



## Edgar Filing: BP PLC - Form 6-K

change and enhancing the recovery and utilization of known world energy resources.

The planned project - producing 'decarbonised' fuel and using it for power generation - would convert natural gas to hydrogen and carbon dioxide gases, then use the hydrogen gas as fuel for a 350MW power station, and export the carbon dioxide to a North Sea oil reservoir for increased oil recovery and ultimate storage. The project would reduce the amount of carbon dioxide emitted to the atmosphere by the power generation by over 90 per cent. While each of the component technologies making up the project is already proven, their proposed combination in this project is a world first.

Initial engineering feasibility studies into the project have already been completed. The partners will now carry out further detailed front-end engineering design work with the aim of confirming the economic feasibility of the scheme. This work would be expected to be complete in the second half of 2006. This will allow a final investment decision to be taken next year, subject to which the project would then be expected to commence operation in 2009.

The full project would require total capital investment of some \$600million. It would also require an appropriate policy and regulatory framework which encourages the capture of carbon from fossil fuel-based electricity generation and its long-term storage.

When fully operational, the project would be expected to capture and store around 1.3 million tonnes of carbon dioxide each year and provide 'carbon-free' electricity to the equivalent of a quarter of a million UK homes.

Lord Browne, BP Group Chief Executive, said: "This is an important and unique project configured at a scale that can offer significant progress in the provision of cleaner energy and the reduction of carbon dioxide emissions.

"For example, if applied to just five per cent of the new electricity generating capacity that the world is projected to require by 2050, such schemes would have the potential to reduce global carbon dioxide emissions by around one billion tonnes a year - a material step in the challenge the world faces. The success of this UK scheme will provide invaluable experience for the further application of this concept worldwide.

"In the UK, and Scotland in particular, the project will offer a new, large-scale source of decarbonised electricity to consumers as well as extending the commercial life and contribution of the North Sea to the UK and Scottish economies. BP will look for opportunities to replicate this scheme and apply the associated technologies and experience in other parts of the world where we conduct business."

The project would be located close to Peterhead in north-east Scotland. A newly built reformer plant would convert up to 70 million cubic feet of natural gas a day into carbon dioxide and hydrogen and the hydrogen would be used as fuel for a new 350MW combined cycle gas turbine power station.

Ian Marchant, SSE Group chief executive, said: "The work on which we're now embarking with our partners will enable us to evaluate the benefits of combining a number of technologies in a way which would be a world first. The project demonstrates that the energy sector is continuing to respond to the challenges posed by climate change and by the need for a more sustainable use of natural resources.

"Our work on this development with our partners complements our activities in progressing new and emerging technologies for generating electricity from renewable sources and represents a significant opportunity for the North East of Scotland. Investment in the research, development and demonstration of new and

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emerging technologies for generating electricity is a key part of SSE's long-term strategy for sustainable electricity generation in the UK."

The carbon dioxide generated by the reformer would be exported through existing pipelines to the mature BP-operated Miller oilfield, 240 kilometres offshore, where the platform would be adapted to allow for injection of the gas into the reservoir four kilometres below the seabed to increase oil recovery from the reservoir and for storage.

The Miller field is currently due to cease production in 2006/7 but the injection of carbon dioxide into the reservoir could increase the amount of oil extracted from the field, potentially allowing the production of up to 40 million additional barrels of oil and extending the life of the field by 15 to 20 years.

### Notes to editors:

- In its March 2005 Budget, the UK Government announced that it is examining the potential for new economic incentives to support the development of carbon capture and storage technologies and applications.
  
- The Miller oil field is operated by BP (52 per cent) with partners ConocoPhillips (30 per cent) and Shell (18 per cent). The field, which began production in 1992, is 240 kilometers north east of Peterhead in water depths of 100 metres. Production peaked in 1995 at 150,000 barrels of oil and 220 million cubic feet of gas a day. The field now produces some 10,000 barrels of oil and 15 million cubic feet of gas a day. Oil from the field is exported via the Forties pipeline system and gas is exported in a sour gas pipeline initially to shore at St Fergus and then on to SSE's Peterhead power station.
  
- Scottish and Southern Energy is the UK's largest generator of electricity from non-nuclear sources, as well as being the UK's second largest energy distributor and third largest energy supplier. Its assets include Peterhead Power Station. Originally constructed in 1980, it was re-powered in 2000, with the installation of three new gas turbines requiring a total investment of GBP220 million. The reduction in carbon dioxide emissions resulting from the re-powering was equivalent to removing around 400,000 cars from the road.
  
- BP, with its partners Sonatrach and Statoil, operates the In Salah geological storage project in Algeria that is storing approximately one million tonnes a year of carbon dioxide in a gas reservoir.
  
- Oil and gas reservoirs are geological formations, often kilometres below the earth's surface, that have held oil, natural gas, and sometimes carbon dioxide trapped for millions of years in capped sandstone.

### Further enquiries:

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BP p.l.c.  
(Registrant)

Dated: 30 June, 2005

/s/ D. J. PEARL  
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D. J. PEARL  
Deputy Company Secretary