessary to avoid a credit default.

In addition to the severance and retention payments described above, in the event a change in control occurs due to a sale of Luna s assets or a merger of Luna or an acquisition of Luna via tender offer, the employment agreement also provides that Mr. Graeff will receive a payment equal to the sum of his annual salary plus annual target bonus. If this change in control occurs within one year after he has received a retention payment (as described above), however, then this change in control payment shall be subject to partial reduction.

Terms of Restricted Stock Awards under Luna s 2006 Equity Incentive Plan

In addition to the benefits payable to Luna s named executive officers under their employment agreements described above, each of Luna s named executive officers holds shares of restricted common stock granted pursuant to Luna s 2006 Equity Incentive Plan that provide for the accelerated vesting of unvested shares under certain circumstances. As described in the Summary Compensation Table above, Messrs. Messick and Graeff hold restricted stock awards

granted in March 2011 in respect of their service to Luna in 2010 during a management transition, which shares vested in 36 equal monthly installments following the date of grant. Additionally, in March 2013, Luna s Compensation Committee approved grants of restricted stock to each of Luna s named executive officers in connection with its 2013 compensation decisions, which shares will vest in four equal annual installments following the date of grant.

Pursuant to the standard terms of Luna s restricted stock awards under Luna s 2006 Equity Incentive Plan, any unvested shares of restricted stock held by Luna s named executive officers are subject to accelerated vesting if Luna s named executive officers employment is terminated by Luna without cause or by the named executive officers for good reason, in each case, as defined in the named executive officers respective employment agreement.

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Termination of Employment Not Within 12 Months Following a Change in Control

Based on the terms of the employment agreements with Messrs. Chung, Messick and Graeff, the terms of restricted stock awards and their respective 2014 salaries, assuming (i) the employment of each of the executive officers had been terminated as of December 31, 2014, (ii) the termination was by Luna without cause or by the executive for good reason and (iii) the termination was not within 12 months following a change in control transaction, each named executive officer would receive the benefits set forth in the table below.

Name	Cash Severance ($)	Accrued Vacation ($)	Healthcare Benefits ($)	Intrinsic Value of Accelerated Stock Options ($) (1)	Value of Accelerated Restricted Stock Awards ($) (2)	Total Potential Payments ($)
My E. Chung	501,353	13,176	9,720		99,400	623,649
Dale E. Messick	291,750	17,336	10,183		24,495	343,764
Scott A. Graeff	297,687	20,494	4,628		24,495	347,304

(1) The intrinsic value of accelerated stock options is the difference, if positive, between the $1.42 closing trading price of Luna s common stock on December 31, 2014, the last trading day of the year, and the exercise price, multiplied by the number of unvested options that would have vested upon termination.

(2) The value of restricted stock awards reflects the market value, based on the $1.42 closing trading price of Luna s common stock on December 31, 2014, of shares of unvested restricted stock that would have vested upon termination.

Payments in Connection With a Change in Control; Termination of Employment Within 12 Months Following a Change in Control

Based on the terms of the current employment agreements with Messrs. Chung, Messick and Graeff, and the terms of their restricted stock awards and based on their respective 2014 salaries, the table below sets forth the benefits each named executive officer would receive in connection with a change in control, as well as such additional benefits that would be payable upon each executive officer s termination, assuming such termination (i) occurred on December 31, 2014 and within 12 months following the change in control transaction and (ii) was by Luna without cause or by the executive for good reason.

Name	Payments Upon Change in Control	Additional Payments in Connection with Termination of Employment within 12 months following Change in Control					
	Cash Change in Control Payment	Cash Severance ($)	Accrued Vacation ($)	Healthcare Benefits ($)	Intrinsic Value of Accelerated	Value of Accelerated Restricted Stock	Total Potential Payments ($)

	($) (1)				Stock Options ($) (2)	Awards ($) (3)	
My E. Chung	501,353	752,029	13,176	14,580		347,900	1,629,038
Dale E. Messick	350,100	350,100	17,336	10,183		85,733	813,452
Scott A. Graeff	357,225	357,225	20,494	4,628		85,733	811,055

(1) If the change in control occurs within one year after the executive officer receives a retention payment, as described in each executive officer s employment agreement, the change in control payment listed would be subject to partial reduction. See Employment Agreements and Potential Payments upon Termination or Change in Control for a discussion of the retention payments.

(2) The intrinsic value of accelerated stock options is the difference, if positive, between the $1.42 closing trading price of Luna s common stock on December 31, 2014, the last trading day of the year, and the exercise price, multiplied by the number of unvested options that would have vested upon termination.

(3) The value of restricted stock awards reflects the market value, based on the $1.42 closing trading price of Luna s common stock on December 31, 2014, of shares of unvested restricted stock that would have vested upon termination.

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CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

It is anticipated that the policies and procedures of the combined company with respect to the review, approval or ratification of related-person transactions will be substantially similar to Luna s current policies and procedures on such matters.

Luna Related Person Transactions

Policies and Procedures for Transactions with Related Persons

Related person transactions, which Luna defines as all transactions involving an executive officer, director, or a holder of more than five percent of Luna s common stock, including any of their immediate family members and any entity owned or controlled by such persons, are reviewed and approved by the Audit Committee of Luna s board of directors and a majority of disinterested directors on Luna s board of directors.

In any transaction involving a related person, Luna s Audit Committee and board of directors consider all of the available material facts and circumstances of the transaction, including:

- the direct and indirect interests of the related persons;
- in the event the related person is a director (or immediate family member of a director or an entity with which a director is affiliated), the impact that the transaction will have on a director s independence;
- the risks, costs and benefits of the transaction to Luna; and
- whether any alternative transactions or sources for comparable services or products are available.

After considering all such facts and circumstances, Luna s Audit Committee and board of directors determine whether approval or ratification of the related person transaction is in Luna s best interests. For example, if Luna s Audit Committee determines that the proposed terms of a related person transaction are reasonable and at least as favorable as could have been obtained from unrelated third parties, it will recommend to Luna s board of directors that such transaction be approved or ratified. Alternatively, if a related person transaction will compromise the independence of one of Luna s directors, the Audit Committee may recommend that Luna s board of directors reject the transaction if it could affect Luna s ability to comply with securities laws and regulations or NASDAQ listing requirements.

Each transaction described below was approved or ratified by Luna s Audit Committee or the disinterested members of Luna s board of directors after making a determination that the transaction was on terms no less favorable than those Luna could have obtained from unrelated third parties.

The policies and procedures described above for reviewing and approving related person transactions are not set forth in writing. The charter for Luna s Audit Committee, however, provides that one of the committee s responsibilities is to review and approve in advance any proposed related person transactions.

Transactions and Relationships with Directors, Executive Officers and Five Percent Stockholders

Other than compensation described in Director and Executive Compensation of Luna elsewhere in this joint proxy statement/prospectus and as described below, Luna believes that there has not been any other transaction or series of transactions during 2014 or 2015 to which Luna was or is to be a participant in which the amount involved exceeds $120,000 and in which any director, executive officer or holder of more than five percent of Luna s common stock, or members of any such person s immediate family, had or are expected to have a direct or indirect material interest.

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Carilion Lease

Luna has entered into a lease agreement with Carilion Medical Center, an affiliate of Carilion Clinic, for Luna s corporate headquarters in Roanoke, Virginia. Under the terms of the lease agreement, as amended to date, Luna leases a total of 24,000 square feet of office space. During 2013 and 2014, Luna paid Carilion Medical Center rent of $632,339 and $384,000, respectively. As a part of the 2010 transaction with Carilion described below, Luna agreed to extend this lease on customary and reasonable terms through December 31, 2015, and Luna also agreed not to exercise Luna s right to terminate the lease prior to expiration of its term. On March 1, 2013, Luna subleased half of Luna s leased space through April 30, 2014 to MacAulay-Brown, Inc. in connection with the sale of Luna s Secure Computing and Communications group. On March 21, 2013, Luna amended the lease on Luna s Roanoke office to reduce the square footage covered by the lease by approximately half and reduce the rental rates, in each case to be effective as of January 1, 2014 and to extend the term of the lease through December 2018. On December 13, 2013, Luna amended the lease to delay the effectiveness of the reduction in square footage covered by the lease (the half subleased to MacAulay-Brown, Inc.) from January 1, 2014 to March 1, 2014, with the option to further delay such effectiveness by up to another two months, which option was exercised. On January 20, 2015, Luna and Carilion amended the lease to give Luna the right to terminate on 30 days notice and to provide that, in any event, the term of the lease will end by April 30, 2015.

Carilion Clinic is the beneficial owner of more than five percent of Luna s outstanding common stock. Until June 30, 2011, Dr. Edward Murphy, a member of Luna s board of directors until May 2013, served as the Chief Executive Officer of Carilion Clinic.

Carilion Notes, Warrants and the Exchange of Carilion Notes for Preferred Stock

On May 21, 2008, Luna and Carilion Clinic amended each of the five Senior Convertible Promissory Notes dated December 30, 2005 and held by Carilion Clinic. The amendments extended the maturity dates of those notes from December 30, 2009 to December 31, 2012.

As consideration for the amendments to these notes, Luna granted Carilion Clinic a warrant to purchase 10,000 shares of Luna s common stock. The exercise price of the warrant was $7.98 per share, the closing price of Luna s common stock as reported on the NASDAQ Global Market on May 21, 2008. This warrant is currently exercisable and originally had an exercise period through December 31, 2017.

In January 2010, Luna entered into a transaction with Carilion Clinic in which Carilion agreed to exchange all of its Senior Convertible Promissory Notes, including all accrued but unpaid interest, for (i) 1,321,514 shares of Luna s newly designated Series A Convertible Preferred Stock and (ii) an additional warrant to purchase 356,000 shares of Luna s common stock at an exercise price of $2.50 per share. This warrant is currently exercisable and has an exercise period through December 31, 2020. Luna also agreed to reduce the exercise price of a prior common stock warrant held by Carilion from $7.98 to $2.50 per share and to extend its expiration date to December 31, 2020. As of the date of the exchange, the outstanding principal balance of the Senior Convertible Promissory Notes was $5.0 million, and the aggregate accrued but unpaid interest on the notes was $1.2 million.

Indemnification Agreements with Officers and Directors

Luna has entered into indemnity agreements with certain of Luna s officers and directors that provide, among other things, that Luna will indemnify such officer or director, under the circumstances and to the extent provided for therein, for expenses, damages, judgments, fines and settlements he may be required to pay in actions or proceedings that he is or may be made a party by reason of his position as a director, officer or other agent of Luna, and otherwise

to the fullest extent permitted under Delaware law and Luna s bylaws. Upon completion of the Merger, Luna will enter into indemnity agreements with the directors who are joining the Luna board as described under Directors and Executive Officers of the Combined Company Following the Merger on page 191.

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API Related Person Transactions

API s written Code of Business Conduct and Ethics provides that all conflicts of interest, including transactions with executive officers, directors or their family members, are prohibited unless approved by API s board of directors or a Committee of the Board. In addition, all directors and executive officers are required to annually complete a questionnaire to identify their related interests and are required to notify API of any changes in that information. These reports are reviewed by API and, as appropriate, API s outside counsel. If any director, executive officer or other employee of API becomes aware of a conflict of interest or potential conflict of interest, such person is required to bring it to the attention of a supervisor, manager, an officer of API, the Audit Committee or other appropriate personnel, as appropriate.

During fiscal year 2014, there were no transactions between API or any of its subsidiaries and any Related Person (as that term is defined in Item 404 of Regulation S-K), including the API director who will be a director of the combined company, that would be required to be reported pursuant to Item 404 of Regulation S-K.

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PRINCIPAL STOCKHOLDERS OF THE COMBINED COMPANY

The following table and the related notes present certain information with respect to the beneficial ownership of the combined company upon consummation of the Merger, by:

- each person expected to be a director or named executive officer of the combined company;
- each person or group who is expected by the management of the combined company to be the beneficial owner of more than 5% of the common stock of the combined company upon the consummation of the Merger; and
- all persons expected to be directors or executive officers of the combined company as a group.

The percentage of beneficial ownership calculation is based on an estimated 26,975,577 total outstanding shares following the Merger, which is the sum of (i) 15,095,017 shares of Luna common stock outstanding on February 28, 2015 and (ii) an estimated 11,880,560 shares to be issued to the API stockholders upon completion of the Merger.

Beneficial ownership is determined in accordance with the rules of the SEC. Except as indicated by the footnotes below, Luna believes, based on the information furnished to Luna, that the persons and entities named in the table below will have sole voting and investment power with respect to all shares of the common stock that they will beneficially own upon completion of the Merger, subject to applicable community property laws. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of common stock subject to options, restricted stock units, warrants or other exercisable or convertible securities held by that person that are currently exercisable or convertible or exercisable or convertible within 60 days of February 28, 2015 are deemed outstanding, but are not deemed outstanding for purposes of computing the percentage ownership of any other person. Unless otherwise indicated, these shares do not include any stock, options or restricted stock units awarded after February 28, 2015.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Luna Innovations Incorporated, 1 Riverside Circle, Suite 400, Roanoke, Virginia 24016.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percent of Class
Carilion Clinic (1) c/o Carilion Roanoke Memorial Hospital First Floor Roanoke, Virginia 24033	4,329,687	14.9%
Hansen Medical, Inc. 800 East Middlefield Road Mountain View, CA 94043	1,389,369	5.2%

My E. Chung (2)	618,848	2.3%
Dale E. Messick (3)	460,808	1.7%
Scott A. Graeff (4)	503,750	1.8%
John B. Williamson, III (5)	303,647	1.1%
Ed J. Coringrato Jr.		
Richard W. Roedel (6)	746,167	2.7%
Michael W. Wise (7)	609,633	2.2%
Gary Spiegel		
Donald Pastor (8)	74,080	*
All directors and executive officers as a group (10 persons) (9)	3,505,081	11.9%

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* Represents less than 1% of the outstanding shares of common stock.

(1) Includes 1,321,514 shares of Series A Convertible Preferred Stock, which are currently convertible into an equivalent number of shares of common stock, as well as 393,277 shares of common stock payable as accrued dividends on the Series A Convertible Preferred Stock that will be issued upon the holder s request. Includes 366,000 shares of common stock underlying warrants that are exercisable within 60 days of February 28, 2015. Nancy Agee, Don Lorton and Rob Vaughan share voting and investment power over the shares beneficially owned by Carilion Clinic.

(2) Consists of (i) 349,348 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015 and (ii) 210,000 shares of restricted stock that are not vested, and will not vest, within 60 days of February 28, 2015 (Mr. Chung is deemed to have voting, but not dispositive, power over such shares).

(3) Includes (i) 352,336 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015 and (ii) 51,705 shares of restricted stock that are not vested, and will not vest, within 60 days of February 28, 2015 (Mr. Messick is deemed to have voting, but not dispositive, power over such shares).

(4) Includes (i) 398,216 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015; and (ii) 51,750 of restricted stock that are not vested, and will not vest, within 60 days of February 28, 2015 (Mr. Graeff is deemed to have voting, but not dispositive, power over such shares).

(5) Includes 210,920 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015 and 84,727 shares of common stock issuable pursuant to restricted stock units held under Luna s Non-Employee Director s Deferred Compensation Plan that are payable under circumstances within the control of the holder.

(6) Includes 646,921 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015, and 94,722 shares of common stock issuable pursuant to restricted stock units held under Luna s Non-Employee Director s Deferred Compensation Plan that are payable under circumstances within the control of the holder.

(7) Includes 156,564 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015, and 40,229 shares of common stock issuable pursuant to restricted stock units held under Luna s Non-Employee Director s Deferred Compensation Plan that are payable under circumstances within the control of the holder. Also includes 12,840 shares held by Mr. Wise s family members over which Mr. Wise shares voting and investment power.

(8) Upon consummation of the Merger, Mr. Pastor will be the beneficial owner of 74,080 shares of Luna Common Stock, which includes 36,957 shares of Luna s Common Stock that will be jointly held by Mr. Pastor and his wife and 37,123 shares subject to options that are immediately exercisable or exercisable within 60 days of February 28, 2015.

(9) Includes an aggregate of: (i) 219,678 shares of common stock issuable pursuant to restricted stock units issued under Luna s Non-Employee Director s Deferred Compensation Plan that are payable under circumstances within the control of the holders; (ii) 2,273,163 shares of common stock issuable under stock options that are immediately exercisable or exercisable within 60 days of February 28, 2015 (this total includes 121,735 shares issuable under stock options held by Talfourd H. Kemper, Jr., an executive officer of Luna who is not a named executive officer); and (iii) 261,750 shares of restricted stock that are not vested, and will not vest, within 60 days of February 28, 2015 (this total includes 51,750 shares of restricted stock held by Mr. Kemper).

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COMPARISON OF LUNA STOCKHOLDERS AND API STOCKHOLDERS RIGHTS AND CORPORATE GOVERNANCE MATTERS

The rights of API stockholders are currently governed by the Delaware General Corporation Law, its certificate of incorporation, as amended, and the bylaws, as amended, of API, which API refers to as the certificate of incorporation and bylaws of API, respectively. The rights of Luna stockholders are currently governed by the Delaware General Corporation Law, its amended and restated certificate of incorporation and the amended and restated bylaws of Luna, which Luna refers to as the certificate of incorporation and bylaws of Luna, respectively. If the Merger is completed, API stockholders will become stockholders of Luna, and their rights will be governed by the Delaware General Corporation Law, and the certificate of incorporation and bylaws of Luna.

The table below summarizes the material differences between the rights of Luna s and API s stockholders pursuant to their respective certificates of incorporation and bylaws currently in effect.

While Luna and API believe that the summary table covers the material differences between the rights of their respective stockholders prior to the Merger, this summary does not include a complete description of all differences among the rights of Luna s and API s stockholders, nor does it include a complete description of the specific rights of these respective stockholders. Furthermore, the identification of some of the differences in the rights of these stockholders as material is not intended to indicate that other differences that may be equally important do not exist.

You are urged to read carefully the certificate of incorporation and bylaws of API, and the certificate of incorporation and bylaws of Luna. See the section entitled, Where You Can Find More Information. Copies of the certificate of incorporation and bylaws of Luna are filed as exhibits to the reports of Luna filed with the SEC. Copies of the certificate of incorporation and bylaws of API are filed as exhibits to the reports of API filed with the SEC.

	LUNA	**API**
Authorized Capital Stock	The authorized capital stock of Luna currently consists of 100,000,000 shares of common stock, par value $0.001 per share, and 5,000,000 shares of preferred stock, par value $0.001 per share. Of the preferred stock, 1,321,514 shares have been designated as Series A Convertible Preferred Stock.	The authorized capital stock of API currently consists of 100,000,000 shares of common stock, $0.001 par value and 10,000,000 shares of preferred stock, par value $0.001. Of the preferred stock, 780,000 shares have been designated as Class A Convertible Preferred Stock of which there are no shares outstanding.
Number of Directors	Subject to the rights of preferred stockholders, the authorized number of directors shall be determined from time to time by resolution of a majority of Luna s directors then in office. No reduction of the authorized number of directors shall have the effect of removing any director before that director s term of office	The board of directors shall consist of five to eleven directors, as such number shall be fixed by resolution of the majority of the board of directors.

expires.	The current authorized number of directors is seven.
The current authorized number of directors is six.	

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	LUNA	API
Cumulative Voting	Under the Delaware General Corporation Law, cumulative voting is permitted if provided for in the certificate of incorporation. Luna s certificate of incorporation does not provide for cumulative voting.	Under the Delaware General Corporation Law, cumulative voting is permitted if provided for in the certificate of incorporation. API s certificate of incorporation does not provide for cumulative voting.
Quorum	Luna s bylaws provide that the holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, will constitute a quorum for the transaction of business at all meetings of the stockholders. If, however, such quorum is not present or represented at any meeting of the stockholders, then the majority of the stockholders entitled to vote at the meeting, present in person or represented by proxy, shall have the power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present or represented. At such adjourned meeting at which a quorum is present or represented, any business may be transacted that might have been transacted at the meeting as originally noticed.	API s bylaws provide that the holders of a majority of the shares entitled to vote shall constitute a quorum at a meeting of stockholders for the transaction of business, except that when specified business is to be voted on by a class or series of stock voting as a class, the holders of a majority of the shares of such class or series shall constitute a quorum of such class or series for the transaction of such businesses.
Voting Stock	Each common stockholder has one vote for every share of common stock entitled to vote. The holders of Series A Preferred Stock have no voting rights.	Each common stockholder has one vote for every share of common stock entitled to vote.
Classification of Board of Directors	Luna s certificate of incorporation provides for classification of Luna s board of directors. Luna s directors are divided into three classes as nearly equal in size as is practicable, designated Class I, Class II and Class III. The term of office of the Class III directors expires at the 2015 annual meeting of the stockholders, the term of office of the Class I directors expires at the 2016 annual meeting	API s certificate of incorporation and bylaws do not provide for classification of API s board of directors.

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	LUNA	API
	of the stockholders and the term of office of the Class II directors expires at the 2017 annual meeting of the stockholders.	
Removal of Directors	Luna s certificate of incorporation and bylaws provide that any director may be removed from office by the Luna stockholders only for cause.	Except as otherwise provided by the Delaware General Corporation Law, any director may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors. API s bylaws provide that any one or more of the directors may be removed with or without cause, at any time by a vote of the stockholders holding two-thirds of the stock, at any special meeting called for that purpose.
Vacancies on the Board of Directors	Luna s certificate of incorporation provides that vacancies occurring on Luna s board of directors for any reason and newly created directorships resulting from an increase in the authorized number of directors may be filled only by vote of a majority of the remaining members of Luna s board of directors, although less than a quorum, at any meeting. A person so elected by Luna s board of directors to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified.	API s bylaws provide that vacancies shall be filled by a majority of the remaining directors.
Stockholder Action by Written Consent	Luna s bylaws provide that unless otherwise provided in the certificate of incorporation, any action required by the Delaware General Corporation Law to be taken at any annual or special meeting of stockholders of a corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without	In accordance with the Delaware General Corporation Law, any action required by the Delaware General Corporation Law to be taken at any annual or special meeting of API stockholders of a corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without

prior a meeting, without prior notice, and without a vote, if a

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	LUNA	API
	notice, and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. The Luna certificate of incorporation does not limit action by stockholder consent.	consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. API s bylaws provide that any stockholder seeking to have stockholders act by written consent shall, by written notice, request the board of directors to fix a record date to determine the stockholders entitled to act by written consent. Within ten days of the request, the board of directors may fix a record date, which record date will not be more than ten days after the date of the resolution fixing the record date. If no record date is fixed by the board of directors, the record date, when no prior action by the board of directors is required by applicable law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to API in accordance with applicable law. If no record date has been fixed by the board of directors and prior action by the board of directors is required by applicable law, the record date shall be at the close of business on the date on which the board of directors adopts the resolution taking such prior action. API s bylaws also empower API to assign independent inspectors to

determine that consents obtained from the requisite number of stockholders in order to take the action specified in the consent. API s certificate of incorporation may be amended in accordance with the provisions of the Delaware General Corporation Law. Under those provisions, the

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	LUNA	API
		certificate of incorporation can be amended by the affirmative vote of the holders of a majority of the voting power of the capital stock of API outstanding and entitled to vote on the amendment.
Amendment of the Certificate of Incorporation	Pursuant to the Luna certificate of incorporation, Luna reserves the right to amend, alter, change or repeal any provision contained in the certificate of incorporation in the manner now or hereafter prescribed by the laws of the State of Delaware and all rights conferred upon stockholders are granted herein subject to this reservation; provided, however, that, notwithstanding any other provision of the certificate of incorporation, or any provision of law that might otherwise permit a lesser vote or no vote, but in addition to any vote of the holders of any class or series of Luna s stock required by law or by the certificate of incorporation, the affirmative vote of the holders of at least two thirds (66 2/3%) of the voting power of the then outstanding shares of voting stock entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend or repeal Article IX, Article V, Article VI, Article VII or Article VIII. In addition, the consent of a majority of the outstanding shares of Series A Preferred Stock is needed to alter or amend the certificate of incorporation in a manner that adversely affects the rights, preferences or privileges of the Series A Preferred Stock, increases or decreases the authorized number of shares of any class or series of capital stock or creates or issues any class or series of capital stock which ranks superior or pari passu with the Series A Preferred	API s certificate of incorporation may be amended in accordance with the provisions of the Delaware General Corporation Law.

Stock in any respect.

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	LUNA	API
Amendment of Bylaws	Luna s certificate of incorporation provide that Luna s board of directors is expressly authorized to adopt, amend or repeal any of the Luna bylaws. Any adoption, amendment or repeal of Luna s bylaws by the board of directors requires the approval of a majority of the board of directors. The stockholders also have the power to adopt, amend or repeal Luna s bylaws; provided, however, that, in addition to any vote of the holders of any class or series of Luna s stock required by law or by the certificate of incorporation, the affirmative vote of the holders of at least two-thirds (66 2/3%) of the voting power of the then outstanding shares of voting stock entitled to vote generally in the election of directors, voting together as a single class, shall be required to adopt, amend or repeal all or any portion of Article II, Section 3.2, Section 3.3, Section 3.4, Section 3.14, Article VI or Article IX of Luna s bylaws.	API s certificate of incorporation provides that the API board of directors is expressly authorized to make, alter or repeal API s bylaws. According to API s bylaws, the bylaws may also be amended by an affirmative vote of the stockholders representing a majority of the whole capital stock entitled to vote at an annual stockholders meeting or at a special meeting for the purpose of amending the bylaws.
Special Meeting of Stockholders	Luna s certificate of incorporation provides that a special meeting of the stockholders may be called at any time only by the chairman of the board of directors, the chief executive officer, the president (if there is no chief executive officer) or Luna s board of directors, acting pursuant to a resolution duly adopted by a majority of the board, but such special meeting may not be called by any other person or persons. Only such business shall be considered at a special meeting of stockholders as shall have been stated in the notice for such meeting.	API s bylaws provide that, subject to the rights of preferred stockholders, special meetings, other than those allowed under DGCL, may only be called by a majority of directors. No business other than that specified in the call for the meeting shall be transacted at any special meeting.
Notice of Stockholder Meeting	Luna s bylaws provide that notice must be given not less than 10 nor more than 60 days before the date of	API s bylaws provide that written notice must be given not less than ten (10) days nor more than sixty

the meeting to each stockholder entitled to vote at such meeting. The notice shall specify the place,	(60) days before the date on which the meeting is to be held. As required by the Delaware General Corporation

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	LUNA	API
	date and hour of the meeting, the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called.	Law, the notice shall specify the place, date and hour of the meeting, the means of remote communication, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called.
Delivery and Notice Requirements of Stockholder Nominations and Proposals	The Luna bylaws provides that a stockholder s notice must be delivered to or mailed and received at Luna s executive offices of the corporation not less than ninety (90) calendar days in advance of the date that is the one year anniversary of the date on which Luna first mailed its proxy statement to stockholders in connection with the previous year s annual stockholder meeting. A stockholder s notice to Luna s secretary shall set forth as to each matter the stockholder proposes to bring before the annual meeting: (i) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (ii) the name and address, as they appear on Luna s books, of the stockholder proposing such business, (iii) the class and number of Luna s shares which are beneficially owned by the stockholder, (iv) any material interest of the stockholder in such business and (v) any other information that is required to be provided by the stockholder pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended.	API s bylaws provide that a proponent stockholder must give timely notice with respect to nominations and proposals of business. The notice must be delivered to the API secretary at the principal executive offices of API not later than the 60th day nor earlier than the 90th day prior to the first anniversary of the preceding year s annual meeting of the stockholders. The notice shall set forth: a) all information about a director nominee that would be required under the SEC rules for the solicitation of proxies for a director nominee; b) a brief description of all other business proposed to be conducted by the proponent at the meeting, the reasons for conducting such business at the meeting and any material interest that the proponent (and any beneficial owner on whose behalf the proponent is acting) has in such business; and c) information about the stock ownership and mailing address of the proponent (and any beneficial owner on whose behalf the proponent is acting).

Declaration and Payment of Dividends	The Luna bylaws provide that Luna s board of directors, subject to any restrictions contained in either (i) the DGCL, or (ii) the certificate of incorporation, may	Subject to the provisions of API s certificate of incorporation, and any certificate of designation with respect to any preferred stock, the common stockholders shall be

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	LUNA	API
	declare and pay dividends upon the shares of its capital stock. Dividends may be paid in cash, in property, or in shares of the corporation s capital stock.	entitled to receive dividends out of funds legally available therefore at such times and in such amounts as the board of director may determine in their sole discretion.
	The Board may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve. Such purposes shall include but not be limited to equalizing dividends, repairing or maintaining any property of the corporation, and meeting contingencies.	
Exculpation; Indemnification of Directors and Officers; Advancement of Expenses	Pursuant to Luna s certificate of incorporation, directors of Luna are not liable to Luna or its stockholders for monetary damages for breach of fiduciary duty, except for liability in connection with a breach of duty of loyalty, for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law for dividend payments or stock repurchases illegal under Delaware law or any transaction in which a director has derived an improper personal benefit.	Pursuant to Delaware law and API s certificate of incorporation, directors of API are not liable to API or its stockholders for monetary damages for breach of fiduciary duty, except for liability in connection with a breach of duty of loyalty, for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, for dividend payments or stock repurchases illegal under Delaware law or any transaction in which a director has derived an improper personal benefit.
	The certificate of incorporation and bylaws of Luna provide indemnification, subject to specified exceptions, for directors and officers who are a party to or who are threatened to be made a party to any litigation. The Luna bylaws provide that Luna will pay expenses incurred by directors and officers in defending any litigation in advance of the final disposition of any litigation.	API s bylaws provide that API will indemnify, and advance expenses to, its current and former directors and officers for certain expenses and losses incurred by reason of their service to API or to other entities at the request of API, subject to limited exceptions in the bylaws.

Stockholder Rights Plan	Luna is not a party to any stockholder rights plan.	API is not a party to any stockholder rights plan.
Anti-Takeover Provisions	Certain provisions of Luna s certificate of incorporation, bylaws, and the Delaware General Corporation Law may be deemed	API is subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law. Section 203 of the Delaware

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LUNA	API
to have an anti-takeover effect. Such provisions may delay, deter or prevent a tender offer or takeover attempt that a stockholder might consider to be in that stockholder s best interests, including attempts that might result in a premium over the market price for the shares held by stockholders. These provisions include:	General Corporation Law generally prohibits business combinations, including mergers, sales and leases of assets, issuances of securities and similar transactions, by a corporation or a subsidiary with an interested stockholder who beneficially owns 15% or more of a corporation s voting stock, within three years after the person or entity becomes an interested stockholder, unless: (i) the transaction that will cause the person or entity to become an interested stockholder, or the business combination, is approved by the board of directors of the corporation prior to the time the person or entity became an interested stockholder, (ii) after the completion of the transaction in which the person or entity becomes an interested stockholder, the interested stockholder holds at least 85% of the voting stock of the corporation not including shares held by officers and directors of interested stockholders or shares held by specified employee benefit plans, or (iii) after the person or entity becomes an interested stockholder, the business combination is approved by the corporation s board of directors and holders of at least two-thirds of the corporation s outstanding voting stock, excluding shares held by the interested stockholder.
A classified board serving staggered terms;	
Advance notice requirements to stockholders for matters to be brought at stockholder meetings;	
A supermajority stockholder vote requirement for amending certain provisions of the amended certificate of incorporation and bylaws; and	
The right to issue preferred stock without stockholder approval, which could be used to dilute the stock ownership of a potential hostile acquiror.	
In addition, Luna is subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law. Section 203 of the Delaware General Corporation Law generally prohibits business	As noted above, API s bylaws also impose advance notice requirements in order for stockholders to bring business or director nominations before a stockholder meeting.

combinations, including mergers, sales and leases of assets, issuances of securities and similar transactions, by a corporation or a subsidiary with an interested stockholder who beneficially owns 15% or more of a corporation s voting stock, within three years after the person or entity becomes an interested stockholder, unless: (i) the transaction that will cause the person or entity to become an interested stockholder, or the business combination, is approved by the board of directors of the	The foregoing may have the effect of preventing or rendering more difficult or costly, the completion of a takeover transaction that

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	LUNA	API
	corporation prior to the time the person or entity became an interested stockholder, (ii) after the completion of the transaction in which the person or entity becomes an interested stockholder, the interested stockholder holds at least 85% of the voting stock of the corporation not including shares held by officers and directors of interested stockholders or shares held by specified employee benefit plans, or (iii) after the person or entity becomes an interested stockholder, the business combination is approved by the corporation s board of directors and holders of at least two-thirds of the corporation s outstanding voting stock, excluding shares held by the interested stockholder.	stockholders might view as being in their best interests.
	Each of the foregoing may have the effect of preventing or rendering more difficult or costly, the completion of a takeover transaction that stockholders might view as being in their best interests.	
Stock Trading Policy	Luna s insider trading policies forbids insider trading. If you will be an employee of Luna after the closing of the Merger, your shares may be subject to these insider trading policies and establishes trading windows that limit the time periods during which Luna employees and directors may trade Luna securities. All trades require pre-clearance by Luna s General Counsel.	API s insider trading policy forbids insider trading. All material non-public information must be held in strictest confidence and API employees are not permitted to trade in API s securities if such employee is in possession of material, non-public information. Members of API s board of directors and employees of API or its subsidiaries may trade in API securities during the period beginning 21 days before the end of a fiscal quarter and ending at the open of business on the third business day following the date of public release of earnings for the quarter or year, as applicable.

	No trading is permitted during the period from the date of public announcement of any material information until the open of business on the third business day thereafter.

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THE LUNA INNOVATIONS INCORPORATED ANNUAL MEETING OF STOCKHOLDERS

General

Luna is sending this joint proxy statement/prospectus to its stockholders as part of the solicitation of proxies by Luna s board of directors for use at Luna s annual meeting of stockholders and any adjournments or postponements of the meeting. Luna is first mailing this joint proxy statement/prospectus, including a notice of the Luna annual meeting of stockholders and a form of proxy on or about , 2015.

Date, Time and Place of the Luna Innovations Incorporated Annual Meeting

The Luna annual meeting is scheduled to be held on May 8, 2015 at 9:00 a.m. Eastern Time:

at the Roanoke Higher Education Center, 108 N. Jefferson Street, Roanoke, Virginia 24016.

Purpose of the Luna Innovations Incorporated Annual Meeting

At the Luna annual meeting Luna common stockholders will be asked:

1. To consider and vote upon a proposal to approve the issuance of shares of Luna common stock, par value $0.001 per share, to securityholders of Advanced Photonix, Inc. (API), in connection with the Merger contemplated by the Agreement and Plan of Merger and Reorganization, dated as of January 30, 2015, by and among Luna, API and API Merger Sub, Inc., a wholly owned subsidiary of Luna, as amended from time to time, pursuant to which API will become a wholly owned subsidiary of Luna through the Merger;

2. To consider and vote upon an adjournment of the annual meeting from time to time, if necessary or appropriate (as determined by Luna), to solicit additional proxies if there are not sufficient votes to approve the proposal described immediately above;

3. To elect My E. Chung and Neil D. Wilkin, Jr., as Class III members of the board of directors, to serve until Luna s 2018 annual meeting of stockholders and until their successors are duly elected and qualified; provided, however, that, if the Merger is completed, the board of directors of Luna will be reconstituted as described in the joint proxy statement/prospectus;

4. To approve, on a non-binding, advisory basis, the compensation of Luna s named executive officers, as disclosed in this joint proxy statement/prospectus;

5. To ratify the selection, by the Audit Committee of Luna s board of directors, of Grant Thornton LLP as Luna s independent registered public accounting firm for the fiscal year ending December 31, 2015; and

6. To transact such other business as may be properly brought before the annual meeting, or any adjournment or postponement thereof, by or at the direction of the board of directors of Luna.

LUNA INNOVATIONS INCORPORATED S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR EACH OF PROPOSALS NO. 1, 2, 3, 4 and 5.

Proposals to be Voted on at the Luna Innovations Incorporated Annual Meeting

Proposal No. 1: The Merger Proposal

To consider and vote upon a proposal to approve the issuance of shares of Luna common stock, par value $0.001 per share, to securityholders of API in connection with the Merger proposed under the Agreement and Plan of Merger and Reorganization, dated as of January 30, 2015, by and among Luna, API, a Delaware corporation, and API Merger Sub, Inc., a wholly owned subsidiary of Luna, as amended from time to time, pursuant to which API will become a wholly owned subsidiary of Luna through the Merger.

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Under NASDAQ Listing Rule 5635(a)(1), a company listed on NASDAQ is required to obtain stockholder approval prior to the issuance of common stock, among other things, in connection with the acquisition of another company s stock, if the number of shares of common stock to be issued is in excess of 20% of the number of shares of common stock then outstanding. The potential issuance of up to 12,961,602 shares of Luna common stock in the Merger exceeds the 20% threshold under the NASDAQ Listing Rules and is expected to represent approximately 43% of Luna s common stock following the Merger on a fully diluted basis, which assumes the exercise of all options and warrants for Luna common stock. Accordingly, in order to ensure compliance with NASDAQ Listing Rule 5635(a)(1), Luna must obtain the approval of Luna stockholders for the issuance of these securities in the transaction.

LUNA INNOVATIONS INCORPORATED S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR PROPOSAL NO. 1.

Proposal No. 2: Adjournment

To consider and vote upon an adjournment of the annual meeting from time to time, if necessary or appropriate (as determined by Luna), to solicit additional proxies if there are not sufficient votes to approve Proposal No. 1.

Luna s stockholders are being asked to approve a proposal that will give Luna authority to adjourn the annual meeting from time to time, if necessary or appropriate (as determined by Luna), for the purpose of soliciting additional proxies in favor of the approval of Proposal No. 1 if there are not sufficient votes at the time of the annual meeting to approve Proposal No. 1. If this adjournment proposal is approved, the annual meeting could be adjourned by Luna to any future date. If the annual meeting is adjourned, stockholders who have already submitted their proxies will be able to revoke them at any time prior to their use. Luna does not intend to call a vote on this proposal if Proposal No. 1 has been approved at the annual meeting.

Luna s bylaws also grant the chairman of the annual meeting the power to adjourn the annual meeting for any reason.

LUNA INNOVATIONS INCORPORATED S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR PROPOSAL NO. 2.

Proposal No.3: Election of Directors

General Information

Luna s board of directors is divided into three classes (Class I, Class II and Class III) with staggered three-year terms. Each class consists, as nearly as possible, of one-third of the total number of directors. Vacancies on the board of directors may be filled only by persons elected by a majority of the remaining directors. A director elected by the board of directors to fill a vacancy in a class, including vacancies created by an increase in the number of directors, shall serve for the remainder of the full term of that class and until the director s successor is duly elected and qualified.

Luna s board of directors currently has six members, including two Class III directors whose terms expire at the 2015 annual meeting. The terms of the Class I and Class II directors will expire at the 2016 and 2017 annual meetings of the stockholders, respectively.

Luna s board of directors has nominated My. E Chung and Neil D. Wilkin, Jr., to serve as Class III directors for a three-year term expiring at the 2018 annual meeting of stockholders and until their successors have been duly elected and qualified, or, if sooner, until the director s death, resignation or removal. My E. Chung is currently a member of

Luna s board of directors and President and Chief Executive Officer of Luna. Neil D. Wilkin, Jr., is currently a member of Luna s board of directors and a member of the Audit Committee.

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The names of the two nominees for director and of Luna s other directors whose terms will continue after the annual meeting, their ages as of February 28, 2015, and certain other information about them are set forth below. There are no family relationships among Luna s directors or executive officers.

Names of Nominees	Age	Position(s)	Director Since
My E. Chung	62	Director	2011
Neil D. Wilkin, Jr.	50	Director	2012

Names of the Incumbent Directors with Terms Continuing After 2015 Annual Meeting	Age	Position(s)	Director Since
John B. Williamson, III	60	Director	2010
Michael W. Wise	64	Director	2011
Warner Dalhouse	80	Director	2010
Richard W. Roedel	65	Chairman of the Board of Directors	2005

Luna s Nominating and Governance Committee seeks to assemble a board of directors that, as a whole, possesses the appropriate balance of professional and industry knowledge, financial expertise and high-level management experience necessary to oversee and direct Luna s business. To that end, the committee has identified and evaluated nominees in the broader context of the board s overall composition, with the goal of recruiting members who complement and strengthen the skills of other members and who also exhibit integrity, collegiality, sound business judgment and other qualities that the committee views as critical to effective functioning of the board. The biographies below include information, as of the date of this joint proxy statement/prospectus, relating to the specific and particular experience, qualifications, attributes or skills of each director or nominee that led the committee to believe that the nominee or director should serve or continue to serve, as applicable, on the Luna board. However, each of the members of the committee may have a variety of reasons why he believes a particular person would be an appropriate nominee for the board, and these views may differ from the views of other members.

Class III Director Nominees for Election for a Three-Year Term Expiring at the 2018 Annual Meeting of Stockholders

My E. Chung has served as Luna s President and Chief Executive Officer and as a member of Luna s board of directors since April 2011. He previously served as Senior Vice President of Worldwide Sales for Sunrise Telecom, a publicly held provider of communications test and measurement solutions for telecom, cable and wireless networks, from September 2009 to March 2011. In 2005, Mr. Chung was appointed as President and Chief Executive Officer of Circadiant Systems, an optical testing company, and served in that role until the company s acquisition by JDS Uniphase Corporation in November 2008, and continued as senior director of the Circadiant business unit of the combined company until June 2009. From 1998 to 2004, he served as Group President of Spirent Communications, a division of Spirent PLC, a publicly held provider of communications test equipment, and served on Spirent PLC s board of directors as Executive Director from 2001 to 2004. Previously, he was Division President of Acterna, formerly known as Telecommunications Techniques Corporation, or TTC. Having joined TTC in 1987 as National Sales Manager, Mr. Chung later became Director of Sales and Vice President of U.S. Sales. In 1992, he became Division President with responsibility for the Network Services Division focusing on products used in the installation and maintenance of networks at customer premises. His responsibilities included product development, marketing, manufacturing and accounting. He was involved in setting TTC s strategic direction through a number of strategic partnerships and acquisitions. Mr. Chung s earlier career was spent at Agilent, formerly Hewlett-Packard Company,

where he spent 11 years in sales and sales management. Mr. Chung received a bachelor s degree in electrical engineering from New Jersey Institute of Technology. The Luna Nominating and Governance Committee believes that Mr. Chung s position as Luna s President and Chief Executive Officer and his prior management experience with technology companies will enable him to continue to make valuable contributions to Luna s board of directors.

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Neil D. Wilkin, Jr. has served as a member of Luna s Board of Directors since May 2012 and is a member of the Audit Committee. Mr. Wilkin is chairman of the board of directors, president and chief executive officer of Optical Cable Corporation (OCC), a publicly held optical fiber and copper data communications cable and connectivity manufacturer based in Roanoke, Virginia. He was named chairman of the board and chief executive officer of OCC in September 2003, in addition to his previously held positions as president and as a member of the board of directors. Mr. Wilkin first became a director and was named chief financial officer and senior vice president of OCC in September 2001, assuming the role of president in addition to his position as chief financial officer in December 2001. Prior to joining OCC, Mr. Wilkin served as chief financial officer of a nationally licensed, internet-based real estate brokerage company. Prior to that, Mr. Wilkin practiced law concentrating on mergers and acquisitions, corporate finance, and general corporate matters. He worked at two law firms: McGuireWoods LLP in Richmond, Virginia and Kirkland & Ellis in Washington, D.C. Mr. Wilkin practiced with Coopers & Lybrand (a predecessor to PricewaterhouseCoopers) as a Certified Public Accountant before returning to graduate business school and law school. Mr. Wilkin earned his MBA from the Darden School at the University of Virginia, is a graduate of the University of Virginia School of Law, and received his undergraduate degree from the McIntire School of Commerce at the University of Virginia. The Luna Nominating and Governance Committee believes that Mr. Wilkin s experience as the president and chief executive officer of a public company in the optical fiber industry uniquely qualifies him to provide valuable insights to the Luna board of directors.

THE BOARD OF DIRECTORS RECOMMENDS YOU VOTE FOR EACH NAMED NOMINEE.

Class I Director Continuing in Office Until the 2016 Annual Meeting of Stockholders

Richard W. Roedel has served as a member of Luna s board of directors since 2005 and as chairman of Luna s board of directors since January 2010. Mr. Roedel also serves as a director of publicly held companies IHS, Inc., Lorillard, Inc. and Six Flags Entertainment Corporation. Mr. Roedel serves as chairman of the audit committee of Lorillard, a member of the audit committees of IHS and Six Flags and Chairman of the Risk Committee of IHS. He served as a director of Broadview Network Holdings, Inc., a private company with publicly traded debt until 2012. Mr. Roedel was a director of Sealy Corporation from 2006 to 2013, when Sealy was acquired by Tempur-Pedic International Inc. Mr. Roedel was a director of Brightpoint, Inc. from 2002 until 2012, when Brightpoint was acquired by Ingram Micro. Mr. Roedel served in various capacities at Take-Two Interactive Software, Inc. from 2002 until 2005, including chairman and chief executive officer. Mr. Roedel is a member of the National Association of Corporate Directors (NACD) Risk Oversight Advisory Council and a member of the board of directors of the Association of Audit Committee Members, Inc., a non-profit organization dedicated to strengthening the audit committee by developing best practices. Mr. Roedel was appointed to a three year term, beginning January 1, 2014, on the Standing Advisory Group of the Public Company Accounting Oversight Board (PCAOB). From 1971 through 2000, he was employed by BDO Seidman LLP, becoming an audit partner in 1980, later being promoted in 1990 to managing partner in Chicago and then managing partner in New York in 1994, and finally, in 1999, to chairman and chief executive officer. Mr. Roedel holds a B.S. degree in accounting from The Ohio State University and is a Certified Public Accountant. The Luna Nominating and Governance Committee believes that Mr. Roedel s public accounting experience and his status as an authority on issues facing audit committees, his extensive service on public company boards and committees and his deep familiarity with Luna make him a valuable member of the board of directors.

Class II Directors Continuing in Office Until the 2017 Annual Meeting of Stockholders

Michael W. Wise has served as a member of Luna s board of directors since May 2011. Mr. Wise currently serves as the Chief Financial Officer of Corvesta, Inc., an insurance and technology holding company, and Chief Financial Officer of its subsidiary Delta Dental of Virginia. Mr. Wise serves on the boards of directors and as treasurer of several additional Corvesta portfolio companies, including OneMind Health, a provider of cloud-based enterprise

software for the dental industry, Corvesta Life Insurance Company, a life and health insurance company, and Corvesta Services Software Solutions India, an offshore information technology services

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company. Prior to joining Delta Dental of Virginia as its Chief Financial Officer in 1996, Mr. Wise owned and managed several small businesses. He also currently serves and has in the past served on numerous boards of directors of local non-profit organizations. He received a B.S. degree in business administration accounting from West Virginia University and was previously a Certified Public Accountant. The Luna Nominating and Governance Committee believes that Mr. Wise s accounting and financial background, his experience in funding and managing technology companies through growth periods, his experience as an entrepreneur and his local and community leadership make him a valuable member of Luna s board of directors. Mr. Wise is also one of Luna s largest stockholders, which the committee believes evidences his commitment to the long-term interests of Luna s stockholders.

Warner Dalhouse has served as a member of Luna s board of directors since January 2010. Prior to his retirement, he served as Chairman and Chief Executive Officer of Dominion Bankshares Corporation, which later became First Union National Bank of Virginia. He currently serves as a director and chairman of the corporate governance committee of HomeTown Bankshares Corporation, a publicly held local bank, as well as a director of the Virginia Tech Carilion School of Medicine. He received a B.S. degree in commerce from the University of Virginia and attended the Rutgers University Stonier Graduate School of Banking. The Luna Nominating and Governance Committee believes that Mr. Dalhouse s local leadership, extensive executive and director experience, banking background and compensation committee experience allow him to make valuable contributions to the Luna board of directors.

John B. Williamson, III has served as a member of Luna s board of directors since January 2010. He served as Chairman and Chief Executive Officer of RGC Resources, Inc., a publicly held energy distribution and services holding company from 2003-2014. He currently serves as Chairman of RGC Resources, Inc. Mr. Williamson is a member of the boards of directors of Bank of Botetourt, Inc., a publicly held local bank, where he serves as chairman of the Nominating and Corporate Governance Committee, Optical Cable Corporation, a publicly held optical fiber manufacturer, where he serves as the chairman of the audit committee and a member of the nominating and corporate governance committee, and Corning Natural Gas Corporation, a publicly held natural gas company, where he serves as chairman of the audit committee and serves on the compensation committee. He currently serves as a member of the Botetourt County Board of Supervisors in Virginia. He was formerly a board member of NTELOS, Inc., a publicly held telecommunications company, where he also served as chairman of the audit committee. Mr. Williamson also formerly served in government executive capacities, including as County Administrator for Botetourt and Nelson Counties in Virginia. He earned a bachelor s degree in business administration and management from Virginia Commonwealth University and an M.B.A. degree from the College of William and Mary. The Luna Nominating and Governance Committee believes that Mr. Williamson s public company chief executive officer experience, his experience as audit committee chairman of other public companies and his local and community leadership will enable him to continue to make valuable contributions to the Luna board of directors.

INFORMATION REGARDING THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

Independence of the Board of Directors

As required under the NASDAQ Stock Market (NASDAQ) listing standards, a majority of the members of a listed company s board of directors must qualify as independent, as affirmatively determined by the board of directors. Luna s board of directors consults with legal counsel to ensure that the board s determinations are consistent with relevant securities and other laws and regulations regarding the definition of independent, including those set forth in pertinent NASDAQ listing standards, as in effect from time to time.

Consistent with these considerations, after review of all relevant identified transactions or relationships between each director or director nominee, or any of his family members, and Luna, its senior management and its independent

auditors, Luna s board of directors has affirmatively determined that the following five current directors are independent within the meaning of the applicable NASDAQ listing standards: Mr. Wise,

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Mr. Wilkin, Mr. Dalhouse, Mr. Williamson, and Mr. Roedel. Mr. Chung is not independent, as he is currently employed as Luna s President and Chief Executive Officer. Dr. Kent Murphy, who served on Luna s board of directors until January 22, 2014, was not independent by virtue of his prior employment with Luna through August 2010.

Board Leadership Structure

In January 2010, Luna s board of directors designated an independent non-executive Chairman, Mr. Roedel, who has authority, among other things, to call and preside over board meetings, including meetings of the independent directors, to set meeting agendas and to determine materials to be distributed to the board. Accordingly, the non-executive Chairman has substantial ability to shape the work of the board. Luna believes that separation of the positions of Chairman and Chief Executive Officer reinforces the independence of the board in its oversight of Luna s business and affairs. In addition, Luna believes that having an independent non-executive Chairman creates an environment that is more conducive to objective evaluation and oversight of management s performance, increasing management accountability and improving the ability of the board to monitor whether management s actions are in the best interests of the Luna and its stockholders. As a result, Luna believes that having an independent non-executive Chairman can enhance the effectiveness of the board as a whole.

Role of the Board in Risk Oversight

One of the board s key functions is informed oversight of Luna s risk management process. Luna s board does not have a standing risk management committee, but rather administers this oversight function directly through the board as a whole, as well as through its standing committees that address risks inherent in their respective areas of oversight. Luna s Audit Committee has the responsibility to consider and discuss Luna s major financial risk exposures and the steps Luna management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. The Audit Committee also monitors compliance with legal and regulatory requirements. Luna s Nominating and Governance Committee monitors the effectiveness of Luna s corporate governance policies, including whether they are successful in preventing illegal or improper liability-creating conduct. Luna s Compensation Committee assesses and monitors whether any of Luna s compensation policies and programs have the potential to encourage excessive risk-taking.

Information Regarding Certain Committees of the Board of Directors

Luna s board of directors has established an Audit Committee, a Compensation Committee and a Nominating and Governance Committee. Luna s board of directors and its committees meet regularly throughout the year and also hold special meetings and act by written consent from time to time as appropriate. Luna s board of directors has delegated various responsibilities and authority to these committees as generally described below. The committees regularly report on their activities and actions to the full board of directors. Each of these committees of Luna s board of directors has a written charter approved by Luna s board of directors.

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The following table provides the membership information for 2014 for each of the Audit, Compensation and Nominating and Governance committees:

Name	Audit	Compensation	Nominating and Governance
My E. Chung			
Neil D. Wilkin, Jr.	X		
Warner Dalhouse		X *	X
John B. Williamson, III	X *		X
Richard W. Roedel		X	X *
Michael W. Wise	X	X	
Kent A. Murphy (1)			

* Committee Chairman

(1) Dr. Kent Murphy resigned from Luna s board of directors effective January 22, 2014.

Audit Committee

The Audit Committee of Luna s board of directors recommends the selection of Luna s independent auditors, reviews Luna s internal accounting procedures and financial statements, and consults with and reviews the services provided by Luna s independent auditors, including the results and scope of their audit.

The Audit Committee is currently composed of Messrs. Williamson, Wilkin and Wise. Mr. Williamson is the chairman of the committee. The Audit Committee met six times, including telephonic meetings, during 2014.

The board of directors reviews the NASDAQ listing standards definition of independence for audit committee members on an annual basis and has determined that each member of the Audit Committee is independent within the meaning of the requirements of the Sarbanes-Oxley Act of 2002 and applicable SEC and NASDAQ rules, including Rule 5605(c)(2)(A)(i) and (ii) of the NASDAQ listing rules. The board of directors has also determined that each of Messrs. Williamson, Wilkin and Wise qualifies as an audit committee financial expert, as currently defined under applicable SEC rules. In reaching this determination, the board of directors made a qualitative assessment of their level of knowledge and experience based on a number of factors, including their formal education and extensive experience at an executive and audit committee level and, in the case of Messrs. Wise and Wilkin, their professional experience as certified public accountants.

The Audit Committee operates under a written charter adopted by the board of directors, which is available in the Investor Relations section of Luna s website at www.lunainc.com.

Compensation Committee

The Compensation Committee of Luna s board of directors reviews and implements changes to the compensation and benefits for Luna s executive officers, administers Luna s stock plans, and establishes and reviews general policies relating to compensation and benefits for certain of Luna s officers.

The Compensation Committee is currently composed of Messrs. Dalhouse, Wise and Roedel. Mr. Dalhouse serves as the chairman of the committee. The Compensation Committee met five times, including telephonic meetings, in 2014.

Each member of the Compensation Committee is independent within the meaning of applicable NASDAQ listing rules.

The Compensation Committee operates under a written charter adopted by the board of directors, which is available in the Investor Relations section of Luna s website at www.lunainc.com.

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Typically, the Compensation Committee meets at least quarterly and with greater frequency if necessary. The agenda for each meeting is usually developed by the chairman of the Compensation Committee, in consultation with the Chief Executive Officer, Chief Financial Officer and/or General Counsel. The Compensation Committee meets regularly in executive session. However, from time to time, various members of management and other employees as well as outside advisors or consultants may be invited by the Compensation Committee to make presentations, to provide financial or other background information or advice or to otherwise participate in Compensation Committee meetings. The charter of the Compensation Committee grants the Compensation Committee full access to all books, records, facilities, and personnel of Luna. In addition, under the charter, the Compensation Committee has the authority to obtain, at the expense of Luna, advice and assistance from compensation consultants and internal and external legal, accounting or other advisors. The Compensation Committee has direct responsibility for the oversight of the work of any consultants or advisers engaged for the purposes of advising the Committee. In particular, the Compensation Committee has the sole authority to retain, in its sole discretion, compensation consultants to assist in its evaluation of executive and director compensation, including the authority to approve the consultant s reasonable fees and other retention terms. Under the charter, the Compensation Committee may select, or receive advice from, a compensation consultant, legal counsel or other adviser to the compensation committee, other than in-house legal counsel and certain other types of advisers, only after taking into consideration six factors, prescribed by the SEC and NASDAQ, that bear upon the adviser s independence; however, there is no requirement that any adviser be independent.

Historically, the Compensation Committee has made most of the significant adjustments to annual compensation and determined bonus and equity awards, if any, at one or more meetings held during the first quarter of the year. However, the Compensation Committee also considers adoption of annual senior management incentive plans, including new performance objectives, matters related to individual compensation, such as compensation for new executive hires, as well as high-level strategic issues, such as the efficacy of Luna s compensation strategy, potential modifications to that strategy and new trends, plans or approaches to compensation, at various meetings throughout the year. Generally, the Compensation Committee obtains the recommendations and advice of the Chief Executive Officer and Chief Financial Officer regarding the form and amount of compensation for executive officers other than themselves.

Compensation Committee Report

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis contained in this joint proxy statement/prospectus with Luna management. Based on the Compensation Committee s review of, and the discussions with management with respect to, the Compensation Discussion and Analysis, the Compensation Committee recommended to the board of directors that the Compensation Discussion and Analysis be included in this joint proxy statement/prospectus and incorporated by reference in Luna s Annual Report on Form 10-K for the fiscal year ended December 31, 2014 filed with the Securities and Exchange Commission.

COMPENSATION COMMITTEE

Warner Dalhouse, Chairman

Richard W. Roedel

Michael W. Wise

The foregoing compensation committee report is not soliciting material, shall not be deemed incorporated by reference into any filing by Luna under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof, and shall not otherwise be deemed filed under these acts, except to the extent

Luna specifically incorporates it by reference into such filings.

The specific determinations of the Compensation Committee with respect to executive compensation for the year ended December 31, 2014 are described in greater detail in the Luna Compensation Discussion and Analysis section of this joint proxy statement/prospectus on page 196.

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Nominating and Governance Committee

The Nominating and Governance Committee of Luna s board of directors is responsible for reviewing the appropriate size, function and needs of the board of directors, establishing criteria for evaluating and selecting new members of the board, identifying and recommending qualified director nominees to the board for approval and monitoring and making recommendations to the board of directors on matters relating to corporate governance. The Nominating and Governance Committee met four times, including telephonic meetings, during 2014.

The Nominating and Governance Committee currently consists of Messrs. Roedel, Dalhouse and Williamson. Mr. Roedel serves as chairman of the committee. All members of the Nominating and Governance Committee are independent within the meaning of applicable NASDAQ listing rules.

The Nominating and Governance Committee operates under a written charter adopted by the board of directors, which is available in the Investor Relations section of Luna s website at www.lunainc.com.

Director Nomination Process

Candidates for Luna director nominees are reviewed in the context of the current composition of the board of directors, the operating requirements of Luna and the long-term interests of stockholders. Luna s Nominating and Governance Committee identifies director nominees by first evaluating the current members of the board of directors willing to continue in service. In the case of incumbent directors whose terms of office are set to expire, the Nominating and Governance Committee reviews these directors overall service to Luna during their terms, including the number of meetings attended, level of participation, quality of performance and any other relationships and transactions that might impair the directors independence. Current members with skills and experience that are relevant to Luna s business and who are willing to continue in service are considered for nomination.

If any member of the board of directors does not wish to continue in service, or the committee or board of directors decides not to nominate a member for re-election, the committee identifies the desired skills and experience of a new nominee. In the case of new director candidates, the Nominating and Governance Committee also determines whether the nominee is independent for NASDAQ purposes, which determination is based upon applicable NASDAQ listing standards, applicable SEC rules and regulations and the advice of counsel, if necessary. The Nominating and Governance Committee then uses its network of contacts to compile a list of potential candidates. The Nominating and Governance Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the board of directors. Current members of the board of directors and senior management are then polled for their recommendations. To date, the Nominating and Governance Committee has not engaged professional search firms or other third parties to identify or evaluate potential nominees, but the committee may do so in the future.

The Nominating and Governance Committee will also consider nominees recommended by stockholders, and any such recommendations should be forwarded to Luna s Corporate Secretary in writing at Luna s executive offices as identified in this joint proxy statement/prospectus. Such recommendations should include the following information:

- the name, age, business address and residence address of the proposed candidate;

the principal occupation or employment of the proposed candidate and the candidate s business experience for at least the previous five years;

the class and number of shares of Luna s stock which the proposed candidate beneficially owns;

a description of all arrangements or understandings between the stockholder making the recommendation and each proposed candidate;

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any information reasonably necessary to determine whether the proposed candidate meets SEC and NASDAQ independence standards; and

any other information relating to such proposed candidate that is required to be disclosed in solicitations of proxies for elections of directors or is otherwise required pursuant to Regulation 14A under the Exchange Act (including without limitation such proposed candidate s written consent to being named in any proxy statement as a nominee and to serve as a director if elected).

Such recommendations should be provided at least 120 days prior to the anniversary date of the mailing of Luna s proxy statement for the previous annual meeting of stockholders. The committee does not intend to alter the manner in which it evaluates candidates, including the criteria set forth below, based on whether or not the candidate was recommended by a stockholder.

The Nominating and Governance Committee evaluates individual director candidates based upon a number of criteria, including:

a high degree of personal and professional integrity;

commitment to promoting the long-term interests of Luna s stockholders;

broad general business experience and acumen, which may include experience in management, finance, marketing and accounting, with particular emphasis on technology companies or policy-making experience in governmental or non-profit institutions;

adequate time to devote attention to the affairs of Luna;

an ability to bring balance to Luna s board of directors in light of Luna s current and anticipated needs and in light of the skills and attributes of the other board members; and

other attributes relevant to satisfying the requirements imposed by the SEC and NASDAQ.

The Nominating and Governance Committee retains the right to modify these qualifications from time to time.

Luna s Nominating and Governance Committee does not have a formal policy regarding board diversity. Diversity is one of a number of factors, however, that the committee takes into account in identifying nominees, and the Nominating and Governance Committee believes that it is essential that the board members represent diverse viewpoints. The committee seeks a diversity of business experience and believes that the current composition of the board of directors helps Luna achieve this goal.

Board of Directors and Committee Meeting Attendance

Luna s board of directors met 20 times, including telephonic meetings, during 2014. Each of Luna s directors who served in 2014 attended at least 75% of the aggregate number of meetings held during his tenure by the board of directors and by the committees of the board of directors on which he served, except Dr. Kent A. Murphy who resigned from Luna s board of directors effective January 22, 2014.

Annual Meeting Attendance

Luna s policy is to invite and encourage all directors to attend the annual meeting of stockholders, if possible. All of the members of Luna s board of directors who were serving at the time of Luna s 2014 annual meeting of stockholders attended that meeting.

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Director Compensation

The following table sets forth certain information concerning cash and non-cash compensation earned by the non-employee members of Luna s board of directors in 2014. The compensation paid to My E. Chung, Luna s President and Chief Executive Officer, is described under Executive Compensation on page 196. Mr. Chung does not receive any additional compensation for his service as a director.

Name	Fees Earned or Paid in Cash (1)(2)($)	Option Awards (3)($)		Total ($)
Neil D. Wilkin, Jr.	15,000			15,000
Warner Dalhouse	25,000	164,400		189,400
John B. Williamson, III	25,000	164,400		187,000
Richard W. Roedel	15,000		(4)	15,000
Michael W. Wise	15,000	164,400		179,400
Kent A. Murphy (5)				

(1) Represents the cash retainer for board and, as applicable, committee chair service for calendar year 2014. Pursuant to Luna s non-employee director compensation policy, the annual retainer for board service is paid prospectively on July 1 of each year in respect of board service for the following twelve-month period. In 2014, the annual retainer for board service was $15,000. The annual cash retainer for committee chair service was $10,000 (except for the Nominating and Governance Committee, which was $5,000). These retainers are paid prospectively in quarterly installments of $2,500. Mr. Roedel, who served as chairman of the Nominating and Governance Committee for 2014, elected to forego any compensation for serving in such role.

(2) During 2014, all of Luna s non-employee directors elected to receive payment of their fees for board and committee chair service in either shares of common stock or in restricted stock units pursuant to Luna s non-employee directors deferred compensation plan. Restricted stock units are convertible into shares of Luna s common stock on a one-for-one basis upon specified events as described below. In lieu of the cash payment of the annual board retainer payable on July 1, 2014, each of Messrs. Wilkin, Dalhouse, Williamson, Roedel and Wise received 10,869 restricted stock units under the deferred compensation plan, and, in each case with a grant date fair value of $15,000. Also during 2014, each of Mr. Dalhouse and Mr. Williamson received an aggregate of 7,235 restricted stock units under the deferred compensation plan, with a grant date fair value of $10,000, representing the $10,000 annual retainer for service as chairman of the Compensation Committee and Audit Committee, respectively. As of December 31, 2014, Luna s non-employee directors held the following equity compensation awards:

Name	Restricted Stock Units	Shares Underlying Stock Options
Warner Dalhouse	82,661	294,356
John B. Williamson, III	82,991	294,356
Neil D. Wilkin, Jr.	33,258	120,000
Richard W. Roedel	94,722	734,017

Michael W. Wise	40,228	240,000
Kent A. Murphy (5)		

(3) Amounts represent the aggregate grant date fair value for stock options granted in 2014, as calculated in accordance with ASC Topic 718, but excluding the effect of estimated forfeitures. The fair value of the awards was determined using the valuation methodology and assumptions as further described in Note 8 of the Notes to Luna s Consolidated Financial Statements included elsewhere in this joint proxy statement/prospectus. The options granted during 2014 have an exercise price equal to the closing price of Luna s common stock on the NASDAQ Capital Market on the date of grant and generally vest over a period of three years from the date of grant or through the end of their current term as a director.

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(4) Upon re-election as directors in May 2014, Messrs. Dalhouse, Williamson and Wise were granted options to purchase 120,000 shares of Luna common stock at an exercise price of $1.37 per share. As of December 31, 2014, Messrs. Dalhouse and William held outstanding options to purchase 294,356 shares of Luna common stock at a weighted average exercise price of $2.68 per share. Mr. Wise held outstanding options to purchase 240,000 shares of Luna common stock at a weighted exercise price of $1.71 per share.

(5) Kent A. Murphy resigned from Luna s board of directors effective January 22, 2014. Accordingly, he did not receive compensation for his service.

Luna also reimburses its non-employee directors for all reasonable out-of-pocket expenses incurred in the performance of their duties as directors, which expense reimbursements are not included in the foregoing table.

Retainers and Meeting Fees. During fiscal year 2014, the chairmen of the standing committees of Luna s board of directors were paid retainers as follows: $10,000 per year for the chairman of Luna s Audit Committee, $10,000 per year for the chairman of Luna s Compensation Committee and $5,000 per year for the chairman of Luna s Nominating and Governance Committee. Mr. Roedel, as chairman of the Nominating and Governance Committee, elected to forego any compensation in such capacity for the fiscal year 2014. These retainers were paid quarterly.

In 2011, Luna stopped paying meeting fees to outside directors who are neither employees nor consultants and began paying them an annual retainer. The annual retainer covers the period from July 1 through June 30 of the following year. In an effort to minimize the cash impact of these amounts, these retainers have been paid, at the election of the director, in either shares of common stock or restricted stock units issued pursuant to Luna s non-employee directors deferred compensation plan. This retainer is in the amount of $15,000 and is payable on July 1 of each year.

Under the terms of Luna s non-employee directors deferred compensation plan, the number of restricted stock units issued to a director is equal to the amount of the annual retainer divided by the closing price of Luna common stock on July 1. Restricted stock units represent rights to receive shares of Luna common stock at a later date. A participating director may elect to receive up to the number of shares of Luna common stock equal to the number of whole restricted stock units then credited to that director s restricted stock unit account, in either (i) a lump sum or (ii) substantially equal annual installments over a period not to exceed five years. Participating directors may elect to receive their common stock due under the plan upon either (a) separation from service with Luna, (b) a change of control, (c) an unforeseen emergency or (d) a time or fixed schedule as specified at the time of their initial deferral election.

Other Equity-Based Compensation. Non-employee directors are also eligible to receive restricted stock awards and option grants under Luna s 2006 Equity Incentive Plan. Under this plan, newly elected independent directors are eligible to receive an option to purchase up to 120,000 shares of Luna common stock upon election to the board, of which one-third vests on the first anniversary of the grant date and the remaining two-thirds vests in 24 equal monthly installments thereafter. Non-employee directors who are re-elected for a new term also receive an option to purchase 120,000 shares of common stock, which vests in 36 equal monthly installments from the date of grant, unless they were initially elected for a partial term, in which case they are treated as follows. The Nominating and Governance Committee believes that directors should have stock options vesting over each month of service, so that stock options should be granted to any director whose current stock options will become fully vested prior to the expiration of his term. Therefore, a new director elected to a partial term is initially granted an option for 120,000 shares, the vesting of which would conclude at some point during the director s second term, if re-elected. A pro-rata stub period option is then granted to such a director so that the director has stock options vesting over each month of service during his second term. If re-elected again to a third term, such a director then would receive an additional option to purchase 120,000 shares of common stock, which vests in 36 equal monthly installments from the date of grant.

All options issued to directors are granted with an exercise price equal to the closing price of Luna common stock on the NASDAQ Capital Market on the grant date.

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Compensation Committee Interlocks and Insider Participation

During 2014, Luna s Compensation Committee consisted of Mr. Dalhouse, Mr. Wise and Mr. Roedel. None of the members of Luna s Compensation Committee during 2014 is or was a present or former officer or employee of Luna, nor did such members engage in any transaction or relationship requiring disclosure in this joint proxy statement/prospectus under the section titled Certain Relationships and Related Person Transactions on page 210.

No executive officer of Luna served as a director or member of the Compensation Committee (or other board committee performing equivalent functions) of any other entity during the last fiscal year, one of whose executive officers served on Luna s board of directors or Compensation Committee.

Code of Ethics

Luna has adopted a Code of Business Conduct and Ethics that applies to all Luna directors and employees, including its principal executive officer, principal financial officer and principal accounting officer or controller. The full text of Luna s Code of Business Conduct and Ethics is posted on Luna s website at www.lunainc.com in the Investor Relations section. If Luna makes any substantive amendments to the Code of Business Conduct and Ethics or grants any waiver from a provision of the Code to any executive officer or director, Luna will promptly disclose the nature of the amendment or waiver on its website.

Audit Committee Report

As described more fully in its charter, the purpose of the Audit Committee is to assist the board of directors with its oversight responsibilities regarding the integrity of Luna s financial statements, Luna s compliance with legal and regulatory requirements, assessing Luna s independent registered public accounting firm s qualifications and independence and, if applicable, the performance of the persons performing internal audit duties for Luna.

Luna management is responsible for preparation, presentation and integrity of Luna s financial statements as well as Luna s financial reporting processes, accounting policies, internal audit function, internal accounting controls and disclosure controls and procedures. Luna s independent registered public accounting firm is responsible for performing an independent audit of Luna s consolidated financial statements in accordance with generally accepted auditing standards and to issue a report thereon. The Audit Committee s responsibility is to monitor and oversee these processes. The following is the Audit Committee s report submitted to the board of directors for 2014.

The Audit Committee has:

- reviewed and discussed Luna s audited financial statements for the fiscal year ended December 31, 2014 with management and Grant Thornton LLP, Luna s independent registered public accounting firm;

- discussed with Grant Thornton LLP the matters required to be discussed by Statement of Auditing Standards No. 61, *Communications with Audit Committees*, as currently in effect and as adopted by the Public Company Accounting Oversight Board in Rule 3200T; and

received from Grant Thornton LLP the disclosures and a letter regarding their independence as required by the applicable requirements of the Public Company Accounting Oversight Board requesting Grant Thornton LLP s communication with the Audit Committee concerning independence and discussed the auditors independence with them.

In addition, the Audit Committee has met separately with Luna management and with Grant Thornton LLP.

Based on the review and discussions referred to above, the Audit Committee recommended to the board of directors that the audited 2014 financial statements be included in Luna s Annual Report on Form 10-K for the year ended December 31, 2014 for filing with the Securities and Exchange Commission.

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AUDIT COMMITTEE

John B. Williamson, III, Chairman

Michael W. Wise

Neil D. Wilkin, Jr.

The foregoing audit committee report is not soliciting material, shall not be deemed incorporated by reference into any filing of Luna under the Securities Act of 1933 or the Securities Exchange Act of 1934, whether made before or after the date hereof, and shall not otherwise be deemed filed under these acts, except to the extent Luna specifically incorporates it by reference into such filings.

LUNA INNOVATIONS INCORPORATED S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR EACH DIRECTOR NOMINEE IN PROPOSAL NO. 3

Proposal No.4: Advisory Vote on Executive Compensation

Under the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, and Section 14A of the Exchange Act, Luna s stockholders are entitled to vote to approve, on an advisory basis, the compensation of Luna s named executive officers as disclosed in this joint proxy statement/prospectus in accordance with SEC rules.

This vote is not intended to address any specific item of compensation, but rather the overall compensation of Luna s named executive officers and the philosophy, policies and practices described in this joint proxy statement/prospectus. The compensation of Luna s named executive officers subject to the vote is disclosed in the Compensation Discussion and Analysis, the compensation tables, and the related narrative disclosure contained in this joint proxy statement/prospectus. As discussed in those disclosures, Luna believes that its compensation policies and decisions are consistent with current market practices. Compensation of Luna s named executive officers is designed to enable Luna to attract and retain talented and experienced executives to lead Luna successfully in a competitive environment.

Accordingly, the board of directors is asking the stockholders to indicate their support for the compensation of Luna s named executive officers as described in this joint proxy statement/prospectus by casting a non-binding advisory vote FOR the following resolution:

RESOLVED, that the compensation paid to Luna s named executive officers, as disclosed pursuant to compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, compensation tables and any related information disclosed in this joint proxy statement/prospectus is hereby APPROVED.

Because the vote is advisory, it is not binding on the board of directors or Luna. Nevertheless, the views expressed by the stockholders, whether through this vote or otherwise, are important to management and the board of directors and, accordingly, the board of directors and the Compensation Committee intend to consider the results of this vote in making determinations in the future regarding executive compensation arrangements.

LUNA INNOVATIONS INCORPORATED S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR PROPOSAL NO. 4

Proposal No. 5: Ratification of Selection of Independent Registered Public Accounting Firm

Luna s Audit Committee has selected Grant Thornton LLP as Luna s independent registered public accounting firm for the year ending December 31, 2015 and has further directed that management submit the selection of

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Luna s independent registered public accounting firm for ratification by the stockholders at the annual meeting. Grant Thornton has served as Luna s independent audit firm since 2005. A representative of Grant Thornton is expected to be present at Luna s 2015 annual meeting of stockholders and will have an opportunity to make a statement and respond to appropriate questions from stockholders.

Ratification of the selection of Grant Thornton as Luna s independent registered public accounting firm is not required by Luna s bylaws or other applicable legal requirements. However, Luna s board of directors is submitting the selection of Grant Thornton to the stockholders for ratification as a matter of good corporate practice. If Luna s stockholders fail to ratify the selection, the Audit Committee will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee at its discretion may direct the selection of a different independent registered public accounting firm at any time during the year if it determines that such a change would be in Luna s best interests and the best interests of Luna s stockholders.

Audit and Related Fees for Fiscal Years 2013 and 2014

The following table sets forth a summary of the aggregate fees billed to Luna by Grant Thornton LLP for professional services for the fiscal years ended December 31, 2013 and 2014, respectively. All of the services described in the following fee table were approved by the Audit Committee.

Name	2013	2014
Audit Fees	$ 426,800	$ 347,000
Non-audit Fees	$ 37,250	$
Total Fees	$ 464,050	$ 347,000

The Audit Committee meets regularly with Grant Thornton LLP throughout the year and reviews both audit and, if applicable, non-audit services performed by Grant Thornton LLP as well as fees charged for such services.

Pre-Approval Policies and Procedures

The Audit Committee has adopted, and the board of directors has approved, a policy that sets forth the procedures and the conditions pursuant to which services proposed to be performed by the independent auditors may be pre-approved. The policy generally pre-approves all audit services and non-audit services by Luna s independent auditors, except in the case of non-audit services where subsequent approval is necessary and permissible. Pursuant to its pre-approval policy, the Audit Committee may delegate pre-approval authority for non-audit services to one or more of its members. The member to whom such authority is delegated must report, for informational purposes only, any pre-approval decisions to the Audit Committee at its next scheduled meeting. During 2013 and 2014, all services provided by Grant Thornton LLP were pre-approved by the Audit Committee in accordance with this policy.

LUNA INNOVATIONS INCORPORATED S BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT YOU VOTE FOR PROPOSAL NO. 5

Required Vote for Approval of Proposals at Luna Annual Meeting; Broker Non-Votes; Abstentions

Each stockholder of record on the Luna record date will be entitled to one vote per share of common stock held on the Luna record date on all matters submitted for consideration of, and to be voted upon by, the stockholders at the annual meeting.

If you are a beneficial owner and do not instruct your broker, bank, or other agent how to vote your shares, the question of whether your broker or nominee will still be able to vote your shares depends on whether the New York Stock Exchange, or NYSE, deems the particular proposal to be a routine matter. Even though Luna s

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common stock is listed on the NASDAQ Capital Market, the NYSE rules apply to brokers who are NYSE members voting on matters being submitted to stockholders at Luna s annual meeting. Brokers and nominees can use their discretion to vote uninstructed shares with respect to matters that are considered to be routine, but not with respect to non-routine matters. Under the rules and interpretations of the NYSE, non-routine matters are matters that may substantially affect the rights or privileges of stockholders, such as mergers, stockholder proposals, elections of directors (even if not contested), executive compensation and certain corporate governance proposals, even if supported by management. A broker non-vote occurs when a broker does not receive voting instruction from the beneficial owner with respect to a non-routine matter and is, therefore, prohibited from voting on a the matter. **Regardless of whether each proposal concerns routine or non-routine matters, Luna strongly urges you to vote on all proposals described in this joint proxy statement/prospectus.**

Proposal No. 1

Approving Proposal No. 1 requires the affirmative vote of a majority of the shares of Luna common stock present in person or represented by proxy and entitled to vote on the matter.

Proposal No. 1 does not concern a routine matter. Therefore, brokers do not have discretionary authority to vote on Proposal No. 1. Broker non-votes will have no effect on Proposal No. 1. Properly executed proxies marked ABSTAIN will have the same effect as an AGAINST vote on Proposal No.1.

Proposal No. 2

Approving Proposal No. 2 requires the affirmative vote of a majority of the shares of Luna common stock present in person or represented by proxy and entitled to vote on the matter.

Luna believes that Proposal No. 2 concerns a routine matter. Therefore, brokers have discretionary authority to vote on this proposal; and, as a result, Luna expects no broker non-votes on this proposal. Properly executed proxies marked ABSTAIN will have the same effect as an AGAINST vote on Proposal No. 2.

Proposal No. 3

Approving Proposal No. 3, the election of directors, requires a plurality of the votes of shares present in person or represented by proxy at the Luna annual meeting and entitled to vote on the election of directors. Proxies cannot be voted for more than two nominees. Accordingly, the two nominees receiving the highest number of For votes will be elected. Only votes For and Withheld will affect the outcome. Shares represented by executed proxies will be voted For the election of the two nominees recommended by the board of directors unless the proxy is marked in such a manner so as to withhold authority to vote. If any of the nominees is unable or unexpectedly declines to serve as director, the Luna board of directors may designate another nominee to fill the vacancy, and the proxy will be voted for that nominee. Each person nominated for election has agreed to serve if elected, and Luna has no reason to believe that either nominee will be unable to serve.

Proposal No. 3 does not concern a routine matter. Therefore, brokers do not have discretionary authority to vote on this proposal. Broker non-votes will have no effect on the outcome of this proposal.

Proposal No. 4

Proposal No. 4, a non-binding, advisory vote on the compensation of Luna s named executive officers, will be considered to be approved if it receives For votes from the holders of a majority of shares present in person or

represented by proxy and entitled to vote on the matter.

Proposal No. 4 does not concern a routine matter. Therefore, brokers do not have discretionary authority to vote on this proposal. Broker non-votes will have no effect on the outcome of this proposal. Properly executed proxies marked ABSTAIN will have the same effect as an AGAINST vote at the meeting.

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Proposal No. 5

Proposal No. 5, ratification of selection of Grant Thornton LLP as Luna s independent registered public accounting firm for fiscal year ending December 31, 2015, will be ratified if a majority of shares present or represented by proxy at the meeting and entitled to vote on the matter vote For such proposal.

Luna believes that Proposal No. 5 concerns a routine matter. Therefore, brokers have discretionary authority to vote on this proposal; as a result, Luna expects no broker non-votes on this proposal. Properly executed proxies marked ABSTAIN will have the same effect as an AGAINST vote at the meeting.

Record Date; Luna Innovations Incorporated Stockholders Entitled to Vote

Luna s board of directors has fixed March 23, 2015 as the record date for the Luna annual meeting. Only stockholders of record at the close of business on that date will receive notice of and be able to vote at the Luna annual meeting. At the close of business on the record date, there were 15,095,017 shares of Luna common stock outstanding held by approximately 74 record holders.

As of the Luna record date, the directors and executive officers held 992,783 shares of Luna common stock, representing approximately 6.6% of the outstanding shares of Luna common stock. These directors and executive officers have entered into voting agreements in connection with the Merger and have executed irrevocable proxies appointing Donald Pastor, API s chairman of the board of directors, and API their lawful proxy and attorney-in-fact to vote at any meeting of Luna stockholders called for purposes of considering whether to approve the issuance of common shares in connection with the Merger Agreement and the transactions contemplated thereby. For a more detailed discussion of the voting agreement see the section entitled Certain Agreements Related to the Merger Luna Voting Agreements in this joint proxy statement/prospectus.

Quorum

The required quorum for the approval of the Proposals is a majority of the shares of Luna s common stock issued and outstanding as of the Luna record date. Shares voted FOR, AGAINST , ABSTAIN or WITHHOLD on a matter vote upon by the stockholders at the annual meeting will be treated as being present at the annual meeting for purposes of establishing a quorum.

Other Matters to be Presented at the Annual Meeting

Luna s board of directors is not currently aware of any business to be brought before the annual meeting other than the Proposals. However, if any other matters are properly brought before the annual meeting, the proxies named in the proxy card will have discretion to vote the shares represented by duly executed proxies in their sole discretion.

Submitting Proxies and Revocation of Proxies

Luna s board of directors urges you to complete, date and sign the accompanying proxy card and return it promptly in the enclosed, pre-paid envelope or to alternatively submit your proxy via the telephone or internet voting instructions on your card. If your shares of Luna common stock are held in street name by your broker, you must follow the directions your broker provides to you regarding how to instruct your broker to vote your shares of Luna common stock. You cannot vote shares of Luna common stock held in street name by returning a proxy card to Luna.

Submitting Proxies by Mail

By signing and returning the proxy card in the enclosed prepaid and addressed envelope, you are authorizing individuals named on the proxy card (each, a proxy) to vote your shares at the meeting in the manner you

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indicate. Luna encourages you to sign and return the proxy card even if you plan to attend the meeting. In this way, your shares will be voted if you are unable to attend the meeting. If you received more than one proxy card, it is an indication that your shares are held in multiple accounts. Please sign and return all proxy cards to ensure that all of your shares are voted.

Internet and Phone Proxies

Instead of voting in person or submitting a proxy by mail, you may submit a proxy by telephone or over the internet. In order to submit a proxy by telephone or over the internet, please have the enclosed proxy card available for reference, and call the number or visit the website listed on the proxy card and follow the instructions. You will be asked to provide the company number and control number from the enclosed proxy card. Your proxy must be received by 7:00 p.m., Eastern Time on May 7, 2015 to ensure that it will be counted. The telephone and internet voting procedures are designed to authenticate stockholders identities, to allow stockholders to give their voting instructions and to confirm that stockholders instructions have been recorded properly.

Voting in Person

If you plan to attend the meeting and vote in person, Luna will provide you with a ballot at the meeting. If your shares are registered directly in your name, that is, you hold a share certificate, you are considered the stockholder of record and you have the right to vote in person at the meeting. If your shares are held in the name of your broker or other nominee, you are considered the beneficial owner of shares held in street name. As a beneficial owner, if you wish to vote at the meeting, you will need to bring with you to the meeting a legal proxy from your broker or other nominee authorizing you to vote such shares. Contact your broker or other record holder of the shares for assistance if this applies to you.

Your grant of a proxy on the enclosed proxy card does not prevent you from voting in person or otherwise revoking your proxy at any time before it is voted at the Luna annual meeting. To revoke your proxy:

Deliver a signed notice of revocation or a properly executed new proxy card bearing a later date to:

Corporate Secretary

Luna Innovations Incorporated

One Riverside Circle, Suite 400

Roanoke, Virginia 24016

Or grant a subsequent proxy by telephone or over the internet.

Or attend the Luna annual meeting and vote your shares in person.

Attendance at the Luna annual meeting will not, in and of itself, have the effect of revoking your proxy.

Appraisal Rights

Luna common stockholders are not entitled to appraisal rights under the Delaware General Corporation Law in connection with the Merger.

Solicitation of Proxies and Expenses

The cost of soliciting proxies from Luna stockholders will be borne by Luna. Luna may reimburse brokerage firms, banks and other persons representing the beneficial owners of shares for their expenses in forwarding solicitation materials to such beneficial owners.

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Luna will solicit stockholders by mail through regular employees, and will request banks and brokers, and other custodians, nominees and fiduciaries, to solicit their customers who have Luna stock registered in the names of such persons and will reimburse them for their reasonable out-of-pocket costs. Luna may also use the services of directors, officers and others to solicit proxies, personally or by telephone, without additional compensation.

Other Information

Results of Voting

Preliminary voting results will be announced at the Luna annual meeting. In addition, final voting results will be published in a current report on Form 8-K that Luna expects to file within four business days after the annual meeting. If final voting results are not available to Luna in time to file a Form 8-K within four business days after the annual meeting, Luna intends to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to Luna, file an additional Form 8-K to publish the final results.

Luna Security Holder Communication with Luna Board Members

Any holder of Luna common stock may contact the Luna board of directors or a specified individual director by writing to the attention of the board of directors (or a specified individual director) and sending such communication to the attention of Luna s corporate Secretary at Luna s executive offices as identified in this joint proxy statement/prospectus. Each communication from a stockholder should include the following information in order to permit Luna to confirm your status as a security holder and enable Luna to send a response if deemed appropriate:

- the name, mailing address and telephone number of the security holder sending the communication;
- the number and type of Luna securities owned by such security holder; and
- if the security holder is not a record owner of Luna securities, the name of the record owner of Luna s securities beneficially owned by the security holder.

Luna s corporate Secretary will forward all appropriate communications to the board of directors or individual members of the board of directors as specified in the communication. Luna s corporate Secretary may, but is not required to, review all correspondence addressed to the board of directors or any individual member of the board of directors. The purpose of this review is to allow the board to avoid having to consider irrelevant or inappropriate communications, such as advertisements, solicitations and hostile communications, or any correspondence more suitably directed to management.

Stockholder Proposals for Luna s 2016 Annual Meeting of Stockholders

Luna s bylaws provide for advance notice procedures to recommend a person for nomination as a director or to propose business to be considered by stockholders at a meeting but not to be included in Luna s proxy materials. For Luna s 2016 annual meeting of stockholders, such nominations or proposals, other than those made by or at the direction of the board of directors, must be submitted in writing and received by Luna s corporate Secretary at Luna s offices no later than , 2016, which is 90 days prior to the anniversary of the expected first mailing date of this joint proxy statement/prospectus. If Luna s 2016 annual meeting of stockholders is moved more than 30 days before or

after the anniversary date of Luna s 2015 annual meeting of stockholders, then the deadline is the close of business on the tenth day following the day notice of the date of the meeting was mailed or made public, whichever occurs first. Such proposals also need to comply with all applicable requirements of the rules and regulations of the SEC. The chairperson of a stockholder meeting may refuse to acknowledge the introduction of your proposal if it is not made in compliance with the foregoing procedures or the applicable provisions of Luna s bylaws.

In addition, for a stockholder proposal to be considered for inclusion in Luna s proxy statement for the 2016 annual meeting of stockholders, the proposal must be submitted in writing and received by Luna s corporate

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Secretary at Luna s offices at 1 Riverside Circle, Suite 400, Roanoke, Virginia 24016 no later than , 2015, which is 120 days prior to the anniversary of the expected mailing date of this joint proxy statement/prospectus. You are also advised to review Luna s bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations.

Householding of Annual Meeting Materials

Some banks, brokers and other nominee record holders may participate in the practice of householding proxy statements and their accompanying documents. This means that only one set of Luna s annual meeting materials is sent to multiple stockholders in your household unless you instruct otherwise. Luna will promptly deliver a separate copy of these documents without charge to you upon written request to Luna Innovations Incorporated, 1 Riverside Circle, Suite 400, Roanoke, Virginia 24016, Attn: Investor Relations. If you want to receive separate copies of Luna s annual meeting materials in the future, or if you are receiving multiple copies and would like to receive only one copy per household, you should contact your bank, broker or other nominee record holder, or you may contact Luna at the above address.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act of 1934, as amended (the Exchange Act), requires that certain executive officers and directors, and persons who own more than 10% of a registered class of equity securities file reports of ownership and changes in ownership (Forms 3, 4 and 5) with the Securities and Exchange Commission. Such executive officers, directors and greater than 10% holders are required to furnish the issuer with copies of all of these forms that they file. Certain of Luna s executives hold a power of attorney to enable such individuals to file ownership and change in ownership forms on behalf of the reporting persons.

To Luna s knowledge, based solely on Luna s review of these reports or written representations from certain reporting persons that no other reports were required, Luna believes that during 2014, all Section 16(a) filing requirements applicable to its officers, directors, greater than 10% stockholders and other persons subject to Section 16(a) of the Exchange Act were complied with.

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THE ADVANCED PHOTONIX, INC. SPECIAL MEETING OF STOCKHOLDERS

Advanced Photonix, Inc. (API) is furnishing this joint proxy statement/prospectus to its stockholders in order to provide important information regarding the matters to be considered at the API special meeting of stockholders and at any adjournment or postponement of the API special meeting. API first mailed this joint proxy statement/prospectus and the accompanying form of proxy to its stockholders on or about , 2015.

Date, Time and Place of the API Special Meeting

The API special meeting is scheduled to be held on May 8, 2015, at 9:00 a.m. Eastern Time at:

Advanced Photonix, Inc.

2925 Boardwalk Drive

Ann Arbor, MI 48104

Purpose of the API Special Meeting

1. To consider and vote upon a proposal to adopt the Agreement and Plan of Merger and Reorganization, dated January 30, 2015, by and among API, Luna Innovations Incorporated, a Delaware corporation (Luna), and API Merger Sub, Inc., a wholly owned subsidiary of Luna, as amended from time to time, and approve the transactions contemplated thereby;

2. To consider and vote upon an adjournment of the API special meeting from time to time, if necessary or appropriate (as determined by API), to solicit additional proxies if there are not sufficient votes in favor of the adoption and approval of the foregoing Proposal No. 1; and

3. To transact such other business as may be properly brought before the special meeting, or any adjournment or postponement thereof, by or at the direction of the board of directors of API.

Proposal No. 1: The Merger Proposal

To consider and vote upon a proposal to adopt the Agreement and Plan of Merger and Reorganization, dated January 30, 2015, by and among API, Luna Innovations Incorporated, a Delaware corporation (Luna), and API Merger Sub, Inc., a wholly owned subsidiary of Luna, as amended from time to time, pursuant to which API will become a wholly owned subsidiary of Luna through the Merger, and approve the transactions contemplated thereby.

The API board of directors unanimously recommends that API stockholders vote FOR Proposal No. 1 to adopt the Merger Agreement and approve the transactions contemplated thereby.

Proposal No. 2: The Adjournment Proposal

To vote upon an adjournment of the special meeting from time to time, if necessary or appropriate (as determined by API), to solicit additional proxies if there are not sufficient votes to adopt and approve the foregoing Proposal No. 1.

API s stockholders are being asked to approve a proposal that will give API authority to adjourn the special meeting from time to time, if necessary or appropriate (as determined by API), for the purpose of soliciting additional proxies

in favor of the adoption and approval of Proposal No. 1 if there are not sufficient votes at the time of the special meeting to adopt and approve Proposal No. 1. If this adjournment proposal is approved, the special meeting could be adjourned by API to any future date. If the special meeting is adjourned, stockholders who have already submitted their proxies will be able to revoke them at any time prior to their use. API does not intend to call a vote on this proposal if Proposal No. 1 has been adopted and approved at the special meeting.

API s amended by-laws also grant the chairman of the special meeting the power to adjourn the special meeting for any reason.

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The API board of directors unanimously recommends that API stockholders vote FOR Proposal No. 2 to adjourn the special meeting from time to time, if necessary or appropriate (as determined by API), to solicit additional proxies if there are not sufficient votes in favor of Proposal No. 1.

Record Date; API Stockholders Entitled to Vote

The record date for determining the API stockholders entitled to vote at the API special meeting is March 23, 2015. Holders of record of API common stock at the close of business on that date are entitled to vote at the API special meeting. On the API record date, there were issued and outstanding 37,381,413 shares of API common stock.

As of the API record date, the directors and executive officers of API and their affiliates held 4,022,152 shares of API common stock, representing approximately 10.8% of the outstanding shares of API common stock. Certain of the API directors and executive officers, and their affiliates, have entered into a voting agreement in connection with the Merger and have executed irrevocable proxies appointing My E. Chung, Luna s president and chief executive officer, and Luna their lawful proxy and attorney-in-fact to vote at any meeting of API stockholders called for purposes of considering whether to approve the Merger and adopt the Merger Agreement. For a more detailed discussion of the voting agreement see the section entitled Certain Agreements Related to the Merger API Voting Agreements in this joint proxy statement/prospectus.

Submitting Proxies and Revocation of Proxies

General

Shares represented by a properly signed and dated proxy will be voted at the API special meeting in accordance with the instructions indicated on the proxy. Proxies that are properly signed but that do not contain voting instructions will be voted FOR Proposal No. 1 to adopt the Merger Agreement and approve the transactions contemplated thereby and FOR Proposal No. 2 to adjourn the API special meeting from time to time, if necessary or appropriate (as determined by API), to solicit additional proxies if there are not sufficient votes to adopt and approve the foregoing Proposal No. 1.

API s board of directors is not currently aware of any business to be brought before the special meeting other than the Proposals. However, if any other matters are properly brought before the special meeting, the proxies named in the proxy card will have discretion to vote the shares represented by duly executed proxies in their sole discretion.

Abstentions

API will count a properly executed proxy marked ABSTAIN with respect to a particular proposal as present for purposes of determining whether a quorum is present, but the shares represented by that proxy will not be voted at the API special meeting with respect to such proposal. Abstentions will have the same effect as votes AGAINST Proposal No. 1 and Proposal No. 2.

Internet and Phone Proxies

Instead of voting in person or submitting your proxy by mail, you may submit your proxy by telephone or over the internet. In order to submit your proxy by telephone or over the internet, please have the enclosed proxy card available for reference, and call the number or visit the website listed on the proxy card and follow the instructions. You will be asked to provide the company number and control number from the enclosed proxy card. Your proxy must be received by 7:00 p.m., Eastern Time on May 7, 2015 to be counted. The telephone and internet voting procedures are designed

to authenticate stockholders identities, to allow stockholders to give their voting instructions and to confirm that stockholders instructions have been recorded properly.

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Broker Non-Votes

If your API shares are held by your broker, your broker will vote your shares for you only if you provide instructions to your broker on how to vote. You should follow the directions provided by your broker regarding how to instruct your broker to vote your shares. Your broker cannot vote your shares of API common stock without specific instructions from you. Broker non-votes include shares for which a bank, broker or other nominee holder has not received voting instructions from the beneficial owner and for which the nominee holder does not have the discretionary power to vote on a particular matter. Broker non-votes will be counted for purposes of determining a quorum for approval of the proposals. Broker non-votes will have the same effect as a vote AGAINST Proposal No. 1, but will have no effect on the outcome of Proposal No. 2.

Voting Shares in Person that are Held Through Brokers

If your shares are held of record by your broker, bank or another nominee and you wish to vote those shares in person at the API special meeting, you must obtain from the nominee holding your shares a properly executed legal proxy identifying you as a API stockholder, authorizing you to act on behalf of the nominee at the API special meeting and identifying the number of shares with respect to which the authorization is granted.

Revocation of Proxies

If you submit a proxy, you may revoke it at any time before it is voted by:

delivering to the President of API a written notice, dated later than the proxy you wish to revoke, stating that the proxy is revoked;

submitting a new, signed proxy with a later date than the proxy you wish to revoke;

submitting a proxy by telephone or the internet with a later date than the proxy you wish to revoke; or

attending the API special meeting and voting in person (your attendance alone will not revoke your proxy).

Notices of revocations of proxies sent to the President of API should be addressed to Advanced Photonix, Inc., 2925 Boardwalk Drive, Ann Arbor, MI 48104, Attention: President.

If you have instructed your broker to vote your shares, you must follow directions received from your broker to change those instructions.

Required Stockholder Vote; Quorum

In order to conduct business at the API special meeting, a quorum must be present. The holders of a majority of the votes entitled to be cast by holders of common stock at the API special meeting, present in person or represented by proxy, constitute a quorum under API s bylaws. API will treat shares of common stock represented by a properly signed and returned proxy, including abstentions and broker non-votes, as present at the API special meeting for the purposes of determining the existence of a quorum.

With respect to any matter submitted to a vote of the API stockholders, each holder of API common stock will be entitled to one vote, in person or by proxy, for each share of API common stock held in his, her or its name on the books of API on the record date.

Approval of Proposal No. 1 requires the affirmative vote of a majority of the shares of API common stock outstanding on the API record date.

Approval of Proposal No. 2 requires the affirmative vote of holders of a majority of the outstanding shares of API common stock present in person or represented by proxy and entitled to vote on the subject matter at the API special meeting.

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Board of Directors Unanimous Recommendations

The API board of directors has determined that the Merger Agreement is advisable and in the best interests of API and its stockholders. **The API board of directors unanimously recommends that API stockholders vote FOR Proposal No. 1 to adopt the Merger Agreement and approve the transactions contemplated thereby and FOR Proposal No. 2 to adjourn the special meeting from time to time, if necessary or appropriate (as determined by API), to solicit additional proxies if there are not sufficient votes to adopt and approve Proposal No. 1.**

The matters to be considered at the API special meeting are of great importance to the stockholders of API. Accordingly, API urges its stockholders to read and carefully consider the information presented in this joint proxy statement/prospectus, and to properly complete and submit the proxy.

API stockholders should not submit any stock certificates at this time. A transmittal form with instructions for the surrender of stock certificates for API stock will be mailed to API stockholders as soon as practicable after completion of the Merger.

Appraisal Rights

API common stockholders are not entitled to appraisal rights under the Delaware General Corporation Law in connection with the Merger.

Solicitation of Proxies and Expenses

The proxy accompanying this joint proxy statement/prospectus is solicited on behalf of the API board of directors for use at the API special meeting. API will pay for the cost of soliciting proxies from its stockholders. In addition to solicitation by mail, the directors, officers, employees and agents of API may solicit proxies from API stockholders by personal interview, telephone, telegram or otherwise. Arrangements may also be made with brokerage firms and other custodians, nominees and fiduciaries who are record holders of API common stock for the forwarding of solicitation materials to the beneficial owners of API common stock to reimburse these brokers, custodians, nominees and fiduciaries for the reasonable out-of-pocket expenses they incur in connection with the forwarding of solicitation materials. API has engaged The Proxy Advisory Group, LLC to assist in the solicitations of proxies and provide proxy related advice and informational support for a $15,000 service fee, plus customary disbursements.

API stockholders are advised to thoroughly read all available documents and materials regarding the Merger, including the sections entitled The Merger Interests of Directors, Executive Officers and Affiliates of API in this joint proxy statement/prospectus.

Assistance

If you need assistance in completing your proxy card or have questions regarding the API special meeting, please contact The Proxy Advisory Group, LLC, the proxy solicitation agent for API by mail at 18 East 41st Street, 20th Floor, New York, NY 10017, or by telephone at (888) 557-7699 or (888) 55-PROXY (toll free) or (212) 616-2180.

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LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon by Cooley LLP, Reston, Virginia. Certain federal income tax consequences of the Merger will be passed upon for Luna by Cooley, LLP, Reston, Virginia, and for API by Tarter Krinsky & Drogin LLP, New York, New York.

EXPERTS

The financial statements and schedule of Luna Innovations Incorporated included in this joint proxy statement/prospectus and elsewhere in the registration statement have been so included in reliance on the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing.

The consolidated financial statements of Advanced Photonix, Inc. as of March 31, 2014 and 2013 and for the years then ended included in this joint proxy statement/prospectus and in this Registration Statement have been so included in reliance on the report of BDO USA, LLP, an independent registered public accounting firm, appearing elsewhere herein and in the Registration Statement, given on the authority of said firm as experts in auditing and accounting.

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WHERE YOU CAN FIND MORE INFORMATION

Luna Innovations Incorporated

Luna files annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, statements or other information filed by Luna Corporation at the SEC s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information regarding the public reference rooms. The SEC filings of Luna are also available to the public from commercial document retrieval services and at the website maintained by the SEC at http://www.sec.gov. Luna stockholders may request a copy of such documents or by calling Luna Innovations Incorporated at (540) 769-8400, or writing to Luna Innovations Incorporated, One Riverside Circle, Suite 400 Roanoke, Virginia 24016, Attention: Investor Relations.

Luna is filing this joint proxy statement/prospectus as part of a registration statement on Form S-4 regarding the Merger with the SEC. This joint proxy statement/prospectus constitutes a prospectus of Luna in addition to being a proxy statement of Luna and a proxy statement of API for their respective stockholder meetings. The registration statement, including the attached annexes, exhibits and schedules, contains additional relevant information about Luna, Luna common stock and API investors and securityholders are urged to read the joint proxy statement/prospectus because it will contain important information about Luna and API and the proposed transaction. As allowed by the SEC rules, this joint proxy statement/prospectus does not contain all the information you can find in the registration statement or the exhibits to the registration statement.

Luna incorporates by reference (i) the Merger Agreement attached to this joint proxy statement/prospectus as Annex A which includes the Luna Voting Agreement (A-1) and API Voting Agreement (A-2); (ii) Fairness Opinion of Mooreland as Annex B and (iii) Fairness Opinion of B. Riley & Co., LLC as Annex C. Documents incorporated by reference are available from Luna without charge, excluding any exhibits to those documents, unless the exhibit is specifically incorporated by reference in this joint proxy statement/prospectus. Luna stockholders may request a copy of such documents by calling Luna Innovations Incorporated at (540)769-8400 or writing to Luna Innovations Incorporated, One Riverside Circle, Suite 400 Roanoke, Virginia 24016, Attention: Investor Relations.

API

API files annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, statements or other information filed by API at the SEC s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information regarding the public reference rooms. The SEC filings of API are also available to the public from commercial document retrieval services and at the website maintained by the SEC at http://www.sec.gov or by calling API at (734) 864-5647 or writing to Advanced Photonix, Inc., 2925 Boardwalk Drive, Ann Arbor, Michigan 48104, Attention: Investor Relations.

Other Information

The joint proxy statement/prospectus will be mailed to stockholders of Luna and API. Stockholders may obtain a free copy of the definitive joint proxy statement/prospectus and other documents when filed with the SEC at the SEC s website at *http://www.sec.gov*. The joint proxy statement/prospectus and other relevant documents may also be obtained free of charge from:

Luna: by calling Luna Innovations Incorporated at (540) 769-8400 or writing to Luna Innovations Incorporated, One Riverside Circle, Suite 400 Roanoke, Virginia 24016, Attention: Investor Relations.

API: by calling API at (734) 864-5647 or writing to Advanced Photonix, Inc. 2925 Boardwalk Drive, Ann Arbor, Michigan 48104, Attention: Investor Relations.

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Luna has supplied all information contained in this joint proxy statement/prospectus relating to Luna, and API has supplied all information contained in this joint proxy statement/prospectus relating to API. Luna is not incorporating the contents of its website, the website of API, the website of the SEC, or any other website into this joint proxy statement/prospectus.

Luna and API have not authorized anyone to give any information or make any representation about the Merger or Luna Innovations Incorporated or Advanced Photonix, Inc. that is different from, or in addition to, that contained in this joint proxy statement/prospectus. Therefore, if anyone does give you information of this kind, you should not rely on it. If you are in a jurisdiction where offers to exchange or sell, or solicitations of offers to exchange or purchase, the securities offered by this joint proxy statement/prospectus or the solicitation of proxies is unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this joint proxy statement/prospectus does not extend to you. The information contained in this joint proxy statement/prospectus is accurate only as of the date of this joint proxy statement/prospectus unless the information specifically indicates that another date applies.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders

Luna Innovations Incorporated

We have audited the accompanying consolidated balance sheets of Luna Innovations Incorporated (a Delaware corporation) and subsidiaries (the Company) as of December 31, 2013 and 2014, and the related consolidated statements of operations, changes in stockholders equity, and cash flows for each of the two years in the period ended December 31, 2014. Our audits of the basic consolidated financial statements included the financial statement schedule listed in the index appearing under Item 15 (a)(2). These financial statements and financial statement schedule are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. We were not engaged to perform an audit of the Company s internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Luna Innovations Incorporated and subsidiaries as of December 31, 2013 and 2014, and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2014, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

/s/ GRANT THORNTON LLP

McLean, Virginia

March 16, 2015

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LUNA INNOVATIONS INCORPORATED

CONSOLIDATED BALANCE SHEETS

	December 31, 2013	December 31, 2014
Assets		
Current assets:		
Cash and cash equivalents	$ 7,778,541	$ 14,116,969
Accounts receivable, net	5,408,281	5,689,615
Inventory, net	3,346,177	3,364,233
Prepaid expenses	708,974	523,553
Other current assets	70,208	191,749
Total current assets	17,312,181	23,886,119
Property and equipment, net	2,060,709	3,497,057
Intangible assets, net	288,475	199,277
Other assets	42,710	1,995
Total assets	**$ 19,704,075**	**$ 27,584,448**
Liabilities and stockholders equity		
Current Liabilities:		
Current portion of long term debt obligation	1,500,000	625,000
Current portion of capital lease obligation	66,617	70,725
Accounts payable	1,401,764	1,447,177
Accrued liabilities	3,546,585	5,536,322
Deferred revenue	691,424	861,081
Total current liabilities	7,206,390	8,540,305
Long-term debt obligation	625,000	
Long-term capital lease obligation	110,307	39,582
Total liabilities	**7,941,697**	**8,579,887**
Commitments and contingencies		
Stockholders equity:		
Preferred stock, par value $0.001, 1,321,514 shares authorized, issued and outstanding at December 31, 2013 and 2014	1,322	1,322
Common stock, par value $0.001, 100,000,000 shares authorized, 14,527,335 and 15,110,924 shares issued, 14,527,335 and 15,088,199 shares outstanding at December 31, 2013 and 2014, respectively	14,842	15,541
Treasury stock at cost, zero shares at December 31, 2013 and 22,725 shares at December 31, 2014		(32,221)
Additional paid-in capital	62,756,571	64,147,666
Accumulated deficit	(51,010,357)	(45,127,747)

Total stockholders equity	**11,762,378**	**19,004,561**
Total liabilities and stockholders equity	**19,704,075**	**27,584,448**

The accompanying notes are an integral part of these consolidated financial statements.

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LUNA INNOVATIONS INCORPORATED

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years ended December 31,	
	2013	2014
Revenues:		
Technology development revenues	$ 11,421,868	$ 12,205,889
Products and licensing revenues	6,911,707	9,054,101
Total revenues	18,333,575	21,259,990
Cost of revenues:		
Technology development costs	8,882,071	9,376,485
Products and licensing costs	3,402,882	4,046,885
Total cost of revenues	12,284,953	13,423,370
Gross profit	6,048,622	7,836,620
Operating expense:		
Selling, general & administrative	11,525,636	10,253,847
Research, development, and engineering	2,558,332	2,087,874
Total operating expense	14,083,968	12,341,721
Operating loss	(8,035,346)	(4,505,101)
Other income/(expense):		
Other income, net	347,062	111,452
Interest expense, net	(207,538)	(96,229)
Total other income	139,524	15,223
Loss from continuing operations before income taxes	(7,895,822)	(4,489,878)
Income tax benefit	(2,387,422)	(1,137,228)
Loss from continuing operations	(5,508,400)	(3,352,650)
Operating income/(loss) from discontinued operations, net of $0.9 million and $0.0 million of related income taxes	1,313,611	(34,491)
Gain on sale, net of $1.5 million and $1.3 million of related income taxes	3,391,639	9,381,948
Income from discontinued operations, net of income taxes	4,705,250	9,347,457
Net (loss)/income	(803,150)	5,994,807
Preferred stock dividend	102,327	112,197

Net (loss)/income attributable to common stockholders	$ (905,477)	$ 5,882,610
Net loss per share from continuing operations:		
Basic and diluted	$ (0.38)	$ (0.23)
Net income per share from discontinued operations:		
Basic and diluted	$ 0.33	$ 0.63
Net (loss)/income per share attributable to common stockholders:		
Basic and diluted	$ (0.06)	$ 0.40
Weighted average shares:		
Basic and diluted	14,336,135	14,880,697

The accompanying notes are an integral part of these consolidated financial statements.

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LUNA INNOVATIONS INCORPORATED

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY

	Preferred Stock		Common Stock		Treasury Stock		Additional Paid in Capital	Accumulated Deficit	Total
	Shares	$	Shares	$	Shares	$	$	$	$
Balance January 1, 2013	1,321,514	1,322	14,009,280	14,245			61,361,505	(50,104,880)	11,272,192
Exercise of stock options and warrants			169,277	168			111,789		111,957
Stock-based compensation							1,063,645		1,063,645
Non cash compensation			337,500	338			102,396		102,734
Stock dividends (1)				80			102,247	(102,327)	
Issuance of Common Stock, Other (2)			11,278	11			14,989		15,000
Net loss								(803,150)	(803,150)
Balance December 31, 2013	1,321,514	1,322	14,527,335	14,842			62,756,571	(51,010,357)	11,762,378
Exercise of stock options			315,087	316			231,726		232,042
Stock-based compensation							854,370		854,370
Non cash compensation			245,777	303			192,882		193,185
Stock dividends (1)				80			112,117	(112,197)	
Purchase of treasury stock					22,725	(32,221)			(32,221)
Net Income								5,994,807	5,994,807
Balance December 31, 2014	1,321,514	$ 1,322	15,088,199	$ 15,541	22,725	$ (32,221)	$ 64,147,666	$ (45,127,747)	$ 19,004,561

(1) The stock dividends payable in connection with the Series A Convertible Preferred Stock are issuable upon the request of Carilion.

(2) Fees paid to our board of directors by issuance of our common stock.

The accompanying notes are an integral part of these consolidated financial statements.

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LUNA INNOVATIONS INCORPORATED

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years ended December 31,	
	2013	**2014**
Cash flows used in operating activities:		
Net (loss)/income	$ (803,150)	$ 5,994,807
Adjustments to reconcile net (loss)/income to net cash used in by operating activities:		
Depreciation and amortization	935,477	607,693
Stock-based compensation	1,181,379	1,019,445
Gain on sale of discontinued operations, net of income taxes	(3,391,639)	(9,381,948)
Inventory obsolescence		163,998
Bad debt	134,811	
Tax benefit from utilization of loss from current year operations	(1,507,791)	(1,148,941)
Changes in operating assets and liabilities:		
Accounts receivable	1,533,827	(281,334)
Inventory	(9,261)	(220,419)
Other assets	(79,180)	50,696
Accounts payable and accrued liabilities	396,540	311,627
Deferred revenue	(178,305)	169,657
Net cash used in operating activities	(1,787,292)	(2,714,719)
Cash flows provided by investing activities:		
Acquisition of property and equipment	(186,956)	(255,242)
Intangible property costs	(253,451)	(252,083)
Proceeds from sale of discontinued operations, net	5,110,855	10,927,268
Net cash provided by investing activities	4,670,448	10,419,943
Cash flows used in financing activities:		
Payments on debt obligations	(1,500,000)	(1,500,000)
Payments on capital lease obligations	(57,033)	(66,617)
Repurchase of common stock		(32,221)
Proceeds from the exercise of options and warrants	111,957	232,042
Net cash used in financing activities	(1,445,076)	(1,366,796)
Net change in cash and cash equivalents	1,438,080	6,338,428
Cash and cash equivalents beginning of period	6,340,461	7,778,541
Cash and cash equivalents end of period	$ 7,778,541	$ 14,116,969
Supplemental disclosure of cash flow information		

Cash paid for interest	$ 178,646	$ 87,354
Cash paid for income taxes	$ 14,010	$ 150,000
Dividend on preferred stock, 79,292 shares of common stock issuable for each of the years ended December 31, 2013 and 2014, respectively	$ 102,327	$ 112,177

The accompanying notes are an integral part of these consolidated financial statements.

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LUNA INNOVATIONS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Summary of Significant Accounting Policies

Luna Innovations Incorporated (we or the Company), headquartered in Roanoke, Virginia was incorporated in the Commonwealth of Virginia in 1990 and reincorporated in the State of Delaware in April 2003.

We develop, manufacture and market fiber optic sensing and test & measurement products focused on bringing new and innovative technology solutions to measure, monitor, protect and improve critical processes in the aerospace, automotive, energy, composite, telecommunications and defense industries. Our business model is designed to accelerate the process of bringing new and innovative products to market. We use our in-house technical expertise to perform applied research services on government-funded projects across a range of technologies and also for corporate customers in the fiber optic sensing area. We are organized into two business segments: our Technology Development segment and our Products and Licensing segment. Our Technology Development segment performs applied research principally on government-funded projects. Most of the government funding in our Technology Development segment is derived from the U.S. Government s Small Business Innovation Research (SBIR) program coordinated by the U.S. Small Business Administration (SBA). Our Products and Licensing segment focuses on fiber optic test and measurement, sensing, and instrumentation products and also conducts applied research in the fiber optic sensing area to corporate and government customers. The Products and Licensing segment focuses on fiber optic test and measurement, sensing and instrumentation products.

We have a history of net losses and negative cash flow from operations. We have historically managed our liquidity through cost reduction initiatives, debt financings, capital markets transactions and the sale of assets.

Although there can be no guarantees, we believe that our current cash and cash equivalents balance, provides adequate liquidity for us to meet our working capital needs through 2015.

Consolidation Policy

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (GAAP) and include the accounts of the Company and its wholly owned subsidiaries. We eliminate from our financial results all significant intercompany transactions.

Use of Estimates

The preparation of our consolidated financial statements in accordance with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities in our consolidated financial statements and accompanying notes.

Although these estimates are based on our knowledge of current events and actions we may undertake in the future, actual results may differ from such estimates and assumptions.

Technology Development Revenues

We perform research and development for U.S. government agencies, educational institutions and commercial organizations. We recognize revenues under research contracts when a contract has been executed, the contract price

is fixed and determinable, delivery of services or products has occurred and collection of the contract price is considered reasonably assured. Revenue is earned under cost reimbursable, time and materials and fixed price contracts. Direct contract costs are expensed as incurred.

Under cost reimbursable contracts, we are reimbursed for costs that are determined to be reasonable, allowable and allocable to the contract and are paid a fixed fee representing the profit negotiated between us and

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the contracting agency. Revenue from cost reimbursable contracts is recognized as costs are incurred plus a portion of the fee earned. Revenue from time and materials contracts is recognized based on direct labor hours expended at contract billing rates plus other billable direct costs.

Revenue from fixed price research contracts that involve the delivery of services and a prototype model is recognized under the percentage of completion method. Fixed price arrangements that involve the delivery of research reports are recognized under the proportional performance method based upon the ratio of costs incurred to achieve contract milestones to total estimated cost as this method more accurately measures performance under these arrangements. Losses on contracts, if any, are recognized in the period in which they become known and estimable.

Intellectual Property License Revenues

Amounts received from third parties for licenses to our intellectual property are recognized when earned under the terms of the agreements. Revenues are recognized upon transfer of the license unless we have continuing obligations for which fair value cannot be established, in which case the revenues are recognized over the period of the obligation. If there are extended payment terms, license fee revenues are recognized as these payments become due and collection is reasonably assured. We consider all arrangements with payment terms extending beyond 12 months not to be fixed and determinable.

Certain of our license arrangements have also required us to enter into research and development agreements. Accordingly, we allocate our arrangement fees to the various elements based upon objective reliable evidence of fair value, if available. For those arrangements in which evidence of fair value is not available, we defer revenues from any up-front payments and recognize them over the service period in the arrangement. Certain of these arrangements also include the payment of performance bonuses based upon the achievement of specific milestones. Generally, there are no assurances at the onset of these arrangements that the milestones will be achieved. As such, fees related to such milestones are excluded from the initial allocation of the arrangement fee and are recognized upon achievement of the milestone provided that all other revenue recognition criteria are met.

Product Sales Revenues

Revenues from product sales are generated by the sale of commercial products and services under various sales programs to the end user and through distribution channels. We sell fiber optic sensing systems to end users for use in numerous fiber optic based measurement applications. Revenues are recorded net of applicable sales taxes collected from customers and payable to state or local governmental entities.

We recognize revenue relating to our products when persuasive evidence of an arrangement exists, delivery has occurred, the selling price is fixed or determinable and collectability of the resulting receivable is reasonably assured.

For multi-element arrangements that include tangible products that contain software that is essential to the tangible product s functionality, we allocate revenue to all deliverables based on their relative selling prices. Other deliverables include extended warranty, training and various add-on products. In such circumstances, we use a hierarchy to determine the selling price to be used for allocating revenue to deliverables: (i) vendor-specific objective evidence of fair value (VSOE), (ii) third-party evidence of selling price (TPE), and (iii) best estimate of the selling price (ESP). VSOE generally exists only when we sell the deliverable separately and is the price actually charged by us for that deliverable. Due to the uniqueness of our products comparable third party evidence is generally not available. ESPs reflect our best estimates of what the selling prices of elements would be if they were sold regularly on a stand-alone basis.

Our process for determining our ESP for deliverables without VSOE or TPE considers multiple factors that may vary depending upon the unique facts and circumstances related to each deliverable. Key factors considered in developing the ESPs include prices charged by us for similar offerings, our historical pricing practices, the

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nature of the deliverables, and the relative ESP of all of the deliverables as compared to the total selling price of the product. We may also consider, when appropriate, the impact of other products and services on selling price assumptions when developing and reviewing our ESPs.

Revenues from product sales that require no ongoing obligations are recognized as revenues when shipped to the customer, title has passed and collection is reasonably assured. In transactions in which a right-of-return exists, revenues are deferred until acceptance has occurred and the period for the right-of-return has expired.

Allowance for Uncollectible Receivables

Accounts receivable are recorded at their face amount, less an allowance for doubtful accounts. We review the status of our uncollected receivables on a regular basis. In determining the need for an allowance for uncollectible receivables, we consider our customers financial stability, past payment history and other factors that bear on the ultimate collection of such amounts. The allowance was $134,811 at December 31, 2013 and December 31, 2014.

Cash Equivalents

We consider all highly liquid investments purchased with maturities of three months or less to be cash equivalents. To date, we have not incurred losses related to cash and cash equivalents. The Company s cash transactions are processed through reputable commercial banks. To date, the Company has not incurred losses related to cash and cash equivalents. The Company regularly maintains cash balances with financial institutions which exceed Federal Deposit Insurance Corporation (FDIC) insurance limits. At December 31, 2013 and December 31, 2014, the Company had approximately $7.5 million and $13.9 million, respectively, in excess of FDIC insured limits.

Fair Value Measurements

The Company s financial assets and liabilities are measured at fair value, which is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants. Valuation techniques are based on observable or unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company s market assumptions. These two types of inputs have created the following fair value hierarchy:

Level 1 Quoted prices for identical instruments in active markets.

Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which significant value drivers are observable.

Level 3 Valuations derived from valuation techniques in which significant value drivers are unobservable.

The carrying values of cash and cash equivalents, accounts receivable and accounts payable approximate fair value because of the short-term nature of these instruments. We consider the terms of the SVB debt Facility including its interest rate of prime plus 2%, to be at market based upon similar instruments that would be available to us.

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Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. We record depreciation using the straight-line method over the following estimated useful lives:

Equipment	3 7 years
Furniture and fixtures	7 years
Software	3 years
Leasehold improvements	Lesser of lease term or life of improvements

Intangible Assets

Intangible assets consist of patents related to certain intellectual property that we have developed or acquired. We amortize our patents over their estimated useful life of five years, and analyze them whenever events or circumstances indicate that the carrying amount may not be recoverable to determine whether their carrying value has been impaired.

Research, Development and Engineering

Research, development and engineering expenses not related to contract performance are expensed as incurred. We expensed $2.6 million and $2.1 million of non-contract related research, development and engineering expenses for the years ended December 31, 2013 and 2014, respectively.

Valuation of Long-Lived Assets

We review our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets is measured by comparing the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds their fair value. Assets to be disposed of by sale are reflected at the lower of their carrying amount or fair value less cost to sell.

Inventory

Inventory consists of finished goods, work in process and raw materials valued at the lower of cost (determined on the first-in, first-out basis) or market. We provide reserves for estimated obsolescence or unmarketable inventory equal to the difference between the carrying value of the inventory and the estimated market value based upon assumptions about future demand and market conditions.

Net (Loss)/Income per Share

Basic per share data is computed by dividing net (loss)/income attributable to common stockholders by the weighted average number of shares outstanding during the period. Diluted per share data is computed by dividing net (loss)/income attributable to common stockholders by the weighted average shares outstanding during the period increased to include, if dilutive, the number of additional common share equivalents that would have been outstanding if potential common shares had been issued using the treasury stock method. Diluted per share data would also include the potential common share equivalents relating to convertible securities by application of the if-converted method.

The effect of 2.3 million common stock equivalents (which include outstanding warrants, preferred stock and stock options) are not included for the years ended December 31, 2013 and 2014, as they are antidilutive to earnings per share due to the Company having a net loss from continuing operations.

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Stock-Based Compensation

We have a stock-based compensation plan, which is described further in Note 9. We recognize compensation expense based upon the fair value of the underlying equity award as of the date of grant. The Company has elected to use the Black-Scholes option pricing model to value any awards granted. We recognize stock-based compensation for such awards on a straight-line method over the requisite service period of the awards taking into account the effects of the employees expected exercise and post-vesting employment termination behavior.

The Company recognizes expense for equity instruments issued to non-employees based upon the fair value of the equity instruments issued.

The fair value of each option granted is estimated as of the grant date using the Black-Scholes option pricing model with the following assumptions:

	Years ended December 31,	
	2013	2014
Risk-free interest rate range	1.27% 2.34%	2.02% 2.27%
Expected life of option-years	7.5	7.5
Expected stock price volatility	108%	106%
Executive turnover rates	%	%
Non-executive turnover rates	14.7%	33.6%
Expected dividend yield	%	%

The risk-free interest rate is based on U.S. Treasury interest rates, the terms of which are consistent with the expected life of the stock options. Expected volatility is based upon the average historical volatility of our common stock over the period commensurate with the expected term of the related instrument. The expected life and estimated post-employment termination behavior is based upon historical experience of homogeneous groups, executives and non-executes, within our company. We do not currently pay dividends on our common stock nor do we expect to in the foreseeable future.

Advertising

We expense the cost of advertising as incurred. Historically such amounts have not been significant to our operations.

Income Taxes

We account for income taxes using the liability method. Deferred tax assets or liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities as measured by the enacted tax rates which will be in effect when the differences reverse. A valuation allowance against net deferred tax assets is provided unless we conclude it is more likely than not that the deferred tax assets will be realized.

We recognize tax benefits from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by taxing authorities.

Recent Accounting Pronouncements

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (ASU 2014-09), which supersedes nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, more judgment and estimates may be required within the revenue recognition process than are required under existing U.S. GAAP. The standard is effective for annual periods beginning after December 15, 2016, and

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interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) a retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption (which includes additional footnote disclosures). We are currently evaluating the impact of our pending adoption of ASU 2014-09 on our consolidated financial statements and have not yet determined the method by which we will adopt the standard in 2017.

2. Inventory

Inventory consists of finished goods, work-in-process and raw materials valued at the lower of cost (determined on the first-in, first-out basis) or market. We provide reserves for estimated obsolescence or unmarketable inventory equal to the difference between the cost of the inventory and the estimated market value based upon assumptions about future demand and market conditions.

Components of inventory are as follows:

	December 31, 2013	December 31, 2014
Finished goods	$ 719,574	$ 648,182
Work-in-process	361,754	262,025
Raw materials	2,339,595	2,692,765
	3,420,923	3,602,972
Less: Inventory reserves	74,746	238,739
Total inventory, net	$ 3,346,177	$ 3,364,233

3. Debt

Silicon Valley Bank Facility

We currently have a Loan and Security Agreement with Silicon Valley Bank (SVB) under which we have a term loan with an original borrowing amount of $6.0 million (the Term Loan). The Term Loan is to be repaid by us in 48 monthly installments, plus accrued interest payable monthly in arrears, and unless earlier terminated, matures on the earlier of either May 1, 2015 or an event of a default under the loan agreement. The term loan carries a floating annual interest rate equal to SVB s prime rate then in effect plus 2%. We may repay amounts due under the Term Loan at any time with no penalties.

In addition to the terms and conditions of the Term Loan, we had a revolving line of credit (the Line of Credit) which had a maximum borrowing capacity of $1.0 million. The interest rate on the Line of Credit was SVB s prime rate plus 1.25%, paid monthly in arrears, and we were required to pay an unused Line of Credit fee of one-quarter of one percent (0.25%), paid monthly. We could have terminated the Line of Credit for a termination fee of $10,000, which fee would not be paid in the event that the Line of Credit is replaced by another loan facility with SVB. The Line of Credit matured on May 18, 2014 and was not renewed.

Amounts due under the Credit Facility are secured by substantially all of our assets, including intellectual property, personal property and bank accounts.

On March 21, 2013, we entered into a Fourth Loan Modification Agreement with SVB that replaced the existing financial covenants with a single covenant that we maintain a minimum cash balance of $5.0 million with SVB. Effective on January 21, 2014, in connection with our sale of assets to Intuitive, this covenant was modified to reduce the required minimum cash balance to $3.5 million. The Credit Facility also requires us to observe a number of operational covenants, including protection and registration of intellectual property rights, and certain customary negative covenants. As of December 31, 2014, we were in compliance with all covenants under the Credit Facility.

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In addition, the Credit Facility contains customary events of default, including nonpayment of principal, interest or other amounts, violation of covenants, material adverse change, an event of default under any subordinated debt documents, incorrectness of representations and warranties in any material respect, bankruptcy, judgments in excess of a threshold amount, and violations of other agreements in excess of a threshold amount. If any event of default occurs SVB may declare due immediately all borrowings under the Credit Facility and foreclose on the collateral. Furthermore, an event of default under the Credit Facility would result in an increase in the interest rate on any amounts outstanding. As of December 31, 2014, there were no events of default on the Credit Facility.

The balance under the Term Loan at December 31, 2014 was $0.6 million all of which was classified as short-term. The effective rate of our Term Loan at December 31, 2014 was 6%.

The following table presents a summary of debt outstanding as of December 31, 2013 and 2014:

	December 31,	
	2013	2014
Silicon Valley Bank Term Loan	$ 2,125,000	$ 625,000
Less: current portion	1,500,000	625,000
Total long-term debt	$ 625,000	$

Maturities on long-term debt are as follows:

Year	Amount
2015	625,000
Total	$ 625,000

Costs associated with loans outstanding were as follows:

	Years ended December 31,	
	2013	2014
Interest expense	$ 189,151	$ 87,426
Amortization of transaction costs	18,387	8,803
Total interest expense	$ 207,538	$ 96,229

4. Accounts Receivable Trade

Accounts receivable consist of the following:

	December 31,	
	2013	**2014**
Billed	$ 3,552,184	$ 4,517,672
Unbilled	1,755,439	1,249,814
Other	235,469	56,940
	$ 5,543,092	$ 5,824,426
Less: allowance for doubtful accounts	(134,811)	(134,811)
	$ 5,408,281	$ 5,689,615

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Unbilled receivables result from contract retainages and revenues that have been earned in advance of billing and can be invoiced at contractually defined intervals, milestones, or at completion of the contract. Unbilled amounts are expected to be billed in future periods and are classified as current assets in accordance with industry practice.

5. Property and Equipment

Property and equipment, net, consists of the following at:

	December 31,	
	2013	**2014**
Building	$ 69,556	$ 69,556
Equipment	7,239,017	7,312,730
Furniture and fixtures	562,485	562,485
Software	1,092,484	1,092,484
Leasehold improvements	3,168,377	4,830,055
	12,131,919	13,867,310
Less accumulated depreciation	(10,071,210)	(10,370,253)
	$ 2,060,709	$ 3,497,057

Depreciation for the years ended December 31, 2013 and 2014 was approximately $0.5 million and $0.3 million, respectively.

6. Intangible Assets

The following is a summary of intangible assets, net:

	December 31,	
	2013	**2014**
Patent costs	$ 2,496,560	$ 2,356,820
Accumulated amortization	(2,208,085)	(2,157,543)
	$ 288,475	$ 199,277

Amortization for the years ended December 31, 2013 and 2014 was approximately $0.4 million and $0.3 million, respectively. Estimated aggregate amortization, based on the net value of intangible assets at December 31, 2014, for each of the next five years is as follows:

Year Ending December 31,	
2015	91,285
2016	53,342

2017	29,218
2018	15,137
2019	2,210
	$ 191,192

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7. Accrued Liabilities

	December 31, 2013	2014
Accrued compensation	2,205,612	2,362,608
Accrued sub-contracts	297,510	244,218
Accrued professional fees	279,991	177,712
Accrued income tax	13,143	166,550
Deferred rent	102,569	1,752,717
Royalties	291,442	392,945
Warranty reserve	56,700	69,264
Claims reserve	92,167	
Accrued liabilities other	207,451	370,308
Total Accrued Liabilities	3,546,585	5,536,322

8. Income Taxes

The benefit from income taxes from continuing operations consisted of the following for the periods indicated:

	Years ended December 31, 2013	2014
Current:		
Federal	$ (2,387,422)	$ (1,146,447)
State		9,219
Deferred Federal		
Deferred State		
Income tax benefit	$ (2,387,422)	$ (1,137,228)

Deferred tax assets and liabilities consist of the following components:

	December 31, 2013		December 31, 2014	
	Current	Long-Term	Current	Long-Term
Bad debt and inventory reserve	$ 88,077	$	$ 150,330	$
Deferred revenue		59,673		126,096
Depreciation and amortization		1,024,746		309,600
Net operating loss carryforwards		10,897,715		8,030,396
		386,161		386,161

Research and development credits				
Accrued liabilities	836,049		1,584,633	
Deferred compensation		163,655		199,717
Stock-based compensation		1,519,513		1,695,868
AMT credit		42,636		207,648
Total	924,126	14,094,099	1,734,963	10,955,486
Valuation allowance	(924,126)	(14,094,099)	(1,734,963)	(10,955,486)
Net deferred tax asset	$	$	$	$

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The benefit from income taxes from continuing operations differs from the amount computed by applying the federal statutory income tax rate to the Company s loss from continuing operations before income taxes as follows for the periods indicated:

	Years ended December 31,	
	2013	2014
Income tax expense at federal statutory rate	34.00%	34.00%
State taxes, net of federal tax effects	3.96%	3.75%
Change in valuation allowance	(3.78)%	(8.02)%
Incentive stock options	(4.12)%	(3.33)%
Provision to return adjustments	2.43%	(0.34)%
Meals and entertainment	(0.13)%	(0.27)%
Other Permanent differences	(2.12)%	(0.46)%
Income tax benefit	30.24%	25.33%

The realization of our deferred income tax assets is dependent upon sufficient taxable income in future periods. In assessing whether deferred tax assets may be realized, we consider whether it is more likely than not that some portion, or all, of the deferred tax asset will be realized. We consider scheduled reversals of deferred tax liabilities, projected future taxable income and tax planning strategies that we can implement in making our assessment. We have net operating loss carryforwards at December 31, 2014 of approximately $21.2 million expiring at varying dates through 2025. We have research and development tax credit carryforwards at December 31, 2014 of approximately $0.4 million, which expire at varying dates through 2024.

We have undertaken a formal section 382 study and determined that we do not have a limitation on our net operating loss available to offset future income.

The U.S. federal statute of limitations remains open for the year 2006 and onward. We currently have no federal income tax returns under examination. U.S. state jurisdictions have statutes of limitation generally ranging from three to seven years. We currently have no state income or franchise tax returns under examination. We currently do not file tax returns in any foreign tax jurisdiction.

We currently have no positions for which we expect that the amount of unrecognized tax benefit will increase or decrease significantly within twelve months of the reporting date or for which we believe there is significant risk of disallowance upon audit. We have no tax interest or penalties reported in either our statement of operations or statement of financial position for any year reported herein. Management believes it is not more likely than not that the deferred tax assets at December 31, 2013 or December 31, 2014 will not be realized, and as a result a valuation allowance was established against all such deferred tax assets.

Windfall equity-based compensation deductions are tracked, but will not be recorded to the balance sheet until management determines it is more likely than not that such amounts will be utilized. As of December 31, 2014, the Company had approximately $331,007 of windfall stock compensation deductions. If and when realized, the tax benefit associated with these deductions will be credited to additional paid-in capital. These excess benefit deductions are included in the total federal net operating losses disclosed above.

9. Stockholders Equity

Series A Convertible Preferred Stock

In January 2010, we entered into a transaction with Carilion, in which Carilion agreed to exchange all of its Senior Convertible Promissory Notes with an original principal amount of $5.0 million plus all accrued but unpaid interest, totaling $1.2 million, for 1,321,514 shares of our newly designated Series A Convertible Preferred Stock. The Series A Convertible Preferred Stock is non-voting, carries a dividend of 6% payable in shares of common stock and maintains a liquidation preference up to $6.2 million. As of December 31, 2014,

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393,277 shares of common stock were issuable to Carilion as dividends and have been recorded in the statement of stockholders equity. These dividends are issuable on demand. Each share of Series A Convertible Preferred Stock may be converted into one share of our common stock at the option of the holder. We recorded the fair value of the Series A Convertible Preferred Stock, determined based upon the conversion value immediately prior to the exchange, the fair value of the new warrant issued to Carilion, determined using the Black-Scholes-Merton valuation model, and the incremental fair value of the prior warrant due to the re-pricing and extension of maturity to stockholders equity.

Stock Option Plans

In April 2003, we adopted the Luna Innovations Incorporated 2003 Stock Plan, or the 2003 Plan. Under the 2003 Plan, our Board of Directors was authorized to grant both incentive and non-statutory stock options to our employees, directors and consultants to purchase shares of Common Stock. Options generally had a life of 10 years and exercise price equal to or greater than the fair market value of the Common Stock as determined by the Board of Directors. On February 4, 2006, our Board of Directors increased the number of shares reserved under the 2003 Plan to 9,715,000. There were options outstanding under the 2003 Plan to purchase an aggregate of 541,394 shares as of December 31, 2014. Following the adoption of the 2006 Equity Incentive Plan in January 2006, no shares or options are available for future grant under the 2003 Plan, except to satisfy grants outstanding as of June 5, 2006.

In January 2006, we adopted our 2006 Equity Incentive Plan or the 2006 Plan. Under the 2006 Plan, our Board of Directors is authorized to grant both incentive and non-statutory stock options to purchase common stock and restricted stock awards to our employees, directors, and consultants. Stock option awards generally have a life of 10 years and exercise prices equal to the closing price of our common stock on the date of the option grant. On January 1 of each year, the number of shares available for issuance increases by the lesser of (a) 10% of the outstanding shares of our common stock on the last day of the preceding fiscal year; (b) 1,695,690 shares; or (c) such other amount as our Board of Directors may determine. A total of 10,468,175 and 13,999,918 shares were available for future grant under the 2006 Plan as of December 31, 2013 and 2014, respectively.

Vesting for employees typically occurs over a five-year period.

The following table sets forth the activity of the options to purchase common stock under the 2003 Plan and the 2006 Plan. The prices represent the closing price of our Common Stock on the NASDAQ Capital Market on the respective dates.

	Options Outstanding				Options Exercisable		
	Number of Shares	Price per Share Range	Weighted Average Exercise Price	Aggregate Intrinsic Value (1)	Number of Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value (1)
Balance at January 1, 2013	5,422,130	$ 0.35 6.74	$ 2.19	$ 639,904	3,775,388	$ 2.37	$ 604,292
Forfeited	(693,644)	0.35 6.74	2.08				
Exercised	(137,097)	0.35 1.18	0.56				
Granted	687,840	1.20 1.31	1.29				
Balance at December 31, 2013	5,279,229	$ 0.35 6.55	$ 2.11	$ 784,154	4,012,378	$ 2.28	$ 697,826

Forfeited	(1,660,354)	$ 0.35	6.55	2.22				
Exercised	(321,696)	$ 0.35	1.27	0.73				
Granted	992,452	$ 1.37	1.53	1.43				
Balance at December 31, 2014	4,289,631	$ 0.35	6.55	$ 1.93	$ 512,901	3,111,199	$ 2.11	$ 453,032

(1) The intrinsic value of an option represents the amount by which the market value of the stock exceeds the exercise price of the option of in-the-money options only.

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	Options Outstanding				Options Exercisable	
	Range of Exercise Prices	Options Outstanding	Weighted Average Remaining Life in Years	Weighted Average Exercise Price	Options Exercisable	Weighted Average Exercise Price of Options Exercisable
Year ended December 31, 2013	$ 0.35 6.55	5,279,229	5.88	$ 2.11	4,012,378	$ 2.28
Year ended December 31, 2014	$ 0.35 6.55	4,289,631	6.03	$ 1.93	3,111,199	$ 2.11

	Total intrinsic value of options exercised	Total fair value of options vested
Year ended December 31, 2013	$ 111,595	$ 1,248,067
Year ended December 31, 2014	$ 260,803	$ 821,392

For the years ended December 31, 2013 and 2014, the weighted average grant date fair value of options granted was $0.87 and $1.23, respectively. We estimate the fair value of options at the grant date using the Black-Scholes-Merton model.

Restricted Stock Issuances

In 2013 and 2014, we issued 337,500 and 303,000, respectively, shares of restricted stock to certain employees. These shares vest in three equal annual installments on the first three anniversary dates of their grant. Accordingly, zero and 101,000 shares vested in 2013 and 2014, respectively.

The following table summarizes our restricted stock awards:

	Number of Vested Shares	Number of Unvested Shares	Weighted Average Grant Date Fair Value	Aggregate Value of Vested Shares	Aggregate Value of Unvested Shares
Balance at January 1, 2013	23,765	15,123	$ 1.80	$ 42,777	$ 27,222
Granted		337,500	$ 1.26		425,250
Vested	12,963	(12,963)	$ 1.80	23,333	(23,333)
Exercised			$		
Balance at December 31, 2013	36,728	339,660	$ 1.32	66,110	429,139
Granted		303,000	$ 1.40		424,200
Vested	114,660	(114,660)	$ 1.27	145,639	(145,639)
Exercised	(22,725)		$ 1.26	(28,634)	
Balance at December 31, 2014	128,663	528,000	$ 1.36	$ 183,115	$ 707,700

We recognized $1.2 million and $0.9 million in stock-based compensation expense, which is recorded in selling, general and administrative expenses on the consolidated statement of operations for the years ended December 31, 2013 and 2014, respectively, and we will recognize $1.5 million over the remaining requisite service period. For all options granted through December 31, 2014, the weighted average remaining service period is 1.5 years.

10. Commitments and Contingencies

Obligation under Operating Leases

We lease facilities in Blacksburg, Charlottesville and Roanoke, Virginia under operating leases that as of December 31, 2014, were scheduled to expire between March 2015 and December 2020. Certain of the leases are subject to fixed escalations and provide for possible termination prior to their expiration dates. We recognize rent expense on such leases on a straight-line basis over the lease term. Rent expense under these leases recorded in

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selling, general and administrative expense on our statement of operations totaled approximately $1.0 million and $0.9 million, respectively, for the years ended December 31, 2013 and 2014. During 2014, we subleased a portion of the office space formerly occupied by Secure Computing and Communications group (SCC) to Mac-B. The amount of the sublease income recognized in 2014 was approximately $108,000. The sublease expired on April 30, 2014.

We are obligated under operating leases covering certain equipment that expire at various dates during the next two years.

Minimum future payments, as of December 31, 2014, under the aforementioned operating leases for each of the next five years are:

2015	995,312
2016	829,005
2017	837,053
2018	845,294
2019	535,720
Thereafter	480,163
	$ 4,522,547

Purchase Commitment

In the fourth quarter of 2013 we executed two non-cancelable purchase orders totaling $1.4 million for multiple shipments of tunable lasers to be delivered over an 18-month period beginning in the fourth quarter of 2013. At December 31, 2014, approximately $0.5 million of this commitment remained.

Royalty Agreement

We have licensed certain third-party technologies from vendors for which we owe minimum royalties aggregating $1.5 million payable over the remaining patent terms of the underlying technology.

11. Employee Profit Sharing Plan

We maintain a salary reduction/profit-sharing plan under provisions of Section 401(k) of the Internal Revenue Code. The plan is offered to employees who have completed three months of service with us. We contribute 25% of the salary deferral elected by each employee up to a maximum deferral of 10% of annual salary.

We contributed approximately $175,000 and $150,000 to the plan for the years ended December 31, 2013 and 2014, respectively.

12. Litigation and Other Contingencies

From time to time, we may become involved in litigation in relation to claims arising out of our operations in the normal course of business. While management currently believes it is not reasonably possible the amount of ultimate liability, if any, with respect to these actions will have a material adverse effect on our financial position, results of operations or liquidity, the ultimate outcome of any litigation is uncertain.

After our announcement of the merger with API (see Note 17), three separate putative class action complaints were filed in Michigan and Delaware, alleging claims of breach of fiduciary duty against the API board of directors and naming Luna as a defendant for aiding and abetting the alleged breach of fiduciary duty. The plaintiffs seek injunctive relief and unspecified damages. We intend to defend ourselves vigorously in these actions. The possible range of monetary loss that might occur in the future in this matter, if any, is unknown at this time.

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In September 2014, we received a preliminary audit report from the Defense Contract Audit Agency (DCAA), with respect to our 2007 incurred cost submission and questioning $0.8 million of claimed costs that the DCAA believes are expressly unallowable under the Federal Acquisition Regulations and, therefore, subject to potential penalty. We have not been informed of any actual claim for penalty by the Defense Contract management Agency and intend to contest such claim if received.

We have made, and will continue to make, efforts to comply with current and future environmental laws. We anticipate that we could incur additional capital and operating costs in the future to comply with existing environmental laws and new requirements arising from new or amended statutes and regulations. In addition, because the applicable regulatory agencies have not yet promulgated final standards for some existing environmental programs, we cannot at this time reasonably estimate the cost for compliance with these additional requirements. The amount of any such compliance costs could be material. We cannot predict the impact that future regulations will impose upon our business.

13. Relationship with Major Customers

During the years ended December 31, 2013 and 2014, approximately 65% and 57%, respectively, of our consolidated revenues were attributable to contracts with the U.S. government.

At December 31, 2013 and 2014, receivables with respect to contracts with the U.S. government represented 25% and 29% of total billed trade receivables, respectively.

14. Financial Information About Segments

Our operations are divided into two operating segments: Technology Development and Products and Licensing. Our engineers and scientists collaborate with our network of government, academic and industry experts to identify technologies and ideas with promising market potential. We then compete to win fee-for-service contracts from government agencies and industrial customers who seek innovative solutions to practical problems that require new technology. The Technology Development segment derives its revenue primarily from services. The Technology Development segment provides applied research to customers in our areas of focus.

The Products and Licensing segment develops and sells products or licenses technologies based on commercially viable concepts developed by the Technology Development segment. The Products and Licensing segment derives its revenue from product sales, funded product development and technology licenses.

Our President and Chief Executive Officer and his direct reports collectively represent our chief operating decision makers, and they evaluate segment performance based primarily on revenue and operating income or loss.

Information about the results of operations for each segment is set forth in the table below. There were no significant inter-segment sales during the years ended December 31, 2013 and 2014.

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During the years ended December 31, 2013 and 2014, 27% and 18%, respectively, of our total sales took place outside the United States.

	Years ended December 31,	
	2013	2014
Technology Development revenue	$ 11,421,868	$ 12,205,889
Products and Licensing revenue	6,911,707	9,054,101
Total revenue	18,333,575	21,259,990
Technology Development operating loss	(3,169,605)	(1,964,216)
Products and Licensing operating income (loss)	(4,865,741)	(2,540,885)
Total operating loss	(8,035,346)	$ (4,505,101)
Depreciation, Technology Development	$ 499,439	$ 317,925
Depreciation, Products and Licensing	266,327	235,831
Amortization, Technology Development	212,790	219,156
Amortization, Products and Licensing	113,471	162,565

Additional segment information is as follows:

	December 31,	
	2013	2014
Total segment assets:		
Technology Development	$ 12,275,693	$ 15,836,918
Products and Licensing	7,428,382	11,747,530
Total	$ 19,704,075	$ 27,584,448
Property plant and equipment and intangible assets, Technology Development	$ 1,463,548	$ 2,122,157
Property plant and equipment and intangible assets, Products and Licensing	$ 885,636	$ 1,574,177

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15. Quarterly Results (unaudited)

The following table sets forth our unaudited historical revenues, operating loss and net (loss) income by quarter during 2013 and 2014.

	Quarter Ended							
s in thousands, per share amounts)	**March 31, 2013**	**June 30, 2013**	**September 30, 2013**	**December 31, 2013**	**March 31, 2014**	**June 30, 2014**	**September 30, 2014**	**Decem 20**
es:								
ogy	$ 2,627	$ 2,807	$ 3,130	$ 2,858	$ 2,675	$ 3,219	$ 3,067	$
s and licensing	1,478	2,024	1,569	1,841	1,796	2,009	2,304	
venues	4,105	4,831	4,699	4,699	4,471	5,228	5,371	
argin	1,135	1,777	1,677	1,460	1,552	1,988	2,083	
g loss	(2,241)	(1,739)	(1,302)	(2,753)	(1,952)	(963)	(720)	
m continuing ns	(1,319)	(1,035)	(775)	(2,379)	(1,133)	(585)	(467)	
(loss) from nued operations net e taxes	4,105	83	161	356	9,673	(331)	(278)	
	2,786	(952)	(614)	(2,023)	8,540	(916)	(745)	
s)/income ble to common ders	$ 2,762	$ (978)	$ (640)	$ (2,049)	$ 8,511	$ (943)	$ (771)	$
per share from ng operations:								
d diluted	$ (0.09)	$ (0.07)	$ (0.05)	$ (0.16)	$ (0.08)	$ (0.04)	$ (0.03)	$
me/(loss) per share continued ns:								
d diluted	$ 0.29	$ 0.01	$ 0.01	$ 0.02	$ 0.66	$ (0.02)	$ (0.02)	$
s)/income ble to common ders:								
d diluted	$ 0.20	$ (0.07)	$ (0.04)	$ (0.14)	$ 0.58	$ (0.06)	$ (0.05)	$
d average shares:								
d diluted	14,011,814	14,362,494	14,441,707	14,488,060	14,653,262	14,817,084	15,016,429	15,0

16. Discontinued Operations

On March 1, 2013, we completed the sale of SCC, which was part of our Technology Development segment, to an unaffiliated third party for a gross sales price of $6.1 million in cash. Prior to the sale, SCC provided innovative solutions designed to secure critical technologies within the U.S. government. SCC conducted applied research and provided services to the government in this area, with its revenues primarily derived from U.S. government contracts and purchase orders. Of the purchase price, we received approximately $5.4 million at closing and $110,000 on

December 31, 2013. During December 2013, an additional $475,000 in purchase price was released to us from escrow and another $125,000 is in escrow and may be released 18 months after the closing of the transaction, subject to any indemnification claims of the acquirer. In connection with the sale, we incurred approximately $0.9 million in transaction costs that included various charges related to investment banker and legal fees. In addition, the acquirer has entered into a sublease with us for the facilities historically occupied by SCC through April 30, 2014 for a total of $0.4 million. In the transaction, we sold the equipment, contracts and intellectual property associated with SCC. Approximately 20 employees of SCC transferred to the acquirer. Included in the transaction were current assets of approximately $0.2 million and long term assets with a net book value of approximately $0.1 million, at February 28, 2013. We recorded an aggregate after-tax gain on the sale of SCC of $9.3 million or $0.63 per diluted share in our results of operations for the year ended December 31, 2013.

Following the sale of SCC, we have continued to act on behalf of the purchaser and bill the government for certain contracts that have not yet been transferred by the government to the purchaser. We record these amounts

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as revenues, with an offsetting amount as cost of revenues, within (loss)/income from discontinued operations. During the year ended December 31, 2013, this amount was $1.7 million. We expect to continue recording such revenues and costs until all of these contracts are transferred to the purchaser by the government.

On January 21, 2014, we sold our assets associated with the development of fiber optic shape sensing and localization for the medical field to affiliates of Intuitive Surgical, Inc. (Intuitive), for total cash consideration of up to $30 million, including $6 million received at closing, and $6 million to be received within 90 days of closing, and up to $18 million that may be received in the future based on the achievement of certain technical milestones and royalties on system sales, if any. In the transaction, we sold equipment and intellectual property associated with our shape sensing technology. Ten employees were transferred to Intuitive. Included in the transaction were current assets of totaling approximately $0.2 million and long term assets with a net book value of approximately $0.2 million, at December 31, 2013. Our fiber optic shape sensing and localization for the medical field accounted for approximately 12% of our revenues, and 9% of our cost of revenues for the year ended December 31, 2013.

We have reported the results of operations of SCC and our medical shape sensing business as discontinued operations in our consolidated financial statements. We allocated a portion of the consolidated tax expense to discontinued operations based on the ratio of the discontinued groups income or loss before allocations.

The key components of income/(loss) from discontinued operations were as follows:

	Years ended December 31,	
	2013	2014
Net revenues	$ 5,909,375	$
Cost of revenues	3,486,200	46,204
Operating expenses	229,745	
Income/(loss) before income taxes	2,193,430	(46,204)
Allocated tax expense/(benefit)	879,819	(11,713)
Operating income/(loss) from discontinued operations	1,313,611	(34,491)
Gain on sale, net of $1.5 million and $1.3 million of related income taxes	3,391,639	9,381,948
Income from discontinued operations, net of income taxes	$ 4,705,250	$ 9,347,457

17. Subsequent Events

On January 30, 2015, we entered into an agreement to merge with Advanced Photonix, Inc. (API), subject to approval by the stockholders of both companies and customary closing conditions. The merger agreement may be terminated by either us or API in certain circumstances, including if the merger has not been consummated on or before August 31, 2015, if the approval of the stockholders of either Luna or API is not obtained, and for breaches of certain representations and warranties. If the merger agreement is terminated in certain specified circumstances, API must pay us, or we must pay API, as applicable, a termination fee of $750,000. In addition, if the merger agreement is terminated following a meeting of the stockholders of Luna or API at which the adoption of the merger agreement and approval of the transactions contemplated thereby, or the approval of the issuance of shares of Luna Innovations common stock as consideration in the merger is considered but not approved, then we or API, as applicable, will be

required to pay an amount up to $250,000 in reimbursement of the other party s out-of-pocket expenses incurred in connection with the transaction. Upon the completion of the merger, stockholders of API will receive 0.31782 share of Luna Innovations common stock for each outstanding share of API common stock, resulting in the current stockholders of Luna owning approximately 56% of the outstanding common stock of the combined entity.

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API is a leading test and measurement company that packages optoelectronic semiconductors into high-speed optical receivers (HSOR products), custom optoelectronic subsystems (Optosolutions products) and Terahertz (THz products) instrumentation, serving the test and measurement, telecommunications, military/aerospace and medical markets.

On January 20, 2015, we amended the leases for our Blacksburg and Roanoke facilities. The amendment to our Blacksburg lease increased by approximately $1.1 million the value of leasehold improvements to be provided by the landlord and extended the term of the lease for an additional four years. The amendment to the Roanoke lease with Carilion Clinic properties, LLC provides for early termination of the lease with 30 days notice, without penalty, and that in any event the lease would terminate no later than on April 30, 2015. On March 12, 2015, we provided notice to Carilion Clinic Properties, LLC of our election to terminate the Roanoke lease effective April 15, 2015.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders

of Advanced Photonix, Inc.

Ann Arbor, Michigan

We have audited the accompanying consolidated balance sheets of Advanced Photonix, Inc. as of March 31, 2014 and 2013 and the related consolidated statements of operations, shareholders equity and cash flows for the years then ended. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements and schedule. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Advanced Photonix, Inc. at March 31, 2014 and 2013, and the results of its operations and its cash flows for the years then ended**,** in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO USA, LLP

Troy, Michigan

June 30, 2014

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ADVANCED PHOTONIX, INC.

CONSOLIDATED BALANCE SHEETS

	March 31, 2014	March 31, 2013
ASSETS		
Current assets:		
Cash and cash equivalents	$ 120,000	$ 619,000
Receivables, net of allowance for doubtful accounts of $20,000 and $56,000, respectively	5,085,000	4,988,000
Inventories	4,749,000	3,905,000
Prepaid expenses and other current assets	444,000	795,000
Total current assets	10,398,000	10,307,000
Equipment and leasehold improvements, net	2,144,000	3,415,000
Goodwill	4,579,000	4,579,000
Intangible assets, net	2,942,000	3,686,000
Security deposits and other assets	138,000	229,000
Total Assets	$ 20,201,000	$ 22,216,000
LIABILITIES AND SHAREHOLDERS EQUITY		
Current liabilities:		
Accounts payable	$ 2,661,000	$ 1,829,000
Accrued compensation	701,000	729,000
Accrued subcontracting costs	344,000	427,000
Other accrued expenses	1,108,000	871,000
Current portion of long-term debt, PFG	714,000	714,000
Current portion of long-term debt, MEDC/MSF	654,000	553,000
Current portion of capital lease	20,000	
Current portion of long-term debt, bank line of credit	2,147,000	
Current portion of long-term debt, bank term loan	306,000	333,000
Total current liabilities	8,655,000	5,456,000
Long-term debt, less current portion PFG, net of debt discount	794,000	1,322,000
Long-term debt, less current portion MEDC/MSF		377,000
Long-term debt, less current portion bank term loan		334,000
Long-term debt, capital lease	36,000	
Warrant liability	409,000	292,000
Total liabilities	9,894,000	7,781,000
Commitments and contingencies		
Shareholders equity:		
Class A Common Stock, $.001 par value, 100,000,000 authorized; 31,203,213 shares issued and outstanding as of March 31, 2014 and 31,158,347 shares	31,000	31,000

issued and outstanding as of March 31, 2013		
Additional paid-in capital	58,752,000	58,616,000
Accumulated deficit	(48,476,000)	(44,212,000)
Total shareholders equity	10,307,000	14,435,000
Total Liabilities and Shareholders Equity	$ 20,201,000	$ 22,216,000

See Notes to Consolidated Financial Statements.

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ADVANCED PHOTONIX, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

For the Fiscal Years Ended March 31, 2014 and March 31, 2013

	2014	2013
Sales, net	$ 29,041,000	$ 23,649,000
Cost of products sold	19,433,000	14,823,000
Gross profit	9,608,000	8,826,000
Operating expenses:		
Research, development and engineering expenses	4,975,000	5,683,000
Sales and marketing expenses	2,562,000	2,093,000
General and administrative expenses	4,482,000	4,254,000
Amortization expense intangible assets	1,029,000	1,181,000
Total operating expenses	13,048,000	13,211,000
Loss from operations	(3,440,000)	(4,385,000)
Other income (expense):		
Interest income	8,000	10,000
Interest expense	(652,000)	(202,000)
Change in fair value of warrant liability	(117,000)	168,000
Other income (expense)	(63,000)	22,000
Total other expense	(824,000)	(2,000)
Loss before benefit for income taxes	(4,264,000)	(4,387,000)
Benefit for income taxes		
Net loss and comprehensive loss	$ (4,264,000)	$ (4,387,000)
Basic and diluted loss per share	$ (0.14)	$ (0.14)
Weighted average common shares outstanding	31,227,000	31,161,000

See Notes to Consolidated Financial Statements.

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ADVANCED PHOTONIX, INC.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS EQUITY

For the Fiscal Years Ended March 31, 2014 and March 31, 2013

(In thousands, except share data)

	Class A Common Shares	Class A Common Amount	Additional Paid-in Capital	Accumulated Deficit	Total
BALANCE, MARCH 31, 2012	**31,159,431**	**$ 31**	**$ 58,446**	**$ (39,825)**	**$ 18,652**
Exercise of stock options	1,716		3		3
Forfeiture of restricted shares	(2,800)				
Stock based compensation			167		167
Net loss				(4,387)	(4,387)
BALANCE, MARCH 31, 2013	**31,158,347**	**31**	**58,616**	**(44,212)**	**14,435**
Exercise of stock options	5,193		5		5
Issuance of restricted shares	90,000				
Forfeiture of restricted shares	(18,636)				
Correction to outstanding shares	(31,691)				
Income taxes paid on stock grant			(8)		(8)
Stock based compensation			139		139
Net loss				(4,264)	(4,264)
BALANCE, MARCH 31, 2014	**31,203,213**	**$ 31**	**$ 58,752**	**$ (48,476)**	**$ 10,307**

See Notes to Consolidated Financial Statements.

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ADVANCED PHOTONIX, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the fiscal years ended March 31, 2014 and March 31, 2013

	2014	2013
Cash flows from operating activities:		
Net loss	$ (4,264,000)	$ (4,387,000)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation	1,489,000	785,000
Amortization of intangible assets	1,029,000	1,181,000
Amortization of debt discount	186,000	29,000
Stock based compensation expense	139,000	167,000
Change in fair value of warrant liability	117,000	(168,000)
Changes in operating assets and liabilities:		
Accounts receivable	(97,000)	(150,000)
Inventories	(844,000)	71,000
Prepaid expenses and other assets	442,000	(429,000)
Accounts payable	832,000	596,000
Accrued expenses	126,000	84,000
Net cash used in operating activities	(845,000)	(2,221,000)
Cash flows from investing activities:		
Capital expenditures	(136,000)	(408,000)
Patent expenditures	(285,000)	(181,000)
Cash paid for Silonex net assets		(900,000)
Net cash used in investing activities	(421,000)	(1,489,000)
Cash flows from financing activities:		
Payments on bank term loan	(361,000)	(333,000)
Payments on bank line of credit		(500,000)
Proceeds from bank line of credit	2,147,000	
Payments on MEDC/MSF term loans	(276,000)	(531,000)
Proceeds from PFG Loan		2,500,000
Payments on PFG Loan	(714,000)	(59,000)
Payments on capital leases	(26,000)	
Income taxes paid on stock grant	(8,000)	
Proceeds from exercise of stock options	5,000	3,000
Net cash provided by financing activities	767,000	1,080,000
Net decrease in cash and cash equivalents	(499,000)	(2,630,000)
Cash and cash equivalents, beginning of year	619,000	3,249,000

Cash and cash equivalents, end of year	$ 120,000	$ 619,000
Supplemental cash flow information:		
Cash paid for interest	$ 398,000	$ 115,000
Cash paid for income taxes	$	$
Supplemental disclosure of non-cash investing and financing activities:		
Acquisition of equipment through capital lease	$ 82,000	

See Notes to Consolidated Financial Statements.

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ADVANCED PHOTONIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

March 31, 2014 and March 31, 2013

1. The Company

Advanced Photonix, Inc. ® (API) was incorporated under the laws of the State of Delaware in June 1988. API and its subsidiaries (the Company, we, us or API) are a leading supplier of optoelectronic semiconductors which are packaged into components, sub-systems and full systems for high-speed optical receivers (HSOR), custom optoelectronic products and Terahertz (THz) instrumentation, serving a variety of global markets. The Company supports its customers from the initial concept and design phase of the product, through testing to full-scale production. The Company has two manufacturing facilities located in Camarillo, California and Ann Arbor, Michigan.

2. Basis of Presentation and Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the financial statements of the API and its wholly-owned subsidiaries (Silicon Sensors, Inc., Picometrix, LLC and Advanced Photonix Canada, Inc.). The functional currency of all locations is the US dollar. All significant inter-company balances and transactions have been eliminated in consolidation.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2014-09 Revenue from Contracts with Customers (Topic 606). The amendments in this ASU create Topic 606, Revenue from Contracts with Customers, and supersede the revenue recognition requirements in Topic 605, Revenue Recognition, including most industry-specific revenue recognition guidance throughout the Industry Topics of the Codification. In addition, the amendments supersede the cost guidance in Subtopic 605-35, Revenue Recognition Construction-Type and Production-Type Contracts, and create a new Subtopic 340-40, Other Assets and Deferred Costs Contracts with Customers. In summary, the core principle of Topic 606 is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The amendments in this ASU are effective for annual periods beginning after December 15, 2016, including interim periods within that reporting period. Early adoption is not permitted. The Company is currently assessing the impact this ASU will have on its future financial statements.

Reclassifications

Certain prior year balances have been reclassified in the consolidated financial statements to conform to the current year presentation.

Operating Segment Information

FASB guidance establishes annual and interim reporting standards for operating segments and requires certain disclosures about the products and services an entity provides, the material countries in which it holds assets and

reports revenue, and its major customers. Operating segments are defined as components of an enterprise that engage in business activities for which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision making group, in deciding how to allocate resources and in assessing performance. API s chief operating decision makers are its chief executive officer and chief operating officer, who review financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. API has one business activity: light and radiation detection devices also known as photodiodes.

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Pervasiveness of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Fair Value of Financial Instruments

The carrying value of all short term financial instruments potentially subject to valuation risk (principally consisting of cash equivalents, accounts receivable, and accounts payable) approximates fair value based upon the short term nature of these instruments. In the case of MEDC/MSF term debt, the bank line of credit, the PFG debt and the bank term debt, the carrying value approximates fair value based upon prevailing interest rates available to the Company. In the case of new capital lease debt, the carrying value approximates fair value as this debt was entered into in during the current year and interest rates have not changed significantly during the year for this type of debt.

Cash Equivalents

The Company considers all highly liquid investments, with an original maturity of three months or less when purchased, to be cash equivalents.

Accounts Receivable

Receivables are stated at amounts estimated by management to be the net realizable value. The allowance for doubtful accounts is based on specific identification. Accounts receivable are charged off when it becomes apparent, based upon age or customer circumstances, that such amounts will not be collected.

Accounts receivable are unsecured and the Company is at risk to the extent such amounts become uncollectible. The Company performs periodic credit evaluations of its customers financial condition and generally does not require collateral. Any unanticipated change in the customers credit worthiness or other matters affecting the collectability of amounts due from such customers could have a material effect on the results of operations in the period in which such changes or events occur. As of March 31, 2014, one customer individually comprised 19% of accounts receivable. As of March 31, 2013, one customer individually comprised 12% of accounts receivable. The allowance for doubtful accounts was $20,000 and $56,000 on March 31, 2014 and March 31, 2013, respectively.

Concentration of Credit Risk

Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. Luna has never experienced any losses related to these balances. As of March 31, 2013, approximately $190,000 was held at Silicon Valley Bank in excess of federally insured limits. As of March 31, 2014, the $120,000 in cash held at banks was within federally insured limits.

Inventories

Inventories, which include material, labor and manufacturing overhead, are stated at the lower of cost (on a first in first out basis) or market. Slow moving and obsolete inventories are reviewed throughout the year to assess whether a cost adjustment is required. API s review of slow moving and obsolete inventory begins with a listing of all inventory items

which have not moved regularly within the past 12 months. In addition, any residual inventory, which is customer specific and remaining on hand at the time of contract completion, is included in the list. The complete list of slow moving and obsolete inventory is then reviewed by the production, engineering

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and/or purchasing departments to identify items that can be utilized in the near future. These items are then excluded from the analysis and the remaining amount of slow-moving and obsolete inventory is then further assessed and a write down is recorded when warranted. Additionally, non-cancelable open purchase orders for parts Luna is obligated to purchase where demand has been reduced may also be written down. Impairments for open purchase orders where the market price is lower than the purchase order price are also recorded. The impairments established for excess, slow moving, and obsolete inventory create a new cost basis for those items. The cost basis of these parts is not subsequently increased if the circumstances which led to the impairment change in the future. If a product that had previously been impaired is subsequently sold, the amount of reduced cost basis is reflected as cost of goods sold.

Equipment and Leasehold Improvements

Equipment and leasehold improvements are stated at cost. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets, as follows:

Leasehold improvements	Term of lease or useful life, whichever is less
Machinery and equipment	5 7 years
Furniture and fixtures	3 7 years
Computer hardware	3 7 years
Computer software	3 5 years
Equipment under capital lease	Term of lease or useful life, whichever is less

Patents

Patents represent costs incurred in connection with patent applications. Such costs are amortized using the straight-line method over the useful life of the patent once issued, or expensed immediately if any specific application is unsuccessful.

Impairment of Goodwill and Long-Lived Assets

As of March 31, 2014 and March 31, 2013, the consolidated balance sheet included $4.6 million of goodwill. Goodwill represents the excess purchase price over amounts assigned to tangible or identifiable intangible assets acquired and liabilities assumed from API s business acquisitions.

Goodwill and intangible assets that are not subject to amortization are tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired. During the year ended March 31, 2013, the Company adopted new FASB guidance relative to goodwill impairment whereby in its annual assessment of goodwill impairment, the Company has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying value before performing the two step quantitative impairment test. If after assessing the totality of events or circumstances, the Company determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two step impairment test is not necessary. Step one of the two step impairment test is to compare the fair value of the reporting unit with the unit s carrying amount, including goodwill. Fair value of each reporting unit is determined by weighting fair values

determined using a combination of a discounted cash flow approach, and observed enterprise to revenue multiples and precedent sales transactions multiples for companies in the reporting units peer group. If this test indicates that the fair value is less than the carrying value, then step two is required to compare the implied fair value of the reporting unit s goodwill with the carrying amount of the reporting unit s goodwill. If the carrying amount of the goodwill exceeds its implied fair value, an impairment loss shall be recognized in an amount equal to that excess. The Company has selected March 31 as the date for its annual impairment test.

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The Company continues to meet the criteria to report as a single reportable segment. In fiscal 2013 and prior years, the Company had one reporting unit. The nature of the production process was similar for the Company s three product lines, manufacturing for the different product lines occurred in common facilities and the types and class of customers were in some cases similar across the three product lines. However, as disclosed in Note 11, in the third quarter of fiscal 2014, the Company made the decision to begin outsourcing the silicon photodiode production that is used in the Optosolutions product line given sources in Asia became more cost effective. In addition, the decision was made to provide access to the Asia market which management believes will benefit the Company as a whole. Prior to that decision, the production of silicon photodiodes had been done in the Ann Arbor, Michigan facility using shared equipment with the HSOR and THz product lines. As a result of the change from a shared manufacturing process for the three product lines and certain restructuring changes internally, the Company has concluded it can no longer aggregate its three product lines into one reporting unit for goodwill impairment purposes as of March 31, 2014 but instead considers there to be two reporting units as photodiode production remains common for the HSOR and THZ products and the types and classes of customers are similar as well. The Company determined the fair value of the two reporting units by weighting fair values determined using a combination of a discounted cash flow approach, and observed enterprise values to revenues multiples and precedent sales transaction multiples for companies in the reporting units peer group. using a combination of discounted cash flow, market multiples and precedent transactions for a product line or group of product lines. Key assumptions used to determine the fair value of each reporting unit were (a) future expected cash flows; (b) estimated residual growth rates; (c) discount rates which were based on API s estimates of the after tax weighted average cost of capital; (d) observed enterprise value to sales multiples for API s peer group; and (e) enterprise to revenue multiples observed in precedent merger and acquisition transactions for API s peer group.

As a result of the changes in reporting units during the year, the Company allocated the $4.6 million of Goodwill to its two reporting units based on the reporting units relative fair value. The Company then compared the fair value of the reporting units to their respective carrying value. The Company s valuation as of March 31, 2014 indicated there were no impairments of Goodwill for the two reporting units when computed as described above, with the fair value exceeding carrying value by at least 109% for both.

As noted above, API s stock price is a significant factor in assessing fair value for purposes of the goodwill impairment test. As of March 31, 2014, API s market capitalization exceeded the shareholders equity balance of the Company by 91%. If the Company s market capitalization falls below the current carrying value for a sustained period, or the Company s reporting units do not perform as expected, it is reasonably likely that an impairment assessment would be necessary and a non-cash charge to operating income may be recorded.

The carrying value of other long-lived assets, including amortizable intangibles, leasehold improvements, and equipment, are evaluated whenever events or changes in circumstances indicate that a potential impairment has occurred relative to a given asset or assets. Impairment is deemed to have occurred if projected undiscounted cash flows associated with an asset (asset group) are less than the carrying value of the asset (asset group). The estimated cash flows include management s assumptions of cash inflows and outflows directly resulting from the use of that asset, or group of assets used in conjunction with the specific asset or assets, in operations. The amount of the impairment loss recognized is equal to the excess of the carrying value of the asset, or asset group, over its then estimated fair value. As a result of the current year operating loss, the Company performed an impairment evaluation. The vast majority of the amortizing intangibles, leasehold improvements and equipment subject to the impairment test are in the combined HSOR and THz reporting unit. Given the shared nature of the manufacturing process for photodiodes, the Company has determined the lowest level of cash flows to be the reporting unit. The impairment analysis involved forecasting future undiscounted cash flows of the reporting unit over the estimated useful life of the primary asset of the group. After performing this first step analysis, the Company concluded that as of March 31, 2014 there were no impairments indicated.

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Revenue Recognition

Revenue is derived principally from the sales of the Company s products when, persuasive evidence of an arrangement exists, usually in the form of a purchase order, when shipment has occurred or when services have been rendered since title and risk of loss typically transfer at shipment, the price is fixed or determinable and collection is reasonably assured in terms of both credit worthiness of the customer and there are no post shipment obligations or uncertainties with respect to customer acceptance.

The Company sells certain of its products to customers with a product warranty that provides warranty repairs at no cost. The length of the warranty term is one year from date of shipment. The estimated exposure is accrued to warranty claims based upon historical claim costs. These estimates are reviewed on a regular basis with adjustments to the warranty provisions as other information becomes available.

The Company does not provide price protection or a general right of return. The return policy only permits product returns for warranty and non-warranty repair or replacement and requires pre-authorization by the Company prior to the return. Credit or discounts, which have been historically insignificant, may be given at the Company s discretion and are recorded when and if determined.

The Company predominantly sells directly to original equipment manufacturers with a direct sales force with limited sales through representatives, value added resellers (VAR) and distributors. Distributor and VAR sales represented approximately 11% of total revenue for the year ended March 31, 2014. Significant terms and conditions of distributor agreements include FOB source, net 30 days payment terms, with no return and limited exchange rights, and no price protection. Since the product transfers title to the distributor at the time of shipment, the products are not considered inventory on consignment.

Revenue is also derived from technology research and development contracts. API recognizes revenue from these contracts as services and/or materials are provided. Government contract revenues represent approximately 5% and 15% of annual sales for the years ended March 31, 2014 and 2013, respectively.

Significant Customers

During the fiscal year ended March 31, 2014, there were two customers that accounted for 10% and 12% or more of the Company s net sales, respectively. During the fiscal year ended March 31, 2013, one customer accounted for 15% of the Company s net sales.

Product Warranty

The Company generally sells products with a limited warranty of product quality. The Company accrues for known warranty issues if a loss is probable and can be reasonably estimated, and accrues for estimated incurred but unidentified issues based on historical activity. Accrued product warranty liability is included in Other Accrued expenses in the Consolidated Balance Sheets.

The following table presents the movement in the product warranty liability for the years ended March 31, 2014 and March 31, 2013.

Years ended March 31,

	2014	2013
Beginning balance	$ 63,000	$ 24,000
Current period accruals	55,000	51,000
Used for purpose intended	(43,000)	(12,000)
Ending balance	**$ 75,000**	**$ 63,000**

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Shipping and Handling Costs

The Company s policy is to classify shipping and handling costs as a component of Costs of products sold in the Consolidated Statements of Operations.

Research and Development Costs

The Company charges all research and development costs, including costs associated with development contract revenues, to expense when incurred. Manufacturing costs associated with the development of a new fabrication process or a new product are expensed until such times as these processes or products are proven through final testing and initial acceptance by the customer. Costs related to revenues on non-recurring engineering services billed to customers are generally classified as Cost of products sold. The Company generally retains intellectual property rights related to paid research and development contracts.

Advertising Costs

Advertising costs are expensed as incurred. Advertising expense was approximately $16,000 and $30,000 in fiscal 2014 and fiscal 2013, respectively, and is included in Sales and Marketing expenses in the Consolidated Statements of Operations.

Accounting for Stock Based Compensation

The Company estimates the fair value of stock-based awards utilizing the Black-Scholes pricing model for stock options and using the intrinsic value for restricted stock. The fair value of the awards is amortized as compensation expense on a straight-line basis over the requisite service period of the award, which is generally the vesting period.

Accounting for Income Taxes

Income tax provisions and benefits are made for taxes currently payable or refundable, and for deferred income taxes arising from future tax consequences of events that were recognized in the Company s financial statements or tax returns and tax credit carry forwards. The effects of income taxes are measured based on enacted tax laws and rates applicable to periods in which the differences are expected to reverse. If necessary, a valuation allowance is established to reduce deferred income tax assets to an amount that will more likely than not be realized.

The calculation of federal income taxes involves dealing with uncertainties in the application of complex tax regulations. The Company recognizes liabilities for uncertain tax positions based on a two-step process. The first step involves evaluating the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step involves estimating and measuring the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. It is inherently difficult and subjective to estimate such amounts, as the Company has to determine the probability of various possible outcomes. API s evaluation of uncertain tax positions is based on factors including, but not limited to, changes in facts or circumstances, changes in tax law, effectively settled issues under audit, and new audit activity. Such a change in recognition or measurement would result in the recognition of a tax benefit or an additional charge to the tax provision. The Company has taken no tax positions which would require disclosure. Although the Internal Revenue Service (IRS) is not currently examining any of API s income tax returns, tax filings for the fiscal years 2011 to 2013 remain open and are subject to examination.

Earnings per Share

Basic EPS is calculated by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted EPS amounts are based upon the weighted average number of common

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and common equivalent shares outstanding during the period. The Company uses the treasury stock method to calculate the impact of outstanding stock options and warrants. Common equivalent shares are excluded from the computation in periods in which they have an anti-dilutive effect. All common stock equivalents have been excluded from the calculation of Diluted EPS due to the net loss in both the years ended March 31, 2014 and 2013.

3. Inventories

Inventories consisted of the following at March 31:

	2014	2013
Raw material	$ 3,093,000	$ 2,600,000
Work-in-process	954,000	782,000
Finished products	702,000	523,000
Inventories	**$ 4,749,000**	**$ 3,905,000**

4. Equipment and Leasehold Improvements

Equipment and leasehold improvements consisted of the following at March 31:

	2014	2013
Machinery and equipment	$ 10,320,000	$ 9,967,000
Furniture and fixtures	744,000	746,000
Leasehold improvements	1,027,000	1,083,000
Computer hardware	720,000	697,000
Capitalized software	1,092,000	1,087,000
Total assets	13,903,000	13,580,000
Accumulated depreciation	(11,813,000)	(10,338,000)
	2,090,000	3,242,000
Construction-in-process	54,000	173,000
Net equipment and leasehold improvements	**$ 2,144,000**	**$ 3,415,000**

Depreciation expense for the fiscal years ended March 31, 2014 and 2013 was approximately $1.5 million and $785,000, respectively. As disclosed in Note 11, due to the outsourcing of the manufacturing of silicon photodiodes used in the Optosolutions products, the Company determined that an accelerated depreciation charge of approximately $608,000 was necessary to the state the net book value of the idle assets at amounts that could be obtained if the equipment was sold to third party buyers.

5. Intangible Assets and Goodwill

Intangible Assets

Intangible assets that have or will have definite lives consist of the following (in thousands):

			March 31, 2014		
	Original Average Lives in Years	Amortization Method	Carrying Value	Accumulated Amortization	Intangibles Net
Customer list	15	Straight Line	$ 190	$ 113	$ 77
Trademarks	15	Cash Flow	2,270	1,267	1,003
Technology	10	Cash Flow	10,950	10,672	278
Distribution rights	7	Straight Line	148	23	125
Patents pending			795		795
Patents		Straight Line	1,108	444	664
Total Intangibles			**$ 15,461**	**$ 12,519**	**$ 2,942**

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	Original Average Lives in Years	Amortization Method	March 31, 2013 Carrying Value	Accumulated Amortization	Intangibles Net
Customer list	15	Straight Line	$ 190	$ 100	$ 90
Trademarks	15	Cash Flow	2,270	1,105	1,165
Technology	10	Cash Flow	10,950	9,946	1,004
Distribution rights	7	Straight Line	148	2	146
Patents pending			672		672
Patents		Straight Line	946	337	609
Total Intangibles			**$ 15,176**	**$ 11,490**	**$ 3,686**

Amortization expense was approximately $1.0 million and $1.2 million for the years ended March 31, 2014 and March 31, 2013, respectively. The current patents held by the Company have useful lives ranging up to 20 years.

The cash flow method of amortization is based upon management s estimate of how the intangible asset contributes to API s cash flows and best represents the pattern of how the economic benefits of the intangible asset will be consumed or used up. Such amortization is initially derived from the estimated undiscounted cash flows that were used in determining the original fair value of the intangible asset at the acquisition date and is monitored for significant changes in subsequent periods.

Assuming no impairment to the intangible value, future amortization expense for intangible assets and patents are as follows:

Intangible Assets and Patents (000 s)(a)	
2015	$ 457
2016	474
2017	322
2018	322
2019	314
2020 and thereafter	258
Total	**$ 2,147**

(a) Patent pending costs of $795,000 are not included in the chart above. These costs will be amortized beginning the month the patents are granted.

Goodwill

Goodwill reflected on the consolidated balance sheets as of March 31, 2014 and March 31, 2013 is net of previously recorded impairment charges of $954,000.

6. Debt

Bank Debt

On January 31, 2012, API entered into a Loan and Security Agreement with Silicon Valley Bank (**SVB** and such agreement as amended from time to time, the **SVB Loan Agreement**) and a related Loan and Security Agreement (Ex-IM Loan Facility) with SVB (as amended from time to time, the **SVB Ex-Im Loan Agreement** , and together with the SVB Loan Agreement, the **SVB Loan Agreements**) that provided for a three-year $1 million term loan that, as amended through June 2014, expires in March 2015, and a $5 million line of credit with a $3 million export-import facility sublimit that, as amended through June 2014, expires in June 2016. Subsequent to the execution of the original SVB Loan Agreements, there have been eight amendments that

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have modified the financial covenants, allowed for the acquisition of substantially all of the operating assets of Silonex, Inc. (**Silonex**), allowed the Company to enter into the loan agreement with Partners for Growth III, L.P. (PFG and such agreement as amended from time to time as the PFG Loan Agreement) as described below and extended the maturity date of the line of credit from January 2014 to June 2016.

The SVB Loan Agreements as amended contained December 2013 and January 2014 financial covenants that required the Company to maintain a minimum liquidity ratio of 2.25 to 1.00 and a minimum trailing three month adjusted EBITDA, measured monthly of (1) a negative $300,000 for each fiscal month during the period July through October 2013; and (2) $1 for each fiscal month during the period November 2013 through February 2014.

As of December 27, 2013 and January 24, 2014, the Company was not in compliance with the then existing minimum adjusted EBITDA covenant of $1 for the three months ended December 27, 2013 and January 31, 2014, respectively, and as of January 31, 2014, the Company was also not in compliance with the then existing minimum liquidity ratio of 2.25 to 1.00. In addition, the foregoing defaults triggered the cross-default provisions under each of the SVB Loan Agreements and the loan with PFG under the PFG Loan Agreement. Consequently, under the terms of each agreement, SVB and PFG were both entitled to proceed against the collateral provided as security for the loans issued thereunder upon an event of default subject, in PFG s case, to any rights that SVB may have in that same collateral.

On February 10, 2014, API entered into separate Forbearance Agreements with SVB and PFG pursuant to which and subject to certain exceptions, each of SVB and PFG agreed not to proceed against the collateral securing their respective loans until February 28, 2014. On March 5, 2014, the Company entered into separate amendment agreements with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of the Company s $5 million line of credit to May 31, 2014; (ii) the minimum trailing three month adjusted EBITDA covenant was reset to a negative $1.2 million for the fiscal month ended February 28, 2014, a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014 and a positive $1 for the fiscal month ending May 31, 2014; (iii) the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of February 28, 2014, and 2.25 to 1.00 for each month thereafter through May 2014; and (iv) each of SVB and PFG waived the existing defaults. In addition to the payment of an amendment fee, the Company agreed to pay each of SVB and PFG additional fees of up to $50,000 and $75,000, respectively, no later than May 31, 2014 (the **Tail Fees**).

On April 30, 2014, API entered into separate amendment agreements with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of the $5 million line of credit to July 31, 2014; (ii) the trailing three month adjusted EBITDA covenant was reset to a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014, a negative $250,000 for the fiscal months ending May 31, 2014 and June 30, 2014 and a positive $1 for the fiscal month ending July 31, 2014; and (iii) the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of March 31, 2014 through May 31, 2014, and 2.00 to 1.00 for each month thereafter through July 2014. In addition to the payment of an amendment fee, the Company agreed to pay each of SVB and PFG their respective Tail Fee and, commencing with the month ended May 31, 2014, an additional fee of $15,000 and $20,000, respectively, for each month that the liquidity ratio is less than 2.00 to 1.00 as of the last day of the month under measurement.

On June 6, 2014, API received approximately $2,657,000 in proceeds before expenses from a secondary placement of 5,391,304 shares of Class A Common Stock through a firm underwriting by B. Riley & Co., LLC. On June 10, 2014, the underwriter exercised the option on an additional 808,696 shares of Class A Common Stock for proceeds before expenses of $398,606. The net proceeds were used to pay down the existing line of credit with SVB and certain related fees. On June 20, 2014, API signed separate amendments with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of the Company s line of credit to June 2016, (ii) all parties agreed to a six

month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $850,000 through June 2014, negative $300,000 for July through September 2014, a positive $1 for October through December 2014 and $100,000 each month thereafter subject to reset upon the submission of

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the fiscal 2016 budget but no lower than $100,000 on a rolling six month basis, (iii) all parties agreed to adjust the minimum liquidity ratio, as defined, to be 1.30 to 1.00 for months ending prior to June 2014 and 2.00 to 1.00 for all months on or after June 2014 as measured at each month end, and (iv) SVB restored an interest rate matrix based on the covenant performance that results in an interest rate on the line of credit to range from prime rate plus 50 basis points up to prime rate plus 400 basis points and an interest rate on the term loan to range from prime plus 75 basis points up to prime plus 450 basis points. The agreements confirmed the obligation to pay the previously agreed Tail fees of $50,000 and $75,000 to SVB and PFG respectively, associated attorney fees for the amendment, but waived the added tail fees for May 2014 of $15,000 and $20,000 respectively.

The interest rates on the SVB term loan and line of credit as of March 31, 2014 were 7.75% and 7.25%, respectively. The Company had approximately $2.1 million outstanding on the SVB line of credit with approximately $2.0 million in borrowing capacity as of March 31, 2014. As of June 24, 2014, the Company has paid off the entire outstanding balance of the line of credit.

The EX-IM Loan Facility is guaranteed by the API s subsidiaries and all borrowings under the SVB Loan Agreements are secured by a first priority security interest granted to SVB over substantially all of the Company s respective assets. As of March 31, 2014, the Company was in compliance with the related liquidity and adjusted EBITDA covenant with SVB based on the agreement as of that date. Based on the current projections, the Company expects to remain in compliance with the SVB loan covenants through at least March 2015 using the covenants agreed with SVB in June 2014.

Total interest payments made to the bank during the years ended March 31, 2014 and March 31, 2013 were approximately $107,000 and $54,000, respectively.

Partners for Growth Secured Debt

On February 8, 2013, API entered into a $2.5 million secured Loan and Security Agreement with PFG that is subordinated to the SVB Loan Agreements. Pursuant to the terms of the agreement, the Company is obligated to make monthly principal payments of $59,524, plus accrued interest at 11.75% through maturity in August 2016. As part of the consideration for and as a closing condition to the PFG Loan Agreement, the Company agreed to grant PFG and certain of its affiliates warrants to purchase up to 1,195,000 shares of the Company s Class A Stock (the **Warrants**) in a private placement pursuant to Section 4(a)(2) of the Securities Act. 995,000 of the shares issuable under the Warrants were granted at an initial strike price equal to $0.50 per share (the **Tier 1 Warrants**), and the remaining 200,000 shares issuable under the Warrants were granted at an initial strike price equal to $1.00 per share (**$1.00 Warrants**). Included in the PFG Loan Agreement were certain revenue and adjusted EBITDA goals which if hit would have reduced the interest rate from 11.75% to 9.75% and cancelled 200,000 of the warrants. The Company has not achieved those goals during the year and so the interest rate for the remaining life of the loan remains at 11.75% and 1,195,000 warrants remain outstanding as of March 31, 2014.

The Warrants contain full-ratchet anti-dilution provisions that will result in proportional adjustments to the exercise price and the number of shares issuable under the PFG Warrant Agreements in the event that the Company conducts a stock split, subdivision, stock dividend or combination, or similar transaction. The PFG Warrant Agreements also include a net exercise provision pursuant to which warrant holders will receive the number of shares equal to (x) the product of (A) the number of Warrants exercised multiplied by (B) the difference between (1) the fair market value of a share of Class A Stock (with fair value generally being equal to the highest closing price of the Company s Class A Stock during the 45 consecutive trading days prior to the date of exercise) and (2) the strike price of the Warrant, (y) divided by the fair market value of a share of Class A Stock. In addition, in the event the Company is acquired, liquidates, conducts a public offering, or the Warrants expire, each warrant holder will have the right to put its

Warrants to the Company in exchange for a per share cash payment that varies with the number of shares issuable under each Warrant, but in the aggregate will not exceed $250,000.

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The PFG Loan Agreements as amended through December 2013 and January 2014, contained financial covenants that required the Company to maintain a minimum liquidity ratio of 2.25 to 1.00 and a minimum trailing three month adjusted EBITDA, measured monthly of (1) a negative $300,000 for each fiscal month during the period July through October 2013; and (2) $1 for each fiscal month during the period November 2013 through February 2014.

As of December 27, 2013 and January 24, 2014, API was not in compliance with then existing adjusted minimum EBITDA covenant of $1 for the three months ended December 27, 2013 and January 24, 2014, respectively, and as of January 24, 2014, API was also not in compliance with the then existing minimum liquidity ratio of 2.25 to 1.00. In addition, the foregoing defaults triggered the cross-default provisions under each of the SVB Loan Agreements and the loan with PFG. Consequently, under the terms of each agreement, SVB and PFG were both entitled to proceed against the collateral provided as security for the loans issued thereunder upon an event of default subject, in PFG s case, to any rights that SVB may have in that same collateral.

On February 10, 2014, API entered into separate Forbearance Agreements with SVB and PFG pursuant to which and subject to certain exceptions, each of SVB and PFG agreed not to proceed against the collateral securing their respective loans until February 28, 2014. On March 5, 2014, the Company entered into separate amendment agreements with SVB and PFG where, among other things, the minimum trailing three month adjusted EBITDA covenant was reset to a negative $1.2 million for the fiscal month ended February 28, 2014, a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014 and a positive $1 for the fiscal month ending May 31, 2014; the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of February 28, 2014, and 2.25 to 1.00 for each month thereafter through May 2014; and each of SVB and PFG waived the existing defaults. In addition to the payment of an amendment fee, the Company agreed to pay each of SVB and PFG additional fees of up to $50,000 and $75,000, respectively, no later than May 31, 2014 (the **Tail Fees**).

On April 30, 2014, API entered into separate amendment agreements with SVB and PFG where, among other things the trailing minimum three month adjusted EBITDA covenant was reset to a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014, a negative $250,000 for the fiscal months ending May 31, 2014 and June 30, 2014 and a positive $1 for the fiscal month ending July 31, 2014; and the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of March 31, 2014 through May 31, 2014, and 2.00 to 1.00 for each month thereafter through July 2014. In addition to the payment of an amendment fee, the Company agreed to pay each of SVB and PFG their respective Tail Fee and, commencing with the month ended May 31, 2014, an additional fee of $15,000 and $20,000, respectively, for each month that the liquidity ratio is less than 2.00 to 1.00 as of the last day of the month under measurement.

On June 20, 2014, API signed a separate amendments with SVB and PFG where, among other things, both parties agreed to a minimum six month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $850,000 through June 2014, negative $300,000 for July through September 2014, a positive $1 for October through December 2014 and $100,000 each month thereafter subject to reset upon the submission of the fiscal 2016 budget but no lower than $100,000 on a rolling six month basis, both parties agreed to adjust the minimum liquidity ratio, as defined, to be 1.30 to 1.00 for months ending prior to June 2014 and 2.00 to 1.00 for all months on or after June 2014 as measured at each month end. The agreements confirmed the obligation to pay the previously agreed Tail fees of $50,000 and $75,000 to SVB and PFG respectively, associated attorney fees for the amendment, but waived the added tail fees for May of $15,000 for SVB and $20,000 for PFG.

The Company was in compliance with its loan covenants with PFG as of March 31, 2014 which were substantially the same as with SVB as of that date. Based on current projections, the Company expects to be in compliance with the revised PFG loan covenants through at least March 2015 using the covenants agreed with PFG in June 2014.

The Company determined the fair value of the warrant as of the issuance date to be $434,000. Pursuant to the accounting literature, a debt discount and a warrant liability were established as of the issuance date with the debt

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discount amortized over the life of the loan on an effective interest method. As of March 31, 2014, there was $218,000 in remaining unamortized debt discount offset against the PFG long term debt principal. See Note 9 to the Consolidated Financial Statements for additional information on the PFG warrants.

Total interest payments made to PFG during the years ended March 31, 2014 and March 31, 2013 were approximately $253,000 and $12,000, respectively.

MEDC/MSF Loans

In fiscal years 2005 and 2006, API entered into two unsecured loan agreements that are currently held by the Michigan Economic Development Corporation (**MEDC** and such agreement the **MEDC Loan Agreement**) and a MEDC affiliate, the Michigan Strategic Fund (**MSF** and such agreement the **MSF Loan Agreement**) pursuant to which API borrowed an aggregate of amount of $2.2 million. As amended, payments on the approximately $327,000 in principal outstanding, as of March 31, 2014, under each of the MEDC Loan Agreement and MSF Loan Agreement are deferred until they mature on December 1, 2014 and November 1, 2014, respectively, at which time the entire remaining balance under each loan agreement becomes due and payable. The interest rate under both of the loans was 5.00% as of March 31, 2014.

Interest payments made to the MEDC/MSF were approximately $33,000 and $49,000 during the years ended March 31, 2014 and March 31, 2013, respectively.

Capital Leases

During fiscal 2014, the Company purchased certain equipment through several capital leases with monthly principal payments of $1,700 plus interest with some maturities extending to 2019. The leases are collateralized by the associated equipment.

Interest payments made to the lessors for the year ended March 31, 2014 totaled $4,000.

The current debt principal and maturities of all outstanding debt are included in the table below. The PFG loan balance below reflects the remaining principal on the amortizing term loan but is shown net of a debt discount of $218,000 on the Company s balance sheet.

Debt Maturity Table (in 000 s)

			Debt Maturities					
	Balance 3/31/13	**Balance 3/31/14**	**FY2015**	**FY2016**	**FY2017**	**FY2018**	**FY2019**	**FY2020 & Beyond**
Credit Line Silicon Valley Bank	$	$ 2,147	$ 2,147	$	$	$	$	$
Term Loan Silicon Valley Bank	667	306	306					
Partners for Growth Loan	2,441	1,726	714	714	298			
MEDC/MSF loans	930	654	654					
Capital Leases		56	20	11	11	12	2	
TOTAL	**$ 4,038**	**$ 4,889**	**$ 3,841**	**$ 725**	**$ 309**	**$ 12**	**$ 2**	**$**

7. Capitalization

The Company s Certificate of Incorporation provides for one class of common stock: Class A Common Stock, par value $.001, for which 100,000,000 shares are authorized for issuance. The holder of each share of Class A Common Stock is entitled to one vote per share.

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The Company s Certificate of Incorporation also authorizes the issuance of 10,000,000 shares of Preferred Stock, of which 780,000 shares have been designated Class A Redeemable Convertible Preferred Stock with a par value of $0.001 per share, none of which have been issued.

8. Stock Based Compensation

The Company has three equity award plans: The 1997 Employee Stock Option Plan, the 2000 Stock Option Plan and the 2007 Equity Incentive Plan. As of December 30, 2011, no additional awards may be issued under either the 1997 Employee Stock Option Plan or the 2000 Stock Option Plan. There are 2,500,000 shares authorized for issuance under the 2007 Equity Incentive Plan, with 220,295 shares remaining available for future grant as of March 31, 2014.

Options and restricted stock awards may be granted to employees, officers, directors and consultants. Options typically vest over a period of one to four years and are exercisable up to ten years from the date of issuance. The option exercise price equals the stock s market price on the date of grant. Restricted stock awards typically vest over a period of six months to four years, and the shares subject to such awards are generally not transferrable until the awards vest.

Stock option transactions for fiscal years 2013 and 2014 are summarized as follows:

	Shares (000)	Weighted Average Exercise Price	Weighted Average Term (in years)	Aggregate Intrinsic Value
Outstanding, March 31, 2012	2,267	$ 1.75	5.77	$ 32,000
Exercisable, March 31, 2012	1,994	$ 1.88	5.18	$ 15,000
Outstanding, March 31, 2012	2,267	$ 1.75		
Granted	192	$ 0.63		
Exercised	(5)	$ 0.44		
Expired	(62)	$ 1.73		
Outstanding, March 31, 2013	2,392	$ 1.66	4.64	$ 3,000
Exercisable, March 31, 2013	2,142	$ 1.76	4.19	$ 3,000
Outstanding, March 31, 2013	2,392	$ 1.66		
Granted	24	$ 0.48		
Exercised	(11)	$ 0.44		
Expired	(234)	$ 1.55		
Outstanding, March 31, 2014	2,171	$ 1.66	3.97	$ 22,000
Exercisable, March 31, 2014	2,017	$ 1.75	3.67	$ 19,000
Vested & expected to Vest, March 31, 2014	2,136	$ 1.70	3.88	$ 22,000

Information regarding stock options outstanding as of March 31, 2014 is as follows:

	Options Outstanding

Price Range	(in 000s) Shares	Weighted Average Exercise Price	Weighted Average Remaining Life
$0.50 - $1.25	525	$ 0.71	7.48
$1.26 - $2.50	1,396	$ 1.82	3.11
$2.51 - $5.34	250	$ 2.83	1.41

		Options Exercisable	
Price Range	(in 000s) Shares	Weighted Average Exercise Price	Weighted Average Remaining Life
$0.50 - $1.25	371	$ 0.67	7.32
$1.26 - $2.50	1,396	$ 1.82	3.11
$2.51 - $5.34	250	$ 2.83	1.41

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The intrinsic value of options exercised in fiscal years 2014 and 2013 was approximately $2,000 and $1,000, respectively.

During fiscal 2014, restricted shares were issued to certain individuals. The restricted share transactions are summarized below for fiscal 2014 and 2013:

	Shares (000)	Weighted Average Grant Date Fair Value
Unvested, March 31, 2012	**246**	**$ 0.84**
Granted		$
Vested	(115)	$ 0.80
Expired	(3)	$ 0.76
Unvested, March 31, 2013	**128**	**$ 0.87**
Granted	90	$ 0.58
Vested	(108)	$ 0.76
Expired	(26)	$ 0.68
Unvested, March 31, 2014	**84**	**$ 0.76**

The Company estimates the fair value of stock-based awards utilizing the Black-Scholes pricing model for stock options and using the intrinsic value for restricted stock. The fair value of the awards is amortized as compensation expense on a straight-line basis over the requisite service period of the award, which is generally the vesting period. The Black-Scholes fair value calculations involve significant judgments, assumptions, estimates and complexities that impact the amount of compensation expense to be recorded in current and future periods. The factors include:

The time period that option awards are expected to remain outstanding has been determined based on the average of the original award period and the remaining vesting period. As additional evidence develops from the Company s option exercise history, the expected term assumption will be refined to capture the relevant trends.

The future volatility of the Company s stock has been estimated based on the weekly stock price during the expected term to the date of the latest stock option grant.

A dividend yield of zero has been assumed for awards issued during the years ended March 31, 2014 and March 31, 2013, based on the Company s actual past experience and the fact that Company does not

anticipate paying a dividend on its shares in the near future.

The Company has based its risk-free interest rate assumption for awards issued during the years ended March 31, 2014 and March 31, 2013 on the implied yield available on U.S. Treasury issues with an equivalent expected term.

The forfeiture rate, for awards issued for the year ended March 31, 2014 was approximately 24.9% and March 31, 2013 was approximately 17.1%, and was based on the Company s actual historical forfeiture history.

	Year Ended	
	March 31, 2014	**March 31, 2013**
Option Plan Shares:		
Expected term (in years)	6.3	6.3
Volatility	68.4%	66.8%-67.0%
Expected dividend	0.0%	0.0%
Risk-free interest rate	1.07%	0.59%-1.05%
Weighted-average grant date fair value	$0.30	$0.38

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The table below lists the classification of the stock based compensation expense for the years ended March 31, 2014 and March 31, 2013.

	2014	2013
Cost of products sold	$ 6,000	$ 15,000
Research and development expense	20,000	45,000
General and administrative expense	89,000	94,000
Sales and marketing expense	24,000	13,000
Total Stock Based Compensation	**$ 139,000**	**$ 167,000**

At March 31, 2014, the total stock-based compensation expense related to unvested stock options and restricted shares granted to employees and directors under the Company s stock plans but not yet recognized was approximately $87,000. This expense will be amortized on a straight-line basis over a weighted-average period of approximately 1.3 years and will be adjusted for subsequent changes in estimated forfeitures.

9. Equity

Warrants

The schedule below shows the outstanding warrants at March 31, 2014 and March 31, 2013:

Warrants Outstanding & Exercisable

	Shares 2014	Shares 2013	Weighted Average Exercise Price 2014	Remaining Life (in yrs) at 3/31/14
2010 Warrants	267,196	267,196	$ 1.376	1.7
PFG Warrants	995,000	995,000	$ 0.500	3.9
PFG Warrants	200,000	200,000	$ 1.000	3.9
Total	1,462,196	1,462,196		

On November 29, 2010, the Company issued 267,196 warrants to Robin Risser and Steve Williamson (the 2010 Warrants). Each 2010 Warrant is exercisable over a five year period for one share of the Company s Class A Common Stock at an exercise price subject to adjustment, based on a formula in the warrants agreement, if Common Stock is issued in the future below $1.404. Future adjustments cannot reduce the exercise price below $1.17. Given the issuance of the PFG Warrants in February 2013, a price reset was triggered to the 2010 Warrants and the new exercise price became $1.376. As a result of the exercise price reset feature, the fair values of the warrants are recorded as a liability with changes in values flowing through the Consolidated Statements of Operations.

As described in Note 6, during February 2013, the Company issued to PFG warrants to purchase 1,195,000 in the Company s Class A Common Stock. The PFG warrants are exercisable over a five year period with 995,000 shares at strike price of $0.50 per share and another 200,000 shares with a strike price of $1.00 per share. The PFG warrant agreement contains a provision allowing the warrant to be put back to the Company under certain circumstances. Given this feature, the fair values of the warrants are recorded as a liability with changes in values flowing through the Consolidated Statements of Operations.

For the years ended March 31, 2014 and 2013, the Company recorded expense and income in its Consolidated Statements of Operations of $117,000 and $168,000, respectively. The fair value of the liability warrants outstanding was approximately $409,000 and $292,000 at March 31, 2014 and 2013, respectively.

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The fair value of the liability warrants was estimated using the Monte Carlo option pricing model using the following assumptions:

	March 31, 2014		March 31, 2013	
	PFG Warrants	2010 Warrants	PFG Warrants	2010 Warrants
Contractual term in years	3.9	1.7	4.9	2.7
Volatility	65.6%	69.5%	74.1%	70.2%
Expected dividend				
Risk-free interest rate	1.25%	0.34%	0.76%	0.33%

Expected volatility is based primarily on historical volatility using the weekly stock price for the most recent period equivalent to the term of the warrants. A dividend yield of zero has been assumed based on the Company s actual past experience and the fact that the Company does not anticipate paying a dividend on its shares in the future. The Company has based its risk-free interest on the implied yield available on U.S. Treasury issues with equivalent contractual term.

The Company computed the value of the warrants using the Monte Carlo model, which is generally a preferred model when instruments contain non-standard features. When a warrant may have different share exercise assumptions such as those issued in February 2013 to PFG and affiliates, the Company weighs various values based on the estimated probability of each outcome as of the valuation date.

The following chart represents the activity in the Company s Level 3 warrant liability during the years ended March 31, 2014 and 2013.

	Year Ended March 31,	
	2014	2013
Level 3 Warrants, beginning of year	$ 292,000	$ 26,000
Addition PFG Warrants, initial fair value		434,000
Change in fair value of warrant liability	117,000	(168,000)
Level 3 Warrants, end of year	**$ 409,000**	**$ 292,000**

MEDC Put Option

In May 2010, the Company entered into a debt conversion agreement with the MEDC whereby the MEDC converted the accrued and unpaid interest as of November 30, 2009 totaling $562,336 into 1,041,363 unregistered shares of API s Class A Common Stock at a price per share of $0.54 (market value of the stock on the day of conversion). In addition, the Company granted MEDC a put option to sell back the shares received pursuant to the debt conversion agreement in the event of a trigger event as defined in the debt conversion agreement. Given the conditions under which the put may be exercised are in the control of the Company, a liability for the fair value of the put option has not been recorded.

Equity Issuance

The Company entered into an underwriting agreement (the Underwriting Agreement) with B. Riley & Co., LLC, (the Underwriter) as sole underwriter for the offer and sale in a firm commitment underwritten public offering of 5,391,304 shares of the Company s Common Stock at a price to the public of $0.530 per share ($0.493 per share, net of underwriting discounts) (the Offering). Pursuant to the Underwriting Agreement, the Company also (i) granted to the Underwriter a 30-day option to purchase up to an additional 808,696 shares of Common Stock to cover over-allotments, if any, at the same price and (ii) agreed to reimburse the Underwriter for certain of its out-of-pocket expenses.

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The Offering was (i) made pursuant to a prospectus supplement dated May 30, 2014, and an accompanying prospectus dated May 5, 2014 pursuant to the Company s existing shelf registration statement on Form S-3 (File No. 333-195689), which was filed with the Securities and Exchange Commission on May 5, 2014 and declared effective by the Commission on May 12, 2014; and (ii) subject to the satisfaction of customary closing conditions for transactions of this nature including, but not limited to, NYSE MKT approval of the Company s additional listing application to list the Common Stock issued accordance with the Underwriting Agreement on NYSE MKT (the Additional Listing Application). On June 5, 2014, NYSE MKT approved the Additional Listing Application and the Offering closed on June 6, 2014, when the Company and Underwriter satisfied the other closing conditions. The Underwriter on June 9, 2014 provided notice to the Company of their intent to purchase the over allotment shares and the offering closed on June 12, 2014.

The net proceeds to the Company from selling 6,200,000 shares of the Company s Common Stock in the Offering, after underwriting discounts and estimated transaction expenses, were approximately $2.9 million. The Company has used the proceeds to pay down the existing line of credit with SVB.

10. Silonex Net Asset Purchase

On March 1, 2013, the Company, through its Advanced Photonix Canada (APC), Inc. subsidiary, acquired substantially all the operating assets and assumed certain liabilities of Silonex, Inc. s business for $900,000 in cash, which was primarily funded with the PFG loan proceeds. Silonex designed, manufactured and marketed optoelectronic devices and sensor solutions to various vertical markets, including Industrial Controls, Banking, Vending, Medical and Telecommunications. The products, customers and business operations are complimentary to, and have minimal overlap with, the Company s Optosolutions product line, and broaden the Company s overall supply channel due to Silonex s existing relationships with Chinese manufacturers. The results of operation of APC have been included in the consolidated financial statements since the date of the acquisition.

The following table presents the allocation of the purchase price to the net assets acquired based on their fair values:

Net Assets Acquired	Allocation
Receivables	$ 299,000
Inventories	382,000
Prepaid and other current assets	12,000
Equipment and leasehold improvements	491,000
Distribution rights	148,000
Total assets acquired	$ 1,332,000
Accounts payable	$ 361,000
Accrued compensation	62,000
Other liabilities	9,000
Total liabilities assumed	$ 432,000
Total net assets acquired	$ 900,000

The Company evaluated the potential for various types of intangible assets to determine the fair value of any acquired intangible assets. Pursuant to the terms of the asset purchase agreement, API did not acquire any patent or trademarks,

obtain any long term customer agreements or receive non-compete assurances so no value was assigned to these potential intangible assets. Silonex had for the past 10 years focused on automotive designs which were retained by their parent. As such, the Company did not acquire any in-process technology projects nor any established technology and therefore did not assign any value to this intangible class. API did receive an established list of customers and rights to distribute the products worldwide which was valued at approximately $148,000. Given the life cycle of a normal customer, a useful life of seven years is being used for amortization of the intangible asset.

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Silonex was part of a privately owned company, and prepared financial statements with multiple charge out of costs, intercompany sales and royalty arrangements that do not reflect the actual operation of the business as acquired. Therefore the Company has considered it impractical to reconstruct a full Statement of Operations on a pro forma basis for fiscal 2013. Given certain assumptions on China sales which were done on a royalty basis, the Company has been able to estimate the total sales for fiscal 2013 at approximately $3.5 million for a total of $26.9 million on a combined pro forma basis. Sales included in the Company s fiscal 2013 results were approximately $298,000 and a loss of $76,000 due to acquisition costs which totaled approximately $100,000. These costs are reflected in the general and administrative line of the Statement of Operations for fiscal 2013. APC sales included in the Company s fiscal 2014 results from operations were approximately $3.8 million.

11. Restructuring

During the third quarter of fiscal 2014, the Company made the decision to begin outsourcing the manufacturing of silicon photodiodes that are used in the Optosolutions production line given sources in Asia became more cost effective. In addition, the decision was made to provide access to the Asian market which management believes will benefit the Company as a whole. This opportunity became apparent with the acquisition and integration of the net assets of Silonex and could achieve annual cost savings of $400,000 to $600,000 (unaudited) per year when fully implemented. To prepare for the transition, an inventory level was built up and the fabrication assets idled during the quarter ended December 27, 2013. The Company undertook a review of the alternative uses of the equipment and determined that an accelerated depreciation charge of approximately $608,000 was necessary in the quarter to state the net book value of the idled assets at amounts that could be obtained if the equipment was sold to independent third party buyers. Employees affected by the shutdown of this manufacturing activity were provided severance of approximately $59,000, all of which was paid by March 31, 2014. The total restructuring costs of $667,000 are reflected in the Cost of products sold section of the Statement of Operations for the year ended March 31, 2014.

12. Foreign Sales

In fiscal 2014 and fiscal 2013, the Company had export sales of approximately $10.6 million and $5.0 million, respectively, made primarily to customers in North America, Asia and Europe . All foreign sales are denominated in U.S. dollars. Sales to specific countries, stated as a percentage of total sales, consist of the following:

	2014	2013
Canada	1%	0%
China	14%	3%
Germany	2%	1%
Israel	1%	1%
Italy	12%	8%
Japan	1%	4%
Singapore	1%	1%
Sweden	2%	1%
United Kingdom	2%	1%
All other countries	1%	1%
Total export sales	**37%**	**21%**

13. Employees Retirement Plan

The Company maintains a 401(k) Plan which is qualified under the Internal Revenue Code. All full-time employees are eligible to participate in the plan after six months of full time employment. Employees may make voluntary contributions to the plan, which are matched by the Company at the rate of $1.00 for every $1.00 of employee contribution up to 3% of wages, and $.50 for every $1.00 of employee contributions on the next 2% of wages, subject to certain limitations. Employer contributions are fully vested when earned.

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The Company s matching program was in effect during fiscal 2013. Effective April 1, 2013, the Company match portion of the 401(k) program was suspended for cost savings reasons. The Company contributions and administration costs were approximately $11,000 and $283,000 for fiscal 2014 and fiscal 2013, respectively.

14. Income Taxes

At March 31, 2014, the Company had net operating loss carry forwards for Federal income tax purposes of approximately $25.4 million that expire between 2017 and 2034, and approximately $6.5 million for California and Michigan state tax purposes that expire between 2017 and 2034. The tax laws related to the utilization of loss carry forwards are complex and the amount of the Company s loss carry forward that will ultimately be available to offset future taxable income may be subject to annual limitations under IRC Section 382 resulting from changes in the ownership of the Company s common stock.

The Company performed an analysis to determine whether an ownership change under Section 382 of the Internal Revenue Code had occurred. The effect of an ownership change would be the imposition of an annual limitation on the use of the net operating loss carry forwards attributable to periods before the change. As of March 31, 2014, the Company believes there are no limitations on the use of these Federal NOLs.

At March 31, 2014, API s net deferred tax asset before consideration of a valuation allowance was approximately $12.6 million, mainly consisting of net operating loss carry-forwards which expire at various amounts over an approximate 20 year period. In assessing the realizability of deferred tax assets, the Company has determined that at this time it is more likely than not that deferred tax assets will not be realized, primarily due to uncertainties related to its ability to utilize the net operating loss carry-forwards before they expire based on the negative evidence of its recent years history of losses, including tax losses in each of the last three years and cumulative taxable losses over the past three years, outweighing the positive evidence of taxable income projections in future years. The ultimate realization of these deferred tax assets is dependent upon the generation of future taxable income during those periods in which those temporary differences become deductible or within the periods before NOL carry forwards expire. As of both March 31, 2014 and 2013, the Company recorded a full valuation allowance on its net deferred tax.

Below are reconciliations between the provisions for income taxes compared with the amounts at the United States federal statutory rate:

Years Ended	March 31, 2014	March 31, 2013
Federal income tax at statutory rates	$ (1,450,000)	$ (1,537,000)
State income taxes, net of federal benefit	(187,000)	(368,000)
Expiration of NOL carry-forwards		204,000
Change in valuation allowance	1,505,000	1,925,000
Change in R&D credit carry-forwards	(179,000)	(287,000)
Permanent items	91,000	60,000
Change in deferred state tax rate	221,000	
Foreign rate differential	(1,000)	3,000
Effective federal income tax	$ 0	$ 0

Foreign pretax earnings were not material in fiscal 2014 or 2013.

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The Company s net deferred tax assets (liabilities) consisted of the following components, as of March 31, 2014 and 2013:

	2014	2013
Sec. 263A adjustment	$ 50,000	$ 37,000
Inventory adjustments	814,000	777,000
Utility accruals	5,000	8,000
Warranty reserve	28,000	25,000
Accounts receivable allowance	7,000	11,000
Accrued vacation	125,000	122,000
Accrued professional fees	24,000	37,000
Accrued commissions	18,000	10,000
Charitable contributions	8,000	8,000
NOL carry forwards	8,903,000	8,194,000
Basis difference of intangible assets	(707,000)	(920,000)
Basis difference of equipment	(466,000)	(745,000)
R&D credits	3,682,000	3,379,000
Goodwill amortization	54,000	74,000
California Mfg. credit	16,000	39,000
AMT credit	20,000	20,000
Total	**$ 12,581,000**	**$ 11,076,000**
Valuation allowance	(12,581,000)	(11,076,000)
Net deferred tax asset	**$ 0**	**$ 0**

At March 31, 2014, the Company s Federal and State R&D tax credit carry forwards totaled approximately $3.7 million. These will expire annually at March 31 over the next twenty years.

15. Commitments & Contingencies

Leases

The Company leases all of its executive offices, research, marketing and manufacturing facilities under non-cancellable operating leases which are recorded to rent expense using the straight-line method.

The lease for the approximate 40,000 square foot facility located in Camarillo, California was amended in February 2014 and is now leased through March 2019. The amendment reduced the square footage to approximately 29,000 square feet and reduced the monthly lease payment by 42%. The monthly payment increases annually by 3% pursuant to the renewal terms.

In 2001, the Company entered into a 10-year lease for its Ann Arbor, MI facility with two 5-year options to renew at a lease rate tied to the CPI, with a minimum increase for each 5-year option. The original lease included the right of first refusal to purchase the facility and was scheduled to expire in May 31, 2011. In January 2010, the Company amended the lease terms and extended the lease to May 31, 2021. The Company retained the right of first refusal to purchase the property during the new lease term. In addition, the Company negotiated an option to purchase the facility on

May 31, 2016 for no less than $7.1 million. Rent decreased from $58,689 per month to $50,754 per month commencing January, 2010 through May, 2011, then will decrease to $48,238 per month from June, 2011 through May, 2016 and will increase to $52,432 in June, 2016 through the remainder of the lease term.

With the acquisition of substantially all the operating assets of Silonex on March 1, 2013, the Company assumed approximately 6,000 square feet of research, manufacturing and administrative floor space in Montreal Canada. This space is subject to annual renewal on the amount of space and rent each May. APC elected to reduce their space down to 4,000 square feet effective May of 2014.

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Minimum future lease payments under all non-cancellable operating leases are as follows:

2015	$ 892,000
2016	856,000
2017	860,000
2018	867,000
2019	875,000
Thereafter	705,000
Total	**$ 5,055,000**

Rent expense was approximately $1,069,000 and $1,007,000 in fiscal 2014 and fiscal 2013, respectively.

Legal

The Company is, from time to time, subject to legal and other matters in the normal course of its business. While the results of such matters cannot be predicted with certainty, management does not believe that the final outcome of any pending matters will have a material effect on the financial position and results of operations of the Company.

16. Quarterly Financial Data

The table below lists financial information (unaudited) by quarter for each of the two fiscal years ended March 31, 2014 and 2013.

2014	**First**	**Second**	**Third**	**Fourth**	**Total Year**
Sales, Net	$ 7,078,000	$ 7,536,000	$ 7,450,000	$ 6,977,000	$ 29,041,000
Cost of Products Sold	4,151,000	4,747,000	5,562,000	4,973,000	19,433,000
Gross Profit	2,927,000	2,789,000	1,888,000	2,004,000	9,608,000
Research, Development and Engineering Expenses	1,492,000	1,234,000	1,164,000	1,085,000	4,975,000
Sales, Marketing, General & Administrative Expenses	1,711,000	1,842,000	1,775,000	1,716,000	7,044,000
Net Loss	$ (925,000)	$ (578,000)	$ (1,618,000)	$ (1,143,000)	$ (4,264,000)
Basic and Diluted Loss per Common Share	$ (0.03)	$ (0.02)	$ (0.05)	$ (0.04)	$ (0.14)
Weighted Average Common Shares Outstanding	31,198,000	31,229,000	31,243,000	31,240,000	31,227,000

2013	**First**	**Second**	**Third**	**Fourth**	**Total Year**
Sales, Net	$ 6,216,000	$ 5,586,000	$ 5,834,000	$ 6,013,000	$ 23,649,000
Cost of Products Sold	3,972,000	3,612,000	3,381,000	3,858,000	14,823,000
Gross Profit	2,244,000	1,974,000	2,453,000	2,155,000	8,826,000

Research, Development and Engineering Expenses	1,371,000	1,342,000	1,558,000	1,412,000	5,683,000
Sales, Marketing, General & Administrative Expenses	1,558,000	1,615,000	1,614,000	1,560,000	6,347,000
Net Income (Loss)	$ (993,000)	$ (1,287,000)	$ (1,026,000)	$ (1,081,000)	$ (4,387,000)
Basic and Diluted Loss per Common Share	$ (0.03)	$ (0.04)	$ (0.03)	$ (0.03)	$ (0.14)
Weighted Average Common Shares Outstanding	31,161,000	31,161,000	31,161,000	31,161,000	31,161,000

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Advanced Photonix, Inc.

Condensed Consolidated Balance Sheets

	December 26, 2014 (Unaudited)	March 31, 2014
ASSETS		
Current assets:		
Cash and cash equivalents	$ 110,000	$ 120,000
Receivables, net	3,814,000	5,085,000
Inventories	4,987,000	4,749,000
Prepaid expenses and other current assets	725,000	444,000
Total current assets	9,636,000	10,398,000
Equipment and leasehold improvements, net	1,769,000	2,144,000
Goodwill	4,579,000	4,579,000
Intangibles and patents, net	2,678,000	2,942,000
Other assets	160,000	138,000
Total Assets	$ 18,822,000	$ 20,201,000
LIABILITIES AND SHAREHOLDERS EQUITY		
Current liabilities:		
Accounts payable	$ 1,580,000	$ 2,661,000
Accrued compensation	790,000	701,000
Accrued subcontracting costs	226,000	344,000
Other accrued expenses	713,000	1,108,000
Current portion of long-term debt PFG	714,000	714,000
Current portion of long-term debt MEDC/MSF	116,000	654,000
Current portion of capital lease	8,000	20,000
Current portion of long-term debt bank line of credit	1,546,000	2,147,000
Current portion of long-term debt bank term loan	83,000	306,000
Total current liabilities	5,776,000	8,655,000
Long-term debt, less current portion PFG, net of discount	365,000	794,000
Long-term debt, less current portion MEDC/MSF	538,000	
Long-term debt, capital lease	29,000	36,000
Warrant liability	178,000	409,000
Total liabilities	6,886,000	9,894,000
Commitments and contingencies		
Shareholders equity:		
Class A Common Stock, $.001 par value, 100,000,000 authorized; December 26, 2014 37,381,413 shares issued and outstanding, March 31,	37,000	31,000

2014 31,203,213 shares issued and outstanding			
Additional paid-in capital		61,712,000	58,752,000
Accumulated deficit		(49,813,000)	(48,476,000)
Total shareholders equity		11,936,000	10,307,000
Total Liabilities and Shareholders Equity	$	18,822,000	$ 20,201,000

See notes to condensed consolidated financial statements.

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Advanced Photonix, Inc.

Condensed Consolidated Statements of Operations

(Unaudited)

	Three Months Ended		Nine Months Ended	
	December 26, 2014	December 27, 2013	December 26, 2014	December 27, 2013
Sales, net	$ 5,805,000	$ 7,450,000	$ 21,257,000	$ 22,064,000
Cost of products sold	3,936,000	5,562,000	13,845,000	14,460,000
Gross profit	1,869,000	1,888,000	7,412,000	7,604,000
Operating expenses:				
Research, development and engineering	959,000	1,164,000	3,019,000	3,890,000
Sales and marketing	535,000	640,000	1,682,000	1,867,000
General and administrative	928,000	1,135,000	3,291,000	3,461,000
Amortization expense	153,000	260,000	539,000	769,000
Total operating expenses	2,575,000	3,199,000	8,531,000	9,987,000
Loss from operations	(706,000)	(1,311,000)	(1,119,000)	(2,383,000)
Other income (expense):				
Interest expense	(124,000)	(153,000)	(434,000)	(478,000)
Change in fair value of warrant liability	140,000	(124,000)	231,000	(213,000)
Other income (loss)	(11,000)	(30,000)	(15,000)	(47,000)
Total other expense	5,000	(307,000)	(218,000)	(738,000)
Loss before benefit for income taxes	(701,000)	(1,618,000)	(1,337,000)	(3,121,000)
Benefit for income taxes				
Net loss	$ (701,000)	$ (1,618,000)	$ (1,337,000)	$ (3,121,000)
Basic & diluted loss per share	$ (0.02)	$ (0.05)	$ (0.04)	$ (0.10)
Weighted average common shares outstanding				
Basic & diluted	37,381,000	31,243,000	35,860,000	31,223,000

See notes to condensed consolidated financial statements.

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Advanced Photonix, Inc.

Condensed Consolidated Statements of Cash Flows

(Unaudited)

	Nine Months Ended	
	December 26, 2014	December 27, 2013
Cash flows from operating activities:		
Net loss	$ (1,337,000)	$ (3,121,000)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation	448,000	1,297,000
Amortization of intangible assets	539,000	769,000
Amortization of debt discount	107,000	143,000
Stock based compensation expense	52,000	110,000
Change in fair value of warrant liability	(231,000)	213,000
Changes in operating assets and liabilities:		
Accounts receivable net	1,271,000	(389,000)
Inventories	(238,000)	(759,000)
Prepaid expenses and other assets	(303,000)	291,000
Accounts payable and accrued expenses	(1,505,000)	1,186,000
Net cash used in operating activities	(1,197,000)	(260,000)
Cash flows from investing activities:		
Capital expenditures	(198,000)	(109,000)
Proceeds from sale of equipment	125,000	
Patent expenditures	(275,000)	(176,000)
Net cash used in investing activities	(348,000)	(285,000)
Cash flows from financing activities:		
Payments on bank term loan	(223,000)	(250,000)
Net proceeds (payments) on bank line of credit	(601,000)	1,128,000
Payments on MEDC/MSF term loans		(276,000)
Payments on PFG term loan	(536,000)	(537,000)
Payments on capital lease	(19,000)	(21,000)
Net proceeds from issuance of Class A Common Stock	2,914,000	
Taxes paid on net share settlement		(2,000)
Net cash provided by financing activities	1,535,000	42,000
Net decrease in cash and cash equivalents	(10,000)	(503,000)
Cash and cash equivalents at beginning of period	120,000	619,000

Cash and cash equivalents at end of period	$ 110,000	$ 116,000
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 222,000	$ 283,000
Supplemental disclosure of non-cash investing and financing activities:		
Acquisition of equipment through capital lease	$	$ 82,000

See notes to condensed consolidated financial statements.

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Advanced Photonix, Inc.

Notes to Condensed Consolidated Financial Statements

December 26, 2014

Note 1. Basis of Presentation

Business Description

General Advanced Photonix, Inc.® (the Company, we, us, our, or API), was incorporated under the laws of the State of Delaware in June 1988. API is a leading test and measurement company that packages optoelectronic semiconductors into high-speed optical receivers (HSOR products), custom optoelectronic subsystems (Optosolutions products) and Terahertz (THz products) instrumentation, serving the test and measurement, telecommunications, military/aerospace and medical markets. The Company supports the customers from the initial concept and design phase of the product, through testing to full-scale production. The Company has two manufacturing facilities located in Camarillo, California and Ann Arbor, Michigan.

The accompanying unaudited condensed consolidated financial statements include the accounts of the Company and the Company s wholly owned subsidiaries (Silicon Sensors Inc. Picometrix®, LLC, and Advanced Photonix Canada, Inc.). The unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (SEC). All material inter-company accounts and transactions have been eliminated in consolidation. Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted pursuant to such rules and regulations. In the opinion of management, all adjustments, consisting of normal and recurring adjustments, necessary for a fair presentation of the financial position and the results of operations for the periods presented have been included. Operating results for the nine-month period ended December 26, 2014 are not necessarily indicative of the results that may be expected for the balance of the fiscal year ending March 31, 2015.

These unaudited condensed consolidated financial statements should be read in conjunction with Management s Discussion and Analysis and the audited financial statements and notes thereto included in the Company s Annual Report on Form 10-K for the fiscal year ended March 31, 2014, filed with the SEC on June 30, 2014.

Recent Events On January 30, 2015, the Company entered into a merger agreement with Luna Innovations Incorporated (trading on the NASDAQ under the symbol LUNA) (Luna) and API Merger Sub (Merger Sub) pursuant to which Merger Sub will merge with and into API and API will become a wholly-owned subsidiary of Luna (the Merger). On the effective time of the merger, the existing stockholders of API will receive 0.31782 of a share of Luna common stock for each share of API s Class A common stock owned by them. The closing of the transaction is subject to the approval of the stockholders of each of Luna and API and other customary closing conditions. The Company anticipates the transaction to close by late spring or early summer 2015. After the announcement of the Merger, three separate putative class action complaints were filed in Michigan and Delaware against members of API s board of directors, API, Luna and Merger Sub, alleging that API s board of directors breached its fiduciary duties to API s stockholders by, among other things, (a) agreeing to sell API to Luna at an inadequate price, (b) implementing an unfair process, (c) agreeing to certain provisions of the Merger Agreement that are alleged to favor Luna and deter alternate bids, and/or (d) omitting material information from the Registration Statement on Form S-4 filed with the SEC on February 9, 2015 by Luna. The plaintiffs seek, among other things, an injunction against the consummation of

the Merger and an award of costs and expenses, including a reasonable allowance for attorneys and experts fees. The outcome of these lawsuits cannot be predicted with any certainty. An adverse judgment for monetary damages could have a material adverse effect on the operations and liquidity of API. A preliminary injunction could delay or jeopardize the completion of the Merger, and an adverse judgment granting permanent injunctive relief could indefinitely enjoin the completion of the Merger. API, API s board of directors and Luna believe that the claims asserted against them in the lawsuits are without merit and are vigorously defending against them. Additional lawsuits arising out of or relating to the

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Merger Agreement or the Merger may be filed in the future. The proposed Merger is expected to provide API s stockholders the ability to realize the value added associated with a larger company and to execute the Company s growth plans over the near term.

The merger agreement may be terminated by either Luna or API under certain circumstances, including if the merger has not been consummated on or before August 31, 2015, if the approval of the stockholders of either Luna or API is not obtained and for certain breaches of representations and warranties. If the merger agreement is terminated in certain specified circumstances, API must pay Luna, or Luna must pay API, as applicable, a termination fee of $750,000. In addition, if the merger agreement is terminated following a meeting of the stockholders of Luna or API at which the adoption of the merger agreement and approval of the transactions contemplated thereby, or the approval of the issuance of shares of Luna Common Stock to existing API stockholders as consideration for the merger is not approved, then Luna or API, as applicable, will be required to pay an amount up to $250,000 in reimbursement of the other party s out-of-pocket expenses incurred in connection with the transaction.

See Note 5 regarding recent modifications to the Company s debt facilities.

Recent Accounting Pronouncements- In May 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-09 *Revenue from Contracts with Customers* (ASU 2014-09), which supersedes nearly all existing revenue recognition guidance under U.S. Generally Accepted Accounting Principles (U.S. GAAP). The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration to which an entity expects to be entitled for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, more judgment and estimates may be required with the revenue recognition process than are required under existing U.S. GAAP.

The standard is effective for annual periods beginning after December 15, 2016, and interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) a retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption (which includes additional footnote disclosures). The Company is currently evaluating the impact of adopting ASU 2014-09 on the consolidated financial statement and has not yet determined the method by which the Company will adopt the standard in fiscal 2018.

In August 2014, the FASB issued ASU 2014-15, *Disclosure of Uncertainties about an Entity s Ability to Continue as a Going Concern*, which provides guidance on determining when and how to disclose going concern uncertainties in the financial statements. The new standard requires management to perform interim and annual assessments of an entity s ability to continue as a going concern within one year of the date the financial statements are issued. An entity must provide certain disclosures if conditions or events raise substantial doubt about the entity s ability to continue as a going concern.

ASU 2014-15 is effective for annual periods ending after December 15, 2016, and for interim periods within annual periods beginning after December 15, 2016. The Company is currently evaluating the impact of adopting ASU 2014-15 on the consolidated financial statement and has not yet determined the impact the standard may have on the fiscal 2017 disclosures.

Note 2. Stock Based Compensation

The Company has three stock equity plans: The 1997 Employee Stock Option Plan, the 2000 Stock Option Plan and the 2007 Equity Incentive Plan. As of December 26, 2014, no additional awards may be issued under either the 1997

Employee Stock Option Plan or the 2000 Stock Option Plan. There are 2,500,000 shares authorized for issuance under the 2007 Equity Incentive Plan, with 266,095 shares remaining available for future grant.

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Options and restricted stock awards may be granted to employees, officers, directors and consultants. Options typically vest over a period of one to four years and are exercisable up to ten years from the date of issuance. The option exercise price equals the stock s market price on the date of grant. Restricted stock awards typically vest over a period of six months to four years, and the shares subject to such awards are generally not transferrable until the awards vest.

The following table summarizes information regarding options outstanding and options exercisable at each of the quarterly periods through the nine months ended December 27, 2013 and December 26, 2014, respectively, and the changes during the periods then ended:

	Number of Options Outstanding (000 s)	Weighted Average Exercise Price per Share	Number of Shares Exercisable (000 s)	Weighted Average Exercise Price per Share
Balance as of March 31, 2013	**2,392**	**$ 1.66**	**2,142**	**$ 1.76**
Granted	24	$ 0.48		
Exercised		$		
Expired or forfeited	(114)	$ 1.03		
Balance as of June 28, 2013	**2,302**	**$ 1.68**	**2,099**	**$ 1.76**
Granted		$		
Exercised	(4)	$ 0.44		
Expired or forfeited	(19)	$ 1.80		
Balance as of September 27, 2013	**2,279**	**$ 1.68**	**2,117**	**$ 1.75**
Granted		$		
Exercised		$		
Expired or forfeited	(12)	$ 0.63		
Balance as of December 27, 2013	**2,267**	**$ 1.69**	**2,112**	**$ 1.75**

Balance as of March 31, 2014	**2,171**	**$ 1.66**	**2,017**	**$ 1.75**
Granted		$		
Exercised		$		
Expired or forfeited	(36)	$ 2.09		
Balance as of June 27, 2014	**2,135**	**$ 1.68**	**2,031**	**$ 1.70**
Granted		$		
Exercised		$		
Expired or forfeited	(16)	$ 1.39		

Balance as of September 26, 2014	**2,119**	**$ 1.66**	**2,055**	**$ 1.69**
Granted		$		
Exercised		$		
Expired or forfeited	(180)	$ 1.80		
Balance as of December 26, 2014	**1,939**	**$ 1.65**	**1,881**	**$ 1.67**
Vested & expected to Vest, December 26, 2014	**1,924**	**$ 1.65**		

Information regarding stock options outstanding as of December 26, 2014 is as follows:

	Options Outstanding		
Price Range	**Shares (in 000s)**	**Weighted Average Exercise Price**	**Weighted Average Remaining Life**
$0.44 - $1.25	521	$ 0.71	6.75
$1.26 - $2.50	1,168	$ 1.81	2.83
$2.51 - $5.34	250	$ 2.83	0.67

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		Options Exercisable	
Price Range	**Shares (in 000s)**	**Weighted Average Exercise Price**	**Weighted Average Remaining Life**
$0.44 - $1.25	463	$ 0.69	6.70
$1.26 - $2.50	1,168	$ 1.81	2.83
$2.51 - $5.34	250	$ 2.83	0.67

The intrinsic value of options exercised during each of the three and nine month periods ended December 26, 2014 was zero. The intrinsic value of options exercised during the three and nine month periods ended December 27, 2013 was zero and $600, respectively.

During the third quarter of fiscal 2014, no restricted shares were issued. There were no restricted shares issued during the third quarter of fiscal 2015. The restricted share transactions are summarized below:

	Shares (000 s)	**Weighted Average Grant Date Fair Value Per Share**
Unvested, March 31, 2013	**128**	**$ 0.87**
Granted	40	$ 0.48
Vested		$
Expired or forfeited	(1)	$ 0.76
Unvested, June 28, 2013	**167**	**$ 0.78**
Granted	50	$ 0.66
Vested	(26)	$ 0.89
Expired or forfeited	(7)	$ 0.95
Unvested, September 27, 2013	184	**$ 0.72**
Granted		$
Vested	(12)	$ 0.48
Expired or forfeited	(4)	$ 0.76
Unvested, December 27, 2013	168	**$ 0.74**

	Shares (000 s)	**Weighted Average Grant Date Fair Value Per Share**
Unvested, March 31, 2014	**84**	**$ 0.76**
Granted		$
Vested		$
Expired or forfeited	(16)	$ 0.50

Unvested, June 27, 2014	**68**	**$**	**0.83**
Granted		$	
Vested	(25)	$	0.95
Expired or forfeited		$	
Unvested, September 26, 2014	43	**$**	**0.75**
Granted		$	
Vested		$	
Expired or forfeited		$	
Unvested, December 26, 2014	43	**$**	**0.75**

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The Company estimates the fair value of stock-based awards utilizing the Black-Scholes pricing model for stock options and using the intrinsic value for restricted stock. The fair value of the awards is amortized as compensation expense on a straight-line basis over the requisite service period of the award, which is generally the vesting period. The Black-Scholes fair value calculations involve significant judgments, assumptions, estimates and complexities that impact the amount of compensation expense to be recorded in current and future periods. The factors include:

1. The time period that option awards are expected to remain outstanding has been determined based on the average of the original award period and the remaining vesting period. The expected term assumption for awards issued during the nine month periods ended December 27, 2013 was 6.3 years.

2. The future volatility of the Company s stock has been estimated based on the weekly stock price during the expected term to the date of the latest stock option grant. The expected volatility assumption for awards issued during the nine month periods ended December 27, 2013 averaged 68%.

3. A dividend yield of zero has been assumed for awards issued during nine month periods ended December 27, 2013, based on the Company s actual past experience and the fact that Company does not anticipate paying a dividend on its shares in the near future.

4. The Company has based its risk-free interest rate assumption for awards issued during the nine month periods ended December 27, 2013 on the implied yield available on U.S. Treasury issues with an equivalent expected term, which averaged 1.1%.

5. The forfeiture rate, for awards issued during the nine month periods ended December 26, 2014 and December 27, 2013, was 30% and 23%, respectively, and was based on the Company s actual historical forfeiture history.

The Company s stock-based compensation expense is classified in the table below:

	Three months ended		Nine months ended	
	December 26, 2014	December 27, 2013	December 26, 2014	December 27, 2013
Cost of Products Sold	$ 1,000	$ 1,000	$ 4,000	$ 5,000
Research, development & engineering expense	3,000	4,000	10,000	16,000
General and Administrative expense	10,000	31,000	33,000	70,000
Sales and Marketing expense	1,000	4,000	5,000	19,000
Total Stock Based Compensation	**$ 15,000**	**$ 40,000**	**$ 52,000**	**$ 110,000**

At December 26, 2014, the total stock-based compensation expense related to unvested stock options and restricted shares granted to employees and independent directors under the Company s stock option plans but not yet recognized was $33,000. This expense will be amortized on a straight-line basis over a weighted-average period of approximately

0.7 years and will be adjusted for subsequent changes in estimated forfeitures.

Note 3. Credit Risk

Pervasiveness of Estimates and Risk The preparation of condensed consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Financial instruments, which potentially subject the Company to concentrations of credit risk, consist principally of cash equivalents and trade accounts receivable.

Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. API has never experienced any losses related to these balances. At December 26, 2014, there was no cash held in excess of federally insured limits.

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Accounts receivable are unsecured and the Company is at risk to the extent such amounts become uncollectible. The Company performs periodic credit evaluations of its customers financial condition and generally does not require collateral. Any unanticipated change in the customers credit worthiness or other matters affecting the collectability of amounts due from such customers could have a material effect on the results of operations in the period in which such changes or events occur. As of December 26, 2014 one customer comprised 13% of accounts receivable. As of March 31, 2014, one customer individually comprised 19% of accounts receivable. The allowance for doubtful account balance was $28,000 on December 26, 2014 and $20,000 on March 31, 2014.

Note 4. Detail of Certain Asset Accounts

Cash and Cash Equivalents The Company considers all highly liquid investments, with an original maturity of three months or less when purchased, to be cash equivalents.

Inventories Inventories, which include material, labor and manufacturing overhead, are stated at the lower of cost (on a first in, first out method) or market. Inventories consist of the following at December 26, 2014 and March 31, 2014:

	December 26, 2014	March 31, 2014
Raw material	$ 3,031,000	$ 3,093,000
Work-in-process	848,000	954,000
Finished products	1,108,000	702,000
Inventories, net	**$ 4,987,000**	**$ 4,749,000**

Slow moving and obsolete inventories are reviewed during the year to assess whether a cost adjustment is required. Our review of slow moving and obsolete inventory begins with a listing of all inventory items which have not moved regularly within the past 12 months. In addition, any residual inventory, which is customer specific and remaining on hand at the time of contract completion, is included in the list. The complete list of slow moving and obsolete inventory is then reviewed by the production, engineering and/or purchasing departments to identify items that can be utilized in the near future. These items are then excluded from the analysis and the remaining amount of slow-moving and obsolete inventory is then further assessed and a write down is recorded when warranted. Additionally, non-cancelable open purchase orders for parts we are obligated to purchase where demand has been reduced may also be reserved. Impairments for open purchase orders where the market price is lower than the purchase order price are also recorded. The impairments established for excess, slow moving, and obsolete inventory create a new cost basis for those items. The cost basis of these parts is not subsequently increased if the circumstances which led to the impairment change in the future. If a product that had previously been impaired is subsequently sold, the amount of reduced cost basis is reflected as cost of goods sold.

Intangible Assets Intangible assets that have definite lives consist of the following *(dollars in thousands)*:

	Weighted Average Lives in		December 26, 2014		
		Amortization Method	Carrying Value	Accumulated Amortization	Intangibles Net

	Years				
Customer list	15	Straight Line	$ 190	$ 122	$ 68
Trademarks	15	Cash Flow	2,270	1,394	876
Technology	10	Cash Flow	10,950	10,851	99
Distribution Rights	7	Straight Line	148	39	109
Patents pending			729		729
Patents	10	Straight Line	1,449	652	797
Total Intangibles			**$ 15,736**	**$ 13,058**	**$ 2,678**

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	Weighted Average Lives in Years	Amortization Method	March 31, 2014 Carrying Value	Accumulated Amortization	Intangibles Net
Customer list	15	Straight Line	$ 190	$ 113	$ 77
Trademarks	15	Cash Flow	2,270	1,267	1,003
Technology	10	Cash Flow	10,950	10,672	278
Distribution Rights	7	Straight Line	148	23	125
Patents pending			795		795
Patents	10	Straight Line	1,108	444	664
Total Intangibles			**$ 15,461**	**$ 12,519**	**$ 2,942**

Amortization expense for the three-month periods ended December 26, 2014 and December 27, 2013 was $153,000 and $260,000, respectively. The current patents held by the Company have remaining useful lives ranging from 2 years to 20 years. Amortization expense for the nine-month periods ended December 26, 2014 and December 27, 2013 was $539,000 and $769,000, respectively.

The cash flow method of amortization is based upon management s estimate of how the intangible asset contributes to our cash flows and best represents the pattern of how the economic benefits of the intangible asset will be consumed or used up. Such amortization is initially derived from the estimated undiscounted cash flows that were used in determining the original fair value of the intangible asset at the acquisition date and is monitored for significant changes in subsequent periods.

Assuming no impairment to the intangible value, future amortization expense for intangible assets and patents, excluding patents pending, are as follows by fiscal year (*in thousands*):

Intangible Assets and Patents

Remainder of 2015	$ 154
2016	396
2017	351
2018	347
2019	337
2020 & after	364
Total	**$ 1,949**

Patent pending costs of $729,000 are not included in the future amortization chart above. These costs will be amortized beginning the month the patents are granted.

Note 5. Debt

Total outstanding debt of the Company as of December 26, 2014 and March 31, 2014 consisted of the following (*in thousands*):

	December 26, 2014	March 31, 2014
Bank term loan	$ 83	$ 306
Bank line of credit	1,546	2,147
MEDC/MSF loans	654	654
Partners for Growth (PFG) loan, net of debt discount	1,079	1,508
Capital leases	37	56
Total	**$ 3,399**	**$ 4,671**

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Bank Debt

On January 31, 2012, API entered into a Loan and Security Agreement with Silicon Valley Bank (SVB and such agreement as amended from time to time, the SVB Loan Agreement) and a related Loan and Security Agreement (Ex-IM Loan Facility) with SVB (as amended from time to time, the SVB Ex-Im Loan Agreement , and together with the SVB Loan Agreement, the SVB Loan Agreements) that provided for a three-year $1 million term loan that expires in March 2015, and a $5 million line of credit with a $3 million export-import facility sublimit that expires in June 2016. Subsequent to the execution of the original SVB Loan Agreements, there have been ten amendments that have modified the financial covenants, allowed for the acquisition of substantially all of the operating assets of Silonex, Inc. (Silonex), allowed the Company to enter into the loan agreement with Partners for Growth III, L.P. (PFG and such agreement as amended from time to time as the PFG Loan Agreement) as described below and extended the maturity date of the line of credit from January 2014 to June 2016.

The SVB Loan Agreements as amended contained December 2013 and January 2014 financial covenants that required the Company to maintain a minimum liquidity ratio of 2.25 to 1.00 and a minimum trailing three month adjusted EBITDA, measured monthly of (1) a negative $300,000 for each fiscal month during the period July through October 2013; and (2) $1 for each fiscal month during the period November 2013 through February 2014.

As of December 27, 2013 and January 24, 2014, the Company was not in compliance with the then existing minimum adjusted EBITDA covenant of $1 for the three months ended December 27, 2013 and January 31, 2014, respectively, and as of January 31, 2014, the Company was also not in compliance with the then existing minimum liquidity ratio of 2.25 to 1.00. In addition, the foregoing defaults triggered the cross-default provisions under each of the SVB Loan Agreements and the loan with PFG under the PFG Loan Agreement. Consequently, under the terms of each agreement, SVB and PFG were both entitled to proceed against the collateral provided as security for the loans issued thereunder upon an event of default subject, in PFG s case, to any rights that SVB may have in that same collateral.

On February 10, 2014, API entered into separate Forbearance Agreements with SVB and PFG pursuant to which and subject to certain exceptions, each of SVB and PFG agreed not to proceed against the collateral securing their respective loans until February 28, 2014. On March 5, 2014, the Company entered into separate amendment agreements with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of the Company s $5 million line of credit to May 31, 2014; (ii) the minimum trailing three month adjusted EBITDA covenant was reset to a negative $1.2 million for the fiscal month ended February 28, 2014, a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014 and a positive $1 for the fiscal month ending May 31, 2014; (iii) the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of February 28, 2014, and 2.25 to 1.00 for each month thereafter through May 2014; and (iv) each of SVB and PFG waived the existing defaults. In addition to the payment of an amendment fee, the Company agreed to pay each of SVB and PFG additional fees of up to $50,000 and $75,000, respectively, no later than May 31, 2014 (the Tail Fees).

On April 30, 2014, API entered into separate amendment agreements with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of the $5 million line of credit to July 31, 2014; (ii) the trailing three month adjusted EBITDA covenant was reset to a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014, a negative $250,000 for the fiscal months ending May 31, 2014 and June 30, 2014 and a positive $1 for the fiscal month ending July 31, 2014; and (iii) the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of March 31, 2014 through May 31, 2014, and 2.00 to 1.00 for each month thereafter through July 2014. In addition to the payment of an amendment fee, the Company agreed to pay each of SVB and PFG their respective Tail Fee and, commencing with the month ended May 31, 2014, an additional fee of $15,000 and $20,000, respectively, for each month that the liquidity ratio is less than 2.00 to 1.00 as of the last day of

the month under measurement.

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On June 6, 2014, API received approximately $2,657,000 in proceeds before expenses from a secondary placement of 5,391,304 shares of Class A Common Stock through a firm underwriting by B Riley & Co., LLC. On June 10, 2014, the underwriter exercised the option on an additional 808,696 shares of Class A Common Stock for proceeds before expenses of $398,606. The net proceeds were used to pay down the existing line of credit with SVB and certain related fees. On June 20, 2014, API signed separate amendments with SVB and PFG where, among other things, (i) SVB agreed to extend the maturity date of the Company s line of credit to June 2016, (ii) all parties agreed to a six month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $850,000 through June 2014, negative $300,000 for July through September 2014, a positive $1 for October through December 2014 and $100,000 each month thereafter subject to reset upon the submission of the fiscal 2016 budget but no lower than $100,000 on a rolling six month basis, (iii) all parties agreed to adjust the minimum liquidity ratio, as defined, to be 1.30 to 1.00 for months ending prior to June 2014 and 2.00 to 1.00 for all months on or after June 2014 as measured at each month end, and (iv) SVB restored an interest rate matrix based on the covenant performance that results in an interest rate on the line of credit to range from prime rate plus 50 basis points up to prime rate plus 400 basis points and an interest rate on the term loan to range from prime plus 100 basis points up to prime plus 450 basis points. The agreements confirmed the obligation to pay the previously agreed Tail Fees of $50,000 and $75,000 to SVB and PFG respectively, associated attorney fees for the amendment, but waived the added fees for May 2014 of $15,000 and $20,000 respectively.

On November 10, 2014, API signed separate amendments to the SVB Loan Agreements and PFG Loan Agreements where, among other things, (i) all parties agreed to a six month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $800,000 through March of 2015, negative $300,000 for April through June of 2015, and $100,000 each month thereafter, (ii) all parties agreed to adjust the minimum liquidity ratio, as defined, to be 2.00 to 1.00 through February of 2015 with a reduction to 1.50 to 1.00 for each month thereafter, and (iii) all parties agreed to continue the existing interest rate matrix. The amendments provided for a reimbursement of legal expenses and a modification fee of $10,000 with an additional $10,000 payable if the Company s March 2015 quarterly adjusted EBITDA is less than one dollar.

The interest rates on the SVB term loan and line of credit as of December 26, 2014 were 3.75% and 4.25%, respectively. The Company had approximately $1.5 million outstanding on the SVB line of credit with approximately $2.1 million in borrowing capacity as of December 26, 2014. However, given the liquidity covenant of 2.00 to 1.00 required by SVB, an additional advance in excess of $630,000 of the available line of credit would cause the Company to be in violation of the liquidity covenant with SVB.

The EX-IM Loan Facility is guaranteed by the API s subsidiaries and all borrowings under the SVB Loan Agreements are secured by a first priority security interest granted to SVB in substantially all of the Company s respective assets.

As of December 26, 2014, the Company is in compliance with the November 10, 2014 revisions to the liquidity and adjusted EBITDA covenants with SVB. The Company experienced a $2.1 million dollar reduction in HSOR revenues in the third quarter relative to the second quarter which was more than anticipated in the November 2014 covenant reset. As a result, the Company obtained further covenant relief on February 5, 2015 from SVB by reducing the rolling six month adjusted EBITDA requirement for January through June 2015 to a negative $1,250,000, $1 of adjusted EBITDA required in July 2015 and $100,000 each month thereafter until maturity with up to $150,000 in merger transaction costs carved out of the calculation. The parties also agreed to reduce the minimum liquidity ratio to 1.30 to 1.00 for January 2015 until the maturity of the line of credit. Pursuant to this tenth amendment, the interest rate was changed to prime plus 5% or 8.25% per annum for the line of credit. The Company is required to pay a $10,000 bank fee plus associated legal costs for the amendment with an added $15,000 payable upon the maturity or payoff of the line of credit. Should the Company experience a reduction in revenue or an increase in expenses from its most recent forecast which was the basis of the February 5, 2015 covenants, the loan would be callable creating a liquidity

issue.

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Total interest payments made to the Company s bank lenders during the nine months ended December 26, 2014 and December 27, 2013 were $63,000 and $57,000, respectively. Total interest payments made to the Company s bank lenders during the three months ended December 26, 2014 and December 27, 2013 were $10,000 and $21,000, respectively.

Partners for Growth Secured Debt

On February 8, 2013, API entered into a $2.5 million secured Loan and Security Agreement with PFG that is subordinate to the SVB Loan Agreements. Pursuant to the terms of the PFG Agreement, the Company is obligated to make monthly principal payments of $59,524, plus accrued interest at 11.75% through maturity in August 2016. As part of the consideration for and as a closing condition to the PFG Loan Agreement, the Company agreed to grant PFG and certain of its affiliates warrants to purchase up to 1,195,000 shares of the Company s Class A Common Stock (the Warrants) in a private placement pursuant to Section 4(a)(2) of the Securities Act. 995,000 of the shares issuable under the Warrants were granted at an initial strike price equal to $0.50 per share (the Tier 1 Warrants), and the remaining 200,000 shares issuable under the Warrants were granted at an initial strike price equal to $1.00 per share ($1.00 Warrants).

The Warrants contain full-ratchet anti-dilution provisions that will result in proportional adjustments to the exercise price and the number of shares issuable under the PFG Warrant Agreements in the event that the Company conducts a stock split, subdivision, stock dividend or combination, or similar transaction. The PFG Warrant Agreements also include a net exercise provision pursuant to which warrant holders will receive the number of shares equal to (x) the product of (A) the number of Warrants exercised multiplied by (B) the difference between (1) the fair market value of a share of Class A Common Stock (with fair value generally being equal to the highest closing price of the Company s Class A Common Stock during the 45 consecutive trading days prior to the date of exercise) and (2) the strike price of the Warrant, (y) divided by the fair market value of a share of Class A Common Stock. In addition, in the event the Company is acquired, liquidates, conducts a public offering, or the Warrants expire, each warrant holder will have the right to put its Warrants to the Company in exchange for a per share cash payment that varies with the number of shares issuable under each Warrant, but in the aggregate will not exceed $250,000.

The PFG Loan Agreements as amended through December 2013 and January 2014, contained financial covenants that required the Company to maintain a minimum liquidity ratio of 2.25 to 1.00 and a minimum trailing three month adjusted EBITDA, measured monthly of (1) a negative $300,000 for each fiscal month during the period July through October 2013; and (2) $1 for each fiscal month during the period November 2013 through February 2014.

As of December 27, 2013 and January 24, 2014, API was not in compliance with then existing adjusted minimum EBITDA covenant of $1 for the three months ended December 27, 2013 and January 24, 2014, respectively, and as of January 24, 2014, API was also not in compliance with the then existing minimum liquidity ratio of 2.25 to 1.00. In addition, the foregoing defaults triggered the cross-default provisions under each of the SVB Loan Agreements and the PFG Loan Agreement. Consequently, under the terms of each agreement, SVB and PFG were both entitled to proceed against the collateral provided as security for the loans issued thereunder upon an event of default subject, in PFG s case, to any rights that SVB may have in that same collateral.

On February 10, 2014, API entered into separate Forbearance Agreements with SVB and PFG pursuant to which and subject to certain exceptions, each of SVB and PFG agreed not to proceed against the collateral securing their respective loans until February 28, 2014. On March 5, 2014, the Company entered into separate amendment agreements with SVB and PFG where, among other things, the minimum trailing three month adjusted EBITDA covenant was reset to a negative $1.2 million for the fiscal month ended February 28, 2014, a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014 and a positive

$1 for the fiscal month ending May 31, 2014; the existing minimum liquidity ratio covenant was reset to

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1.30 to 1.00 as of February 28, 2014, and 2.25 to 1.00 for each month thereafter through May 2014; and each of SVB and PFG waived the existing defaults. In addition to the payment of an amendment fee, the Company agreed to pay each of SVB and PFG additional fees of up to $50,000 and $75,000, respectively, no later than May 31, 2014 (the Tail Fees).

On April 30, 2014, API entered into separate amendment agreements with SVB and PFG where, among other things the trailing minimum three month adjusted EBITDA covenant was reset to a negative $800,000 for the fiscal month ended March 31, 2014, a negative $600,000 for the fiscal month ended April 30, 2014, a negative $250,000 for the fiscal months ending May 31, 2014 and June 30, 2014 and a positive $1 for the fiscal month ending July 31, 2014; and the existing minimum liquidity ratio covenant was reset to 1.30 to 1.00 as of March 31, 2014 through May 31, 2014, and 2.00 to 1.00 for each month thereafter through July 2014. In addition to the payment of an amendment fee, the Company agreed to pay each of SVB and PFG their respective Tail Fee and, commencing with the month ended May 31, 2014, an additional fee of $15,000 and $20,000, respectively, for each month that the liquidity ratio is less than 2.00 to 1.00 as of the last day of the month under measurement.

On June 20, 2014, API signed separate amendments with SVB and PFG where, among other things, both parties agreed to a minimum six month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $850,000 through June 2014, negative $300,000 for July through September 2014, a positive $1 for October through December 2014 and $100,000 each month thereafter subject to reset upon the submission of the fiscal 2016 budget but no lower than $100,000 on a rolling six month basis, both parties agreed to adjust the minimum liquidity ratio, as defined, to be 1.30 to 1.00 for months ending prior to June 2014 and 2.00 to 1.00 for all months on or after June 2014 as measured at each month end. The agreements confirmed the obligation to pay the previously agreed Tail Fees of $50,000 and $75,000 to SVB and PFG respectively, associated attorney fees for the amendment, but waived the added fees for May of $15,000 for SVB and $20,000 for PFG.

On November 10, 2014, API signed separate amendments to the Loan Agreements with SVB and PFG where, among other things, (i) all parties agreed to a six month trailing adjusted EBITDA covenant, measured at each fiscal month end, of negative $800,000 through March of 2015, negative $300,000 for April through June of 2015, and $100,000 each month thereafter, (ii) all parties agreed to adjust the minimum liquidity ratio, as defined, to be 2.00 to 1.00 through February of 2015 with a reduction to 1.50 to 1.00 for each month thereafter, and (iii) all parties agreed to continue the existing interest rate matrix. The amendments provided for a reimbursement of legal expenses and a modification fee of $12,500 with an additional $12,500 payable if the Company s March 2015 quarterly adjusted EBITDA is less than one dollar.

As of December 26, 2014, the Company is in compliance with the revised liquidity and adjusted EBITDA covenants with PFG, which were substantially the same as with SVB as of that date. The Company experienced a $2.1 million dollar reduction in HSOR revenues in the third quarter relative to the second quarter which was more than forecasted in the November 2014 covenant reset. As a result, the Company obtained further covenant relief on February 5, 2015 from PFG by reducing the rolling six month adjusted EBITDA requirement for January through June 2015 to a negative $1,250,000, $1 of adjusted EBITDA required in July 2015 and $100,000 each month thereafter until maturity with up to $150,000 in transaction costs carved out of the calculation. The parties also agreed to reduce the minimum liquidity ratio to 1.30 to 1.00 for January 2015 until the maturity of the term loan. Pursuant to the amendment, the interest rate remained at 11.75% per annum on the term loan. The Company is required to pay a $10,000 bank fee plus associated legal costs for the amendment with an added $15,000 payable upon the maturity or payoff of the term loan. Should the Company experience a reduction in revenue or an increase in expenses from its most recent forecast which was the basis of the February 5, 2015 covenants, the loan would be callable creating a liquidity issue.

The Company determined the fair value of the warrant as of the issuance date to be $434,000. Pursuant to the accounting literature, a debt discount and a warrant liability were established as of the issuance date with the debt discount amortized over the life of the loan on an effective interest method. As of December 26, 2014, there was $112,000 in remaining unamortized debt discount offset against the PFG long term debt principal. See Note 6 to the Condensed Consolidated Financial Statements for additional information on the PFG warrants.

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Interest payments made to PFG during the three and nine month periods ended December 26, 2014 were $39,000 and $134,000, respectively. Interest payments made to PFG during the three and nine month periods ended December 27, 2013 were $60,000 and $198,000, respectively.

MEDC/MSF Loans

In fiscal years 2005 and 2006, we entered into two unsecured loan agreements that are currently held by the Michigan Economic Development Corporation (MEDC and such agreement the MEDC Loan Agreement) and a MEDC affiliate, the Michigan Strategic Fund (MSF and such agreement the MSF Loan Agreement) pursuant to which we borrowed an aggregate of amount of $2.2 million. As amended, payments on the approximately $654,000 in remaining principal outstanding in aggregate under the MEDC Loan Agreement and MSF Loan Agreement are deferred along with accrued interest at a rate of 6% per annum. Beginning on November 1, 2015 and for 11 months thereafter, the total principal and accrued interest are to be paid in monthly installments along with each month s earned interest at a 6% per annum rate.

Interest payments made to the MEDC/MSF were $22,000 and $25,000 during the 9 months ended December 26, 2014 and December 27, 2013, respectively. Interest payments made to the MEDC/MSF were $5,000 and $8,000 during both the three months ended December 26, 2014 and December 27, 2013, respectively.

Capital Leases

During fiscal 2014, the Company purchased $82,000 of equipment through several capital leases with monthly principal payments of $1,700 plus interest with some maturities extending to 2019. The leases are collateralized by the associated equipment.

Interest payments made to the lessors for the three and nine months ended December 26, 2014 were $1,000 and $3,000, respectively. Interest payments made to the lessors for the three and nine months ended December 27, 2013 were $1,000 and $3,000, respectively.

Prior to the closing of the Merger described in Note 1, and absent such a closing, the Company s near-term liquidity is dependent on its meeting its debt covenants, which management expects it to do based on current forecasts. However, if the Merger is not approved by stockholders or does not proceed to a timely closing and projected revenue increases do not occur as forecast, then the Company may need to seek additional funding sources to meet its obligations which would include the alternatives of raising more capital, restructuring existing debt, or exploring strategic options which could include the sale of a portion or all of the Company. There can be no assurances that additional capital, if needed, will be available to the Company or the terms under which capital would be available to the Company. If adequate financing is not available, or is not available on favorable terms, the Company s business, financial position and results of operations will be adversely affected.

Note 6. Stockholders Equity

Warrants

At December 26, 2014 and March 31, 2014, the Company had the following warrants outstanding and exercisable which could be exchanged into shares of Class A Common Stock:

	Shares (000 s)	Exercise Price
2010 Warrants	267	$ 1.242
PFG Warrants	995	$ 0.500
PFG Warrants	200	$ 1.000
Total	1,462	

On November 29, 2010, the Company issued 267,196 warrants to Robin Risser and Steve Williamson (the 2010 Warrants). Each 2010 Warrant is exercisable over a five year period for one share of the Company s Class A

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Common Stock at an exercise price subject to adjustment, based on a formula in the warrant agreements, if Common Stock is issued in the future below $1.404. Future adjustments cannot reduce the exercise price below $1.17. Given the issuance of the PFG Warrants in February 2013, a price reset was triggered to the 2010 Warrants and the new exercise price became $1.376. As a result of the exercise price reset feature, the fair values of the warrants are recorded as a liability with changes in values flowing through the Consolidated Statements of Operations.

As described in Note 5, during February 2013, the Company issued warrants to PFG to purchase 1,195,000 shares of the Company s Class A Common Stock. The PFG warrants are exercisable over a five year period with 995,000 shares at a strike price of $0.50 per share and another 200,000 shares with a strike price of $1.00 per share. The PFG warrant agreement contains a provision allowing the warrants to be put back to the Company under certain circumstances. Given this feature, the fair values of the warrants are recorded as a liability with changes in values flowing through the Consolidated Statements of Operations.

For the three and nine months ended December 26, 2014, the Company recorded income of $140,000 and $231,000, respectively for the change in fair value of the warrant liability. For the three and nine months ended December 27, 2013, the Company recorded expense of $124,000 and $213,000 respectively. The fair value of the warrant liability outstanding was approximately $178,000 and $409,000 as of December 26, 2014 and March 31, 2014, respectively.

The fair value of the warrant liability was estimated using the Monte Carlo option pricing model using the following assumptions:

	December 26, 2014		March 31, 2014	
	PFG Warrants	2010 Warrants	PFG Warrants	2010 Warrants
Contractual term in years	3.1	0.9	3.9	1.7
Volatility	67.4%	55.2%	65.6%	69.5%
Expected dividend				
Risk-free interest rate	1.21%	0.23%	1.25%	0.34%

Expected volatility is based primarily on historical volatility using the weekly stock price for the most recent period equivalent to the term of the warrants. A dividend yield of zero has been assumed based on the Company s actual past experience and the fact that the Company does not anticipate paying a dividend on its shares in the future. The Company has based its risk-free interest on the implied yield available on U.S. Treasury issues with equivalent contractual term.

When a warrant may have different share exercise assumptions such as those issued in February 2013 to PFG and affiliates, the Company weighs various values based on the estimated probability of each outcome as of the valuation date.

The following chart represents the activity in the Company s Level 3 warrants during the nine months ended December 26, 2014 and the year ended March 31, 2014.

	Nine months Ended December 26, 2014	Year Ended March 31, 2014
Level 3 Warrants, beginning of period	$ 409,000	$ 292,000

Change in fair value of warrant liability	(231,000)	117,000
Level 3 Warrants, end of period	**$ 178,000**	**$ 409,000**

MEDC Put Option

In May 2010, the Company entered into a debt conversion agreement with the MEDC whereby the MEDC converted the accrued and unpaid interest as of November 30, 2009 totaling $562,336 into 1,041,363 unregistered shares of our Class A Common Stock at a price per share of $0.54 (market value of the stock on the

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day of conversion). In addition, the Company granted MEDC a put option to sell back the shares received pursuant to the debt conversion agreement in the event of a trigger event as defined in the debt conversion agreement. Given the conditions under which the put may be exercised are in the control of the Company, a liability for the fair value has not been recorded.

Note 7. Earnings Per Share

The Company s net earnings per share calculations are in accordance with FASB ASC 260-10. Accordingly, basic earnings (loss) per share are computed by dividing net earnings (loss) by the weighted average number of shares outstanding for each period. The calculation of loss per share is as follows:

	Three months ended	
Basic and Diluted	**December 26, 2014**	**December 27, 2013**
Weighted Average Basic Shares Outstanding	37,381,000	31,243,000
Dilutive effect of Stock Options and Warrants		
Weighted Average Diluted Shares Outstanding	37,381,000	31,243,000
Net loss	$ (701,000)	$ (1,618,000)
Basic and Diluted loss per share	$ (0.02)	$ (0.05)

	Nine months ended	
Basic and Diluted	**December 26, 2014**	**December 27, 2013**
Weighted Average Basic Shares Outstanding	35,860,000	31,223,000
Dilutive effect of Stock Options and Warrants		
Weighted Average Diluted Shares Outstanding	35,860,000	31,223,000
Net loss	$ (1,337,000)	$ (3,121,000)
Basic and Diluted loss per share	$ (0.04)	$ (0.10)

The dilutive effect of stock options and warrants for each of the periods was not included in the calculation of diluted loss per share because to do so would have had an anti-dilutive effect as the Company had a net loss for the period.

Note 8. Fair Value of Financial Instruments

The carrying value of all financial instruments potentially subject to valuation risk (principally consisting of cash equivalents, accounts receivable, and accounts payable) approximates the fair value based upon the short-term nature of these instruments. In the case of MEDC/MSF, PFG, and bank debt, the carrying value approximates fair value based upon prevailing interest rates available to the Company for debt of similar nature and maturity.

Note 9. Restructuring

During the quarter ended December 27, 2013, the Company made the decision to begin outsourcing the manufacturing of silicon photodiodes that are used in the Optosolutions production line to lower cost areas that were using larger production wafers. This opportunity became apparent with the acquisition and integration of the net assets of Silonex and we expect to save from $400,000 to $600,000 per year when fully implemented. To prepare for the transition, an inventory level was built up and the fabrication assets idled during the quarter ended December 27, 2013. API undertook a review of the alternative uses of the equipment and determined that an accelerated depreciation charge of approximately $608,000 was necessary in the quarter to state the net book value of the idled assets at amounts that could be obtained if the equipment was sold to independent third party buyers. Employees affected by the shutdown of this manufacturing activity were provided severance of approximately $59,000 of which $44,000 was accrued in the current quarter and $15,000 in the quarter ended September 27, 2013. The total restructuring costs of $652,000 and $667,000 are reflected in the cost of goods sold section of the Statement of Operations for the three months and nine months ended December 27, 2013.

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UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

The following Unaudited Pro Forma Condensed Combined Financial Statements (the pro forma financial statements) give effect to the combination of Luna and API in a transaction to be accounted for under the acquisition method of accounting in accordance with Accounting Standards Codification 805, *Business Combinations*, with Luna as the identified acquirer. These pro forma financial statements have been derived from the historical financial statements of Luna and API included in this joint proxy statement/prospectus and are prepared in accordance with the rules and regulations of the Securities and Exchange Commission. The Unaudited Pro Forma Condensed Combined Statement of Operations (the pro forma statement of operations) for the year ended December 31, 2014 combines the historical consolidated statement of operations of Luna for the year ended December 31, 2014 and the historical consolidated statement of operations of API for the twelve months ended December 26, 2014, and gives pro forma effect to the Merger as if it had been completed on January 1, 2014. The Unaudited Pro Forma Condensed Combined Balance Sheet (the pro forma balance sheet) as of December 31, 2014 combines the historical consolidated balance sheets of Luna and API as of December 31, 2014 and December 26, 2014, respectively, and gives pro forma effect to the Merger as if it had been completed on December 31, 2014.

The historical consolidated financial data has been adjusted to give pro forma effect to events that are (i) directly attributable to the Merger, (ii) factually supportable and (iii) with respect to the statement of operations, expected to have a continuing impact on the combined results. Costs of severance expected to be paid to API s president and chief executive officer of approximately $647,000 are not included in the pro forma balance sheet due to the uncertainty of timing of the related payments. The pro forma adjustments are preliminary and based on management s estimates of the fair value and useful lives of the assets acquired and liabilities assumed and have been prepared to illustrate the estimated effect of the Merger and certain other adjustments.

Assumptions and estimates underlying the unaudited adjustments to the pro forma financial statements are described in the accompanying notes, which should be read in conjunction with the pro forma financial statements. Since the pro forma financial statements have been prepared based on preliminary estimates, the final amounts recorded at the date of closing of the Merger may differ materially from the information presented. These estimates are subject to change pending further review of the assets acquired and liabilities assumed and the final purchase price and its allocation thereof.

The pro forma financial statements have been presented for illustrative purposes only and are not necessarily indicative of the financial condition or results of operations of future periods or the financial condition or results of operations that actually would have been realized had the entities been combined during the period presented. The pro forma financial statements do not give effect to the potential impact of current financial conditions, regulatory matters or any anticipated synergies, operating efficiencies or cost savings that may be associated with the Merger. These financial statements also do not include any integration costs, dissynergies or estimated future transaction costs, except for fixed contractual transaction costs, that the companies may incur as a result of the Merger.

The pro forma financial statements should be read in connection with the historical financial statements and accompanying notes of Luna and API, beginning on pages F-2 and F-25, respectively, of this joint proxy statement/prospectus.

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UNAUDITED PRO FORMA CONDENSED COMBINED BALANCE SHEET

AS OF DECEMBER 31, 2014

(in thousands)

	Historical Luna	Historical API	Pro Forma Adjustments		Pro Forma Combined
Current assets:					
Cash and cash equivalents	$ 14,117	$ 110	$ (250)	c	$ 13,990
			13	d	
Accounts receivable, net	5,690	3,814			9,504
Inventory, net	3,364	4,987			8,351
Prepaid expenses and other current assets	715	725	(137)	d	1,303
Total current assets	23,886	9,636	(374)		33,148
Property and equipment, net	3,497	1,769			5,266
Identifiable intangible assets, net	199	2,678	8,738	f	11,615
Goodwill		4,579	(4,579)	g	
Other assets	2	160	(76)	d	86
Total assets	$ 27,584	$ 18,822	$ 3,709		$ 50,115
Current liabilities:					
Current portion of long term debt	$ 625	$ 2,459	$ (2,459)	d	$ 1,000
			375	d	
Current portion of capital lease obligations	71	8			79
Accounts payable	1,447	1,580			3,027
Accrued liabilities	5,536	1,729	2,943	e	10,208
Deferred revenue	861				861
Total current liabilities	8,540	5,776	859		15,175
Long term debt obligations		903	(903)	d	3,000
			3,000	d	
Long term capital lease obligations	39	29			68
Other long term liabilities		178	(163)	c	15
Total liabilities	8,579	6,886	2,793		18,258
Commitments and contingencies					
Stockholders equity					
Preferred stock	1				1
Common stock	15	37	(37)	a	27
			12	b	
Treasury stock	(32)				(32)
Additional paid-in capital	64,148	61,712	(61,712)	a	79,931

			15,783	b	
Accumulated deficit	(45,127)	(49,813)	49,813	a	(48,070)
			(2,943)	e	
Total stockholders equity	19,005	11,936	916		31,857
Total liabilities and stockholders equity	$ 27,584	$ 18,822	$ 3,709		$ 50,115

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UNAUDITED PRO FORMA CONDENSED COMBINED STATEMENT OF OPERATIONS

FOR THE YEAR ENDED DECEMBER 31, 2014

(in thousands, except per share data)

	Historical Luna	Historical API	Pro Forma Adjustments		Pro Forma Combined
Revenues					
Technology development	$ 12,206	$ 664	$		$ 12,870
Product & licensing	9,054	27,570			36,624
	21,260	28,234			49,494
Costs of revenues					
Technology development	9,376	505			9,881
Product & licensing	4,047	18,818			22,865
	13,423	19,323			32,746
Gross Profit	7,837	8,911			16,748
Operating expenses					
Research, development & engineering	10,254	3,599			13,853
Selling, general & administrative	2,088	7,488	(335)	h	9,710
			469	k	
	12,342	11,087	134		23,563
Operating loss	(4,505)	(2,176)	(134)		(6,815)
Interest expense	(96)	(600)	696	i	(186)
			(186)	i	
Other income	111	296	(327)	j	80
Loss from continuing operations before income taxes	(4,490)	(2,480)	49		(6,921)
Income tax benefit	1,137		(1,137)	l	
Loss from continuing operations net of income taxes	$ (3,353)	$ (2,480)	$ (1,088)		$ (6,921)
Loss per share from continuing operations, net of income taxes, basic and diluted	$ (0.23)				$ (0.26)
Weighted average shares outstanding	14,881		11,880	m	26,761

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NOTES TO UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL STATEMENTS

(Amounts in thousands except for per share data)

1. Description of the Merger

On January 30, 2015, Luna, API and API Merger Sub, Inc. entered into the Merger Agreement, pursuant to which API will merge with and into API Merger Sub, Inc., with API surviving as a wholly-owned subsidiary of Luna, on the terms and subject to the conditions set forth in the Merger Agreement. The Merger Agreement has been approved by the boards of directors of both Luna and API and is subject to approval of the stockholders of Luna and API. Subject to the terms and conditions set forth in the Merger Agreement, holders of outstanding shares of API common stock will receive 0.31782 (the exchange ratio) shares of Luna common stock in exchange for each share of API common stock they hold at the effective time of the Merger. All outstanding API stock options will be converted into options to purchase shares of Luna common stock on substantially the same terms and conditions, with appropriate adjustments based upon the exchange ratio to the exercise price and the number of shares of Luna common stock subject to such stock options. Each share of API restricted common stock will be converted using the exchange ratio at the Effective Time into Luna restricted common stock. Certain warrants to purchase shares of API common stock, exercisable for an aggregate of 1,150 shares of API common stock, are subject to put rights and may be exchanged at the option of the holders upon completion of the Merger for cash not to exceed $250. The pro forma financial statements assume this put right is exercised for $250 cash upon closing of the Merger. All remaining warrants to purchase API stock will be converted into warrants to purchase Luna common stock on substantially the same terms and conditions, with appropriate adjustments based upon the exchange ratio to the exercise price and the number of shares of Luna common stock subject to such warrants.

2. Basis of Pro Forma Presentation

The unaudited pro forma condensed combined financial statements have been derived from the historical consolidated financial statements of Luna and API. Certain financial information presented in the Historical API column in the unaudited pro forma condensed combined financial statements has been reclassified to conform to the historical presentation in Luna s financial statements.

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API s fiscal year ends on March 31 and its fiscal quarters end on the Saturday closest to the applicable calendar month end. In order to derive the unaudited condensed consolidated statement of operations for the twelve months ended December 26, 2014, Luna utilized API s historical statements of operations as follows:

Historical Statement of Operations

(in thousands, except per share data)

	(1)	(2)	(3)	(1)+(2)-(3)
	Fiscal Year Ended March 31, 2014	Nine Months Ended December 26, 2014	Nine Months Ended December 27, 2013	Twelve Months Ended December 26, 2014
Revenues				
Technology development	$ 1,381	$ 324	$ 1,041	$ 664
Product & licensing	27,660	20,933	21,023	27,570
Total revenue	29,041	21,257	22,064	28,234
Costs of revenues				
Technology development	1,037	321	853	505
Product & licensing	19,433	13,845	14,460	18,818
Total Costs of revenues	20,470	14,166	15,313	19,323
Gross profit	8,571	7,091	6,751	8,911
Operating expenses				
Research, development & engineering	3,938	2,698	3,037	3,599
Selling, general & administrative	8,073	5,512	6,097	7,488
Total operating expenses	12,011	8,210	9,134	11,087
Operating loss	(3,440)	(1,119)	(2,383)	(2,176)
Other income/(expense)				
Interest expense	(644)	(434)	(478)	(600)
Other income/(expense)	(180)	216	(260)	296
Total other income/ (expense)	(824)	(218)	(738)	(304)
Loss before income taxes	(4,264)	(1,337)	(3,121)	(2,480)
Income tax benefit				
Net loss	$ (4,264)	$ (1,337)	$ (3,121)	$ (2,480)
Net loss per share, basic and diluted	$ (0.14)	$ (0.04)	$ (0.10)	$ (0.07)

Weighted average shares outstanding	31,227	35,860	31,223	35,838

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3. Estimate of Merger Consideration and Merger Consideration Allocation

Each share of API s common stock outstanding immediately prior to the closing of the Merger will be exchanged for 0.31782 shares of Luna common stock in the Merger. The total value of Merger consideration is subject to change based on changes in the market price of Luna common stock prior to closing of the Merger and based on changes in the number of shares of API common stock, options or warrants outstanding at the time of closing. The preliminary purchase price for the Merger is as follows:

API Shares Outstanding as of December 26, 2014	37,381
Exchange Ratio	0.31782
Shares of Luna Common Stock to be issued in the Merger	11,880
Luna Common Stock Share Price on March 13, 2015	$ 1.31*
Value of Luna Shares to be Issued in the Merger	15,563
Cash payment for API warrants to be put upon the closing of the Merger	250
Value of vested Luna options issued in exchange for vested API options	217
Value of Luna warrants issued in exchange for API warrants	15
Total Merger Consideration	$ 16,045

* A change of five percent in the stock price of Luna would result in a change of $778 to Merger consideration.

The Merger is reflected in the unaudited pro forma condensed combined financial statements in accordance with Accounting Standards Codification 805, *Business Combinations*, using the acquisition method of accounting with Luna as the identified acquirer. Under these accounting standards, the total preliminary purchase price is calculated as described above and allocated as described below. The assets acquired and liabilities assumed have been measured at their estimated fair values. The fair value measurements utilize estimates based on key assumptions of the Merger, including historical and current market data. The unaudited pro forma adjustments included herein are preliminary and will be revised following the completion of the Merger as additional information becomes available and as additional analyses are performed. The final purchase price allocation will be determined as of the time the Merger is completed, and the final amounts recorded for the Merger may differ materially from the information presented herein.

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Under the acquisition method of accounting, the total estimated acquisition consideration is allocated to the acquired tangible and intangible assets and assumed liabilities of API based on their estimated fair values as of the acquisition date. Any excess of the fair value of assets acquired and liabilities assumed over the fair value of the acquisition consideration is recognized as a gain by the acquirer. For the purposes of the unaudited pro forma condensed combined financial statements, the preliminary allocation of the purchase price for the Merger is estimated as follows:

Cash	$ 110
Accounts receivable	3,814
Inventory	4,987
Other current assets	588
Property, plant & equipment	1,769
Intangible assets	11,416
Other assets	84
Accounts payable	(1,580)
Accrued compensation	(790)
Other accrued expenses	(939)
Debt	(3,362)
Other liabilities	(52)
Total purchase price	$ 16,045

4. Long Term Debt

In conjunction with the Merger, Luna intends to refinance all of the then outstanding long term debt balances of Luna and API into a new single credit facility. Luna has received a commitment from Silicon Valley Bank for a term debt note in an original principal amount up to $6,000 with a floating interest rate of prime +2% per annum and monthly payments equal to 1/48th of the original principal balance plus accrued interest. The unaudited pro forma condensed combined financial statements assume the execution of this new debt facility in the amount of $4,000, based on the current aggregate outstanding debt of Luna and API, with an interest rate of 5.25% per annum, based on the current prime rate of 3.25%.

5. Pro Forma Adjustments

(Unaudited Pro Forma Condensed Combined Balance Sheet)

a. Reflects an adjustment to remove the historical equity balances of API.

b. Reflects the issuance of 11,880 shares of $0.001 par value Luna common stock as Merger consideration, as described in the Basis of Pro Forma Presentation note above.

c. Reflects the exercise of the put right on warrants to purchase an aggregate of 1,150 shares in exchange for cash payment of $250. The adjustment of the value of warrants to their assumed fair value as of the Merger

and the payment of $250 to satisfy the put right are included in the determination of the fair value of the Merger consideration.

d. Reflects the refinancing of the debt obligations of Luna and API with a new $4,000 facility as described in the Long Term Debt note above of December 31, 2014 and the elimination of unamortized debt issuance costs associated with API s current debt facilities. Based upon the value of API and Luna debt balances at December 31, 2014, the $4,000 would have been $13 in excess of outstanding debt, which is reflected as an increase in cash in the pro forma balance sheet.

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e. Reflects the recognition of $2,943 of Merger-related expenses associated with completion of the Merger. Luna estimates that its costs for this transaction will be approximately $2,093. API estimates that it will incur transaction expenses of approximately $850. Transaction expenses include fees for investment banking services, legal, accounting, tax, valuation, printing and other various services necessary to complete the transaction.

f. Reflects an adjustment to eliminate historical intangible assets recorded by API. Further, the preliminary estimated fair value of identified intangible assets, which consist primarily of customer lists and technology assets, is being recorded. The estimated fair value of the identifiable intangible assets is based on a preliminary purchase price allocation prepared by management with the assistance of a third party valuation expert. Such valuation is primarily based on an income-based model. The preliminary assessment of the estimated weighted average useful life for such assets is 9 years.

g. Reflects the elimination of historical goodwill recorded by API.

(Unaudited Pro Forma Condensed Combined Statement of Operations)

h. Reflects the elimination of non-recurring Merger-related transaction costs that have been recorded in Luna s and API s historical results of operations for the year ended December 31, 2014. Such costs included primarily fees paid to investment bankers, attorneys, and other consultants engaged by Luna and API to assist in the evaluation of strategic alternatives and negotiation of the Merger.

i. Reflects an adjustment to interest expense based upon refinancing of the existing debt facilities as described in the Long Term Debt note above and the scheduled amortization of that facility. A fluctuation of 1/8% in the interest rate would change the interest expense recognized by $4 for the year ended December 31, 2014.

j. Reflects the elimination of the periodic valuation adjustment for API warrants that are assumed to be retired at the closing of the Merger upon the exercise of the put right, as described in footnote 5.c. above.

k. Reflects the incremental amortization expense based on the preliminary fair values of the intangible assets acquired.

	Fair Value	Useful Life	2014 Annual Amortization
Identifiable intangibles	$ 11,416	9 years	$ 1,268
Historical amortization			799
Pro forma adjustment			$ 469

l. Reflects an adjustment to eliminate the income tax benefit on results from continuing operations recorded by Luna as the benefit to continuing operations resulting from an intra-period allocation of a taxable gain in discontinued operations, which are not assumed to have a continuing impact.

m. Reflects the issuance of 11,880 shares of Luna common stock as Merger consideration, as described in the Basis of Pro Forma Presentation note above.

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ANNEX A

AGREEMENT AND PLAN OF MERGER AND REORGANIZATION

among:

LUNA INNOVATIONS INCORPORATED,

a Delaware corporation;

API MERGER SUB, INC.,

a Delaware corporation; and

ADVANCED PHOTONIX, INC.,

a Delaware corporation

Dated as of January 30, 2015

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AGREEMENT AND PLAN OF MERGER AND REORGANIZATION

THIS AGREEMENT AND PLAN OF MERGER AND REORGANIZATION (**Agreement**) is made and entered into as of January 30, 2015, by and among **LUNA INNOVATIONS INCORPORATED**, a Delaware corporation (**Parent**); **API MERGER SUB, INC.**, a Delaware corporation and a wholly owned subsidiary of Parent (**Merger Sub**); and **ADVANCED PHOTONIX, INC.**, a Delaware corporation (the **Company**). Certain capitalized terms used in this Agreement are defined in **Exhibit A**.

RECITALS

A. Parent, Merger Sub and the Company intend to engage in a strategic business combination to advance their long-term strategies to be effected by a merger of Merger Sub into the Company in accordance with this Agreement and the DGCL (the **Merger**). Upon consummation of the Merger, Merger Sub will cease to exist, and the Company will become a wholly owned subsidiary of Parent.

B. It is intended that the Merger qualify as a reorganization within the meaning of Section 368(a) of the Code and that this Agreement qualifies as a plan of reorganization within the meaning of Sections 1.368-2(g) and 1.368-3(a) of the United States Treasury Regulations.

C. The respective boards of directors of Parent, Merger Sub and the Company have approved, adopted and declared advisable this Agreement and the Merger.

D. In order to induce Parent to enter into this Agreement and cause the Merger to be consummated, the directors and executive officers of the Company are executing voting agreements in favor of Parent concurrently with the execution of this Agreement (the **Company Stockholder Voting Agreements**).

E. In order to induce the Company to enter into this Agreement and consummate the Merger, the directors and executive officers of Parent are executing voting agreements in favor of the Company concurrently with the execution of this Agreement (the **Parent Stockholder Voting Agreements**).

AGREEMENT

The parties to this Agreement, intending to be legally bound, agree as follows:

Section 1. DESCRIPTION OF TRANSACTION

1.1 Merger of Merger Sub into the Company. Upon the terms and subject to the conditions set forth in this Agreement, at the Effective Time, Merger Sub shall be merged with and into the Company. By virtue of the Merger, at the Effective Time, the separate existence of Merger Sub shall cease and the Company shall continue as the surviving corporation in the Merger (the **Surviving Corporation**).

1.2 Effects of the Merger. The Merger shall have the effects set forth in this Agreement and in the applicable provisions of the DGCL.

1.3 Closing; Effective Time. The consummation of the Merger (the **Closing**) shall take place at the offices of Cooley LLP, 500 Boylston Street, Boston, Massachusetts, on a date to be designated jointly by Parent and the Company, which shall be no later than the second business day after the satisfaction or waiver of the last to be satisfied or waived of the conditions set forth in Sections 6 and 7 (other than the conditions that by their nature are to be satisfied at the Closing,

but subject to the satisfaction or waiver of each of such conditions). The date on which the Closing actually takes place is referred to as the **Closing Date**. Subject to the provisions of

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this Agreement, a certificate of merger satisfying the applicable requirements of the DGCL shall be duly executed by the Company and concurrently with or as soon as practicable following the Closing shall be filed with the Secretary of State of the State of Delaware. The Merger shall become effective at the time of the filing of such certificate of merger with the Secretary of State of the State of Delaware or at such later time as may be designated jointly by Parent and the Company and specified in such certificate of merger (the time as of which the Merger becomes effective being referred to as the **Effective Time**).

1.4 Certificate of Incorporation and Bylaws; Directors and Officers.

(a) The Certificate of Incorporation of the Surviving Corporation shall be amended and restated at the Effective Time to read as set forth on **Exhibit B**;

(b) The Bylaws of the Surviving Corporation shall be amended and restated at the Effective Time to read as set forth on **Exhibit C**; and

(c) The directors and officers of the Surviving Corporation immediately after the Effective Time shall be as mutually agreed between the Company and Parent prior to the Effective Time.

1.5 Conversion of Shares.

(a) Subject to the terms and conditions of this Agreement, at the Effective Time, by virtue of the Merger and without any further action on the part of Parent, Merger Sub, the Company or any stockholder of the Company:

(i) any shares of Company Common Stock owned by any wholly owned Subsidiary of the Company immediately prior to the Effective Time (or held in the Company s treasury) shall be canceled and retired and shall cease to exist, and no consideration shall be delivered in exchange therefor;

(ii) any shares of Company Common Stock owned by Parent, Merger Sub or any other wholly owned Subsidiary of Parent immediately prior to the Effective Time shall be canceled and retired and shall cease to exist, and no consideration shall be delivered in exchange therefor;

(iii) except as provided in clauses (i) and (ii) above and subject to Sections 1.5(c), 1.5(d) and 1.5(e), each share of Company Common Stock outstanding immediately prior to the Effective Time shall be converted into the right to receive 0.31782 of a share of Parent Common Stock (such number as may be adjusted in accordance with Section 1.5(b), the **Exchange Ratio**); and

(iv) each share of the Common Stock, $0.001 par value per share, of Merger Sub outstanding immediately prior to the Effective Time shall be converted into one share of common stock of the Surviving Corporation.

(b) If, during the period from the date of this Agreement through the Effective Time, the outstanding shares of Company Common Stock or Parent Common Stock are changed into a different number or class of shares by reason of any stock split, division or subdivision of shares, stock dividend, reverse stock split, combination of shares, reclassification, recapitalization or other similar transaction, or if a stock dividend is declared by the Company or Parent during such period, then the Exchange Ratio shall be adjusted to the extent appropriate to provide the same economic effect as contemplated by this Agreement prior to such action.

(c) If any shares of Company Common Stock outstanding immediately prior to the Effective Time are unvested or are subject to a repurchase option, risk of forfeiture or other condition under any applicable restricted stock purchase

agreement or other Contract with the Company or under which the Company has any rights, then (except to the extent provided in any binding agreement between the Company and the holder thereof): (i) the shares of Parent Common Stock issued in exchange for such shares of Company Common Stock will also be unvested and subject to the same repurchase option, risk of forfeiture or other condition; and (ii) the

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certificates representing such shares of Parent Common Stock may accordingly be marked with appropriate legends. Prior to the Effective Time, the Company shall use commercially reasonable efforts to ensure that, from and after the Effective Time, Parent or the Surviving Corporation is entitled to exercise any such repurchase option or other right set forth in any such restricted stock purchase agreement or other Contract.

(d) All warrants to acquire Company Common Stock or Company Preferred Stock outstanding immediately prior to the Effective Time (**Company Warrants**) will, by virtue of this Agreement and without any action on the part of any holder of a Company Warrant, be assumed or substituted by the Parent in accordance with the terms of such Company Warrants, unless provided on Schedule 1.5(d), and will therefore become a warrant to purchase the number of shares of Parent Common Stock, with appropriate adjustments made to the exercise price, number of shares and other terms of the options to reflect this Merger and the Exchange Ratio.

(e) No fractional shares of Parent Common Stock shall be issued in connection with the Merger, and no certificates or scrip for any such fractional shares shall be issued. Any holder of Company Common Stock who would otherwise be entitled to receive a fraction of a share of Parent Common Stock (after aggregating all fractional shares of Parent Common Stock issuable to such holder) shall, in lieu of such fraction of a share and upon surrender of such holder s Company Stock Certificate(s) (as defined below), or non-certificated shares of Company Common Stock represented by book entry (**Book Entry Shares**), be paid in cash the dollar amount (rounded to the nearest whole cent), without interest, determined by multiplying such fraction by the closing price of a share of Parent Common Stock on the NASDAQ Capital Market on the last business day prior to the date on which the Merger becomes effective.

1.6 Closing of the Company s Transfer Books. At the Effective Time: (a) all shares of Company Common Stock outstanding immediately prior to the Effective Time shall automatically be canceled and retired and shall cease to exist, and all holders of Book Entry Shares or of certificates representing shares of Company Common Stock that were outstanding immediately prior to the Effective Time (each, a **Company Stock Certificate**) shall cease to have any rights as stockholders of the Company, except the right to receive shares of Parent Common Stock as contemplated by Section 1.5, cash in lieu of any fractional share of Parent Common Stock pursuant to Section 1.5(e) and any dividends or other distributions pursuant to Section 1.7(c); and (b) the stock transfer books of the Company shall be closed with respect to all shares of Company Common Stock outstanding immediately prior to the Effective Time. No further transfer of any such shares of Company Common Stock shall be made on such stock transfer books after the Effective Time. If, after the Effective Time, a valid Company Stock Certificate or a Book Entry Share is presented to the Exchange Agent or to the Surviving Corporation or Parent, such Company Stock Certificate or Book Entry Share shall be canceled and shall be exchanged as provided in Section 1.7.

1.7 Exchange of Certificates.

(a) Prior to the Closing Date, Parent shall select a reputable bank or trust company reasonably satisfactory to the Company to act as exchange agent in the Merger (the **Exchange Agent**). Prior to the Effective Time, Parent shall issue and cause to be deposited with the Exchange Agent: (i) non-certificated shares of Parent Common Stock represented by book entry issuable pursuant to Section 1.5; and (ii) cash sufficient to make payments in lieu of fractional shares in accordance with Section 1.5(e). The shares of Parent Common Stock and cash amounts so deposited with the Exchange Agent, together with any dividends or distributions received by the Exchange Agent with respect to such shares of Parent Common Stock, are referred to collectively as the **Exchange Fund**.

(b) Promptly after the Effective Time, the Exchange Agent will mail to the Persons who were record holders of Company Stock Certificates or Book Entry Shares immediately prior to the Effective Time: (i) a letter of transmittal in customary form and containing such provisions as Parent may reasonably specify and the Company shall reasonably approve prior to the Effective Time (including a provision confirming that

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delivery of Company Stock Certificates or Book Entry Shares shall be effected, and risk of loss and title to Company Stock Certificates or Book Entry Shares shall pass, only upon delivery of such Company Stock Certificates or Book Entry Shares to the Exchange Agent); and (ii) instructions for use in effecting the surrender of Company Stock Certificates or Book Entry Shares in exchange for non-certificated shares of Parent Common Stock in book entry form. Upon surrender of a Company Stock Certificate or Book Entry Shares to the Exchange Agent for exchange, together with a duly executed letter of transmittal and such other documents as may be reasonably required by the Exchange Agent or Parent: (A) the holder of such Company Stock Certificate or Book Entry Shares shall be entitled to receive, and the Exchange Agent shall (and Parent shall cause the Exchange Agent to) in exchange therefor transfer from the Exchange Fund to such holder the number of whole shares of Parent Common Stock that such holder has the right to receive pursuant to the provisions of Section 1.5 (and cash in lieu of any fractional share of Parent Common Stock pursuant to Section 1.5(e) and any dividends or other distributions pursuant to Section 1.7(c)); and (B) the Company Stock Certificate or Book Entry Shares so surrendered shall be canceled. Until surrendered as contemplated by this Section 1.7(b), each Company Stock Certificate and Book Entry Share shall be deemed, from and after the Effective Time, to represent only the right to receive shares of Parent Common Stock (and cash in lieu of any fractional share of Parent Common Stock) as contemplated by Section 1.5 and any dividends or other distributions pursuant to Section 1.7(c). If any Company Stock Certificate shall have been lost, stolen or destroyed, Parent may, in its discretion and as a condition to the issuance of any non-certificated shares of Parent Common Stock in book entry form, require the owner of such lost, stolen or destroyed Company Stock Certificate to post a bond, in such reasonable and customary amount as Parent may direct, as indemnity against any claim that may be made against Exchange Agent, Parent or the Surviving Corporation with respect to such Company Stock Certificate.

(c) No dividends or other distributions declared or made with respect to Parent Common Stock with a record date after the Effective Time shall be paid or otherwise delivered to the holder of any unsurrendered Company Stock Certificate or Book Entry Share with respect to the shares of Parent Common Stock that such holder has the right to receive in the Merger until such holder surrenders such Company Stock Certificate or Book Entry Share in accordance with this Section 1.7 (at which time such holder shall be entitled, subject to the effect of applicable abandoned property, escheat or similar laws, to receive all such dividends and distributions, without interest).

(d) Any portion of the Exchange Fund that remains undistributed to holders of Company Stock Certificates and Book Entry Shares as of the date that is one year after the date on which the Merger becomes effective shall be delivered to Parent upon demand, and any holders of Company Stock Certificates or Book Entry Shares who have not theretofore surrendered their Company Stock Certificates or Book Entry Shares in accordance with this Section 1.7 shall thereafter look only to Parent for satisfaction of their claims for Parent Common Stock, cash in lieu of fractional shares of Parent Common Stock and any dividends or distributions with respect to shares of Parent Common Stock.

(e) Each of the Exchange Agent, Parent and the Surviving Corporation shall be entitled to deduct and withhold from any consideration payable or otherwise deliverable pursuant to this Agreement to any holder or former holder of Company Common Stock such amounts as may be required to be deducted or withheld from such consideration under the Code or any provision of state, local or foreign tax law or under any other applicable Legal Requirement. To the extent such amounts are so deducted or withheld and paid to the appropriate Governmental Body, such amounts shall be treated for all purposes under this Agreement as having been paid to the Person to whom such amounts would otherwise have been paid.

(f) Neither Parent nor the Surviving Corporation shall be liable to any holder or former holder of Company Common Stock or to any other Person with respect to any shares of Parent Common Stock (or dividends or distributions with respect thereto), or for any cash amounts, required to be delivered to any public official pursuant to any applicable abandoned property law, escheat law or other Legal Requirement.

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1.8 Tax Consequences. For U.S. federal income tax purposes, the Merger is intended to constitute a reorganization within the meaning of Section 368(a) of the Code. The parties to this Agreement adopt this Agreement as a plan of reorganization within the meaning of Sections 1.368-2(g) and 1.368-3(a) of the United States Treasury Regulations.

1.9 Further Action. If, at any time after the Effective Time, any further action is determined by Parent or the Surviving Corporation to be necessary or desirable to carry out the purposes of this Agreement or to vest the Surviving Corporation with full right, title and possession of and to all rights and property of Merger Sub and the Company, the officers and directors of the Surviving Corporation and Parent shall be fully authorized (in the name of Merger Sub, in the name of the Company and otherwise) to take such action.

Section 2. Representations and Warranties of the Company

The Company represents and warrants to Parent and Merger Sub as follows (it being understood that each representation and warranty contained in this Section 2 is subject to: (a) the exceptions and disclosures set forth in the part or subpart of the Company Disclosure Schedule corresponding to the particular Section or subsection in this Section 2 in which such representation and warranty appears; and (b) any exception or disclosure set forth in any other part or subpart of the Company Disclosure Schedule to the extent it is reasonably obvious that such exception or disclosure would qualify such representation and warranty; and (c) any information set forth in the Company SEC Documents filed on the SEC s EDGAR database and publicly available for at least 10 business days prior to the date of this Agreement, other than information set forth therein under the headings Risk Factors or Forward-Looking Statements and any other information set forth therein that is predictive or forward-looking in nature):

2.1 Subsidiaries; Due Organization; Etc.

(a) Part 2.1(a) of the Company Disclosure Schedule identifies each Subsidiary of the Company and indicates its jurisdiction of organization. Neither the Company nor any of Company s Subsidiaries owns any capital stock of, or any equity interest of any nature in, any other Entity, other than the Company s Subsidiaries. No API Corporation has agreed or is obligated to make, or is bound by any Contract under which it may become obligated to make, any future investment in or capital contribution to any other Entity.

(b) Each of the API Corporations is a corporation or other business organization duly organized, validly existing and in good standing (to the extent that the laws of the jurisdiction of its formation recognize the concept of good standing) under the laws of the jurisdiction of its incorporation and has all necessary organizational power and authority: (i) to conduct its business in the manner in which its business is currently being conducted; (ii) to own and use its assets in the manner in which its assets are currently owned and used; and (iii) to perform its obligations under all Contracts by which it is bound.

(c) Each of the API Corporations is qualified to do business as a foreign corporation, and is in good standing, under the laws of all jurisdictions where the nature of its business requires such qualification, except for jurisdictions in which the failure to be so qualified or in good standing, individually or in the aggregate, would not have a Company Material Adverse Effect.

2.2 Certificate of Incorporation and Bylaws. The Company has delivered or Made Available to Parent accurate and complete copies of the certificate of incorporation, bylaws, memorandum of association and articles of association or equivalent governing documents of each of the API Corporations, including all amendments thereto.

2.3 Authority; Binding Nature of Agreement. Assuming the representations set forth in the last sentence of Section 3.23 are true: the Company has the corporate right, power and authority to enter into and perform its

obligations under this Agreement and, subject to obtaining the Required Company Stockholder Vote,

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consummate the transactions contemplated hereby. The Company Board (at a meeting duly called and held) has: (a) determined that this Agreement and the Merger are advisable and fair to, and in the best interests of, the Company and its stockholders; (b) authorized and approved the execution, delivery and performance of this Agreement by the Company and approved the Merger; and (c) recommended the adoption of this Agreement by the holders of Company Common Stock and directed that this Agreement and the Merger be submitted for consideration by the Company s stockholders at the Company Stockholders Meeting. Assuming the due authorization, execution and delivery of this Agreement by Parent and Merger Sub, this Agreement constitutes the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to: (i) laws of general application relating to bankruptcy, insolvency, the relief of debtors and creditors rights generally; and (ii) rules of law governing specific performance, injunctive relief and other equitable remedies.

2.4 Non-Contravention; Consents. Assuming compliance with the applicable provisions of the DGCL and the listing requirements of the New York Stock Exchange MKT, except as set forth in Part 2.4 of the Company Disclosure Schedule, neither (1) the execution, delivery or performance of this Agreement, nor (2) the consummation of the Merger or any of the other Contemplated Transactions, will, directly or indirectly (with or without notice or lapse of time):

(a) contravene, conflict with or result in a violation of: (i) any of the provisions of the certificate of incorporation, bylaws or other charter or organizational documents of any of the API Corporations; or (ii) any resolution adopted by the stockholders, the board of directors or any committee of the board of directors of any of the API Corporations;

(b) contravene, conflict with or result in a violation of, any Legal Requirement or any Order to which any of the API Corporations, or any of the assets owned or used by any of the API Corporations, is subject;

(c) contravene, conflict with or result in a violation of any of the terms or requirements of, or give any Governmental Body the right to revoke, withdraw, suspend, cancel, terminate or modify, any Governmental Authorization that is held by any of the API Corporations or that otherwise relates to the business of any of the API Corporations or to any of the assets owned or used by any of the API Corporations;

(d) contravene, conflict with or result in a violation or breach of, or result in a default under, any provision of any Company Material Contract, or give any Person the right to: (i) declare a default or exercise any remedy under any such Company Material Contract; (ii) accelerate the maturity or performance of any such Company Material Contract; or (iii) cancel, terminate or modify any right, benefit, obligation or other term of such Company Material Contract; or

(e) result in the imposition or creation of any Encumbrance upon or with respect to any asset owned or used by any of the API Corporations (except for minor liens that will not, in any case or in the aggregate, materially detract from the value of the assets subject thereto or materially impair the operations of any of the API Corporations); or

(f) constitute the occurrence of an event listed in MCL 125.2088(c)(4) for which grants or loans shall not be used.

Except as may be required by the Securities Act, the Exchange Act, the DGCL and the listing requirements of the New York Stock Exchange MKT, none of the API Corporations is or will be required to make any filing with or give any notice to, or to obtain any Consent from, any Governmental Body in connection with: (x) the execution, delivery or performance of this Agreement; or (y) the consummation of the Merger or any of the other Contemplated Transactions, except where the failure to make any such filing or give any such notice or to obtain any such Consent would not, individually or in the aggregate, be material to the API Corporations.

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2.5 Capitalization, Etc.

(a) The authorized capital stock of the Company consists of: (i) 100,000,000 shares of Company Common Stock, $0.001 par value per share, of which 37,381,413 shares are outstanding as of the date of this Agreement; and (ii) 10,000,000 shares of Company Preferred Stock, of which 780,000 have been designated as Class A Redeemable Convertible Preferred Stock, $0.001 par value per share, of which no shares of Company Preferred Stock or Class A Redeemable Convertible Preferred Stock are outstanding. All of the outstanding shares of Company Common Stock have been duly authorized and validly issued, and are fully paid and nonassessable. None of the API Corporations (other than the Company) holds any shares of Company Common Stock or any rights to acquire shares of Company Common Stock.

(b) Except as set forth in Part 2.5(b) of the Company Disclosure Schedule: (i) none of the outstanding shares of Company Common Stock is entitled or subject to any preemptive right, right of repurchase or forfeiture (other than the Company Restricted Stock), right of participation, right of maintenance or any similar right; (ii) none of the outstanding shares of Company Common Stock is subject to any right of first refusal in favor of the Company; and (iii) there is no Company Contract relating to the voting or registration of, or restricting any Person from purchasing, selling, pledging or otherwise disposing of (or from granting any option or similar right with respect to), any shares of Company Common Stock. None of the API Corporations is under any obligation, or is bound by any Contract pursuant to which it may become obligated, to repurchase, redeem or otherwise acquire any outstanding shares of Company Common Stock or other securities, except for the Company s right to repurchase or reacquire shares of Company Restricted Stock held by an employee of the Company upon termination of such employee s employment or upon any other forfeiture of a vesting condition.

(c) As of the date of this Agreement: (i) 1,939,235 shares of Company Common Stock are subject to issuance pursuant to Company Options; (ii) 43,280 shares of Company Restricted Stock are subject to vesting after the date of this Agreement; and (iii) 266,095 shares of Company Common Stock are reserved for future issuance pursuant to equity awards not yet granted under the Company Option Plans.

(d) The Company has delivered or Made Available to Parent a complete and accurate list that sets forth with respect to each Company Equity Award outstanding as of the date of this Agreement the following information: (i) the particular plan (if any) pursuant to which such Company Equity Award was granted; (ii) the name of the holder of such Company Equity Award; (iii) the type of Company Equity Award (whether a Company Option, Company Restricted Stock, or another type of Company Equity Award); (iv) the number of shares of Company Common Stock subject to such Company Equity Award; (v) the per share exercise price (if any) of such Company Equity Award; (vi) the applicable vesting schedule, and the extent to which such Company Equity Award is vested and exercisable, if applicable; (vii) the date on which such Company Equity Award was granted; (viii) the date on which such Company Equity Award expires (if applicable); (ix) if such Company Equity Award is a Company Option, whether such Company Option is an incentive stock option (as defined in the Code) or a non-qualified stock option; and (x) if such Company Equity Award is in the form of Company Restricted Stock, the dates on which shares of Company Common Stock with respect to such Company Restricted Stock, are scheduled to vest. The Company has delivered or Made Available to Parent accurate and complete copies of all equity plans pursuant to which any outstanding Company Equity Awards were granted by the Company, and the forms of all agreements evidencing such Company Equity Awards. The exercise price of each Company Option is not less than the fair market value of a share of Company Common Stock as determined on the date of grant of such Company Option. All grants of Company Equity Awards were recorded on the Company s financial statements (including any related notes thereto) contained in the Company SEC Documents in accordance with GAAP, and no such grants involved any back dating or similar practices with respect to the effective date of grant (whether intentional or otherwise). There are no outstanding or authorized stock appreciation, phantom stock, profit participation or similar rights or similar equity-based awards with respect to any of

the API Corporations.

(e) Except as set forth in Sections 2.5(a), 2.5(c) and 2.5(d), or as permitted from and after the date of this Agreement pursuant to Section 4.2, there is no: (i) outstanding subscription, option, call, warrant or right

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(whether or not currently exercisable) to acquire any shares of the capital stock or other securities of any of the API Corporations; (ii) outstanding security, instrument or obligation that is or may become convertible into or exchangeable for any shares of the capital stock or other securities of any of the API Corporations or that has the right to vote on any matter on which the stockholders of the Company have the right to vote; (iii) Contract under which any of the API Corporations is or may become obligated to sell or otherwise issue any shares of its capital stock or any other securities; or (iv) condition or circumstance that would reasonably be expected to give rise to or provide a basis for the assertion of a claim by any Person to the effect that such Person is entitled to acquire or receive any shares of capital stock or other securities of any of the API Corporations. All outstanding warrants or similar rights to acquire any shares of the capital stock or other securities of any of the API Corporation allow for assumption by Parent as set forth in Section 1.5(d) of this Agreement in accordance with their terms.

(f) All outstanding shares of Company Common Stock, and all options and other Company Equity Awards and other securities of the API Corporations, have been issued and granted in compliance in all material respects with: (i) all applicable securities laws and other applicable Legal Requirements; and (ii) all requirements set forth in applicable Contracts.

(g) All of the outstanding shares of capital stock of each of the Company s Subsidiaries have been duly authorized and validly issued, are fully paid and nonassessable and free of preemptive rights, with no personal liability attaching to the ownership thereof, and are owned beneficially and of record by the Company, free and clear of any Encumbrances, other than restrictions under applicable securities laws.

2.6 SEC Filings; Financial Statements.

(a) The Company has delivered or Made Available (or made available on the SEC website) to Parent accurate and complete copies of all registration statements, proxy statements, Company Certifications and other statements, reports, schedules, forms and other documents filed by the Company with the SEC, including all amendments thereto, since January 1, 2014 (collectively, the **Company SEC Documents**). All statements, reports, schedules, forms and other documents required to have been filed by the Company or to the best of the knowledge of the Company, its officers with the SEC since January 1, 2014 have been so filed on a timely basis. None of the Company s Subsidiaries is required to file any documents with the SEC. As of the time it was filed with the SEC (or, if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing): (i) each of the Company SEC Documents complied as to form in all material respects with the applicable requirements of the Securities Act or the Exchange Act (as the case may be); and (ii) none of the Company SEC Documents contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Each of the certifications and statements relating to the Company SEC Documents required by: (A) Rule 13a-14 or Rule 15d-14 under the Exchange Act; (B) 18 U.S.C. §1350 (Section 906 of the Sarbanes-Oxley Act); or (C) any other rule or regulation promulgated by the SEC or applicable to the Company SEC Documents (collectively, the **Company Certifications**) is accurate and complete, and complies as to form in all material respects with all applicable Legal Requirements. As used in the introduction to this Section 2 and in this Section 2.6, the term **file** and variations thereof shall be broadly construed to include any manner in which a document or information is filed, furnished, submitted, supplied or otherwise made available to the SEC or any member of its staff.

(b) The Company maintains disclosure controls and procedures required by Rule 13a-15 or 15d-15 under the Exchange Act. Such disclosure controls and procedures are designed to ensure that all material information concerning the API Corporations required to be disclosed by the Company in the reports that it is required to file