



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

while capturing and sequestering the carbon as carbon dioxide in deep geological formations. To facilitate this advancement, BP and GE will collaborate on power, carbon capture and sequestration technologies.

"The combination of our two companies' skills and resources in this area is formidable, and is the latest example of our intent to make a real difference in the face of the challenge of climate change," said BP's Vivienne Cox. "BP and GE's strategic approaches to developing increasingly cleaner, lower carbon power options are closely aligned and our skills and strengths are highly complementary."

"Tomorrow's energy mix will include hydrogen - and GE and BP are taking the lead in ensuring progress begins today," said David Calhoun of GE. "This initiative will demonstrate that our companies' leading-edge technologies can make hydrogen production efficient, reliable, and economical for large-scale, commercial power production. Our financial strength will ensure it happens now globally, changing the way we envision our energy future."

BP has already announced plans for two such hydrogen power projects with carbon capture and sequestration in Scotland and California, both of which will use GE technology. Subject to appropriate regulatory and fiscal regimes being in place, and necessary due diligence, the companies have an ambition to progress 10 to 15 further projects over the next decade, including the plants in Scotland and California. Subject to further exploration, the current expectation is that the most appropriate structure may be through creation of a joint venture to invest in hydrogen power projects and a joint development agreement for development of related technology. As a first step, BP and GE would jointly participate in the two hydrogen power projects with carbon capture and sequestration BP has announced - at Peterhead in Scotland and at Carson in Southern California where Scottish and Southern Energy and Edison Mission Energy are partners respectively.

Such low carbon power projects use fossil fuels such as natural gas, petroleum coke or coal for power generation combined with carbon dioxide capture and storage technology. They generate significant quantities of base-load power while capturing and storing some 90% of the carbon dioxide that would otherwise be emitted, in deep geological formations.

BP and GE will apply some of the world's leading technologies, project experience and assets to optimise the integrated design. The collaborative effort will draw upon the companies' technologies and experience in areas such as coal gasification, reforming technology, gas turbines and carbon capture and storage.

"The combination of coal gasification and carbon capture and sequestration is crucial for clean coal development and presents great opportunities for countries with substantial reserves of coal such as the USA, China and India," says Lewis Gillies, BP's Director of Hydrogen Power.

"GE and BP are combining our resources to develop economically attractive, breakthrough technologies in the area of hydrogen to power. This will allow power producers to use abundant, low-cost fossil fuel resources to generate electricity with very low carbon dioxide emissions," said Edward Lowe, general manager of GE Energy's gasification business.

In addition to the complementary nature of the technologies and experience of the two companies, the collaboration is expected to be further strengthened by the global reach of each of the partners. GE's operations in Houston and BP's operations in London will form the core groups for the hydrogen power collaboration.

Notes to editors:

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

- BP ([www.bp.com](http://www.bp.com)) is one of the world's largest energy companies, with 2005 profits of some \$19 billion, a presence in over 100 countries and 96,000 staff worldwide. BP's main businesses are in exploration and production of oil and gas, refining and marketing of oil products, and the transportation and marketing of natural gas and power. In addition to BP's low carbon power interests in BP Alternative Energy, the company has extensive experience in pipelines and the management of oil and gas in geological formations, power generation, petrochemicals operations and in carbon capture and storage technology.

- GE Energy ([www.ge.com/energy](http://www.ge.com/energy)) is one of the world's leading suppliers of power generation and energy delivery technologies, with 2005 revenue of \$16.5 billion. Based in Atlanta, Georgia, GE Energy works in all areas of the energy industry including coal, oil, natural gas and nuclear energy; renewable resources such as water, wind, solar and biogas; and other alternative fuels. Numerous GE Energy products are certified under ecomaginationSM, GE's corporate-wide initiative to aggressively bring to market new technologies that will help customers meet pressing environmental challenges.

- Hydrogen power fits with the spirit of ecomaginationSM, the GE corporate commitment to address challenges such as the need for cleaner, more efficient sources of energy. Ecomagination technologies already launched by GE in the energy arena include products that generate electricity through the use of renewable, biogas or waste gas technologies, high-efficiency and lower-emissions gas turbines and engines, and cleaner coal technology.

- Hydrogen power and carbon capture and sequestration is a key part of BP's growing low-carbon power generation business, BP Alternative Energy. This business, launched in 2005, combines BP's interests in hydrogen power with BP Solar, BP's photovoltaic company, and the company's interests in wind power and natural gas-fired power generation. BP anticipates investing some \$8 billion in BP Alternative Energy over the next decade reinforcing its determination to grow its businesses "beyond petroleum".

- A hydrogen power project takes a fossil fuel, such as natural gas or coal, and converts it into hydrogen and carbon dioxide. The hydrogen-rich gas is used as the fuel gas to generate electric power from turbines in a power plant. The carbon dioxide is captured, transported and stored safely and permanently in deep geological formations such as oil and gas fields. Power generation accounts for some 40% of man-made carbon dioxide emissions. By combining hydrogen power generation with carbon capture and storage in one integrated project, 90% of the carbon dioxide in the fuel is captured so that it does not enter the atmosphere and a substantial step is made towards tackling the climate change issue.

- BP has already announced plans for two hydrogen power plants. At Peterhead, Scotland, BP together with Scottish and Southern Energy plan to build a 475MW hydrogen fired power plant based on natural gas. It would sequester 1.8 million tonnes per annum of carbon dioxide 4,000 metres below the seabed in the Miller oil field where the carbon dioxide will enable the production of some 40 million barrels of oil that would not otherwise have been recoverable. A final investment decision is due in early 2007 so the plant can be in commercial operation in 2010.

The second project is a 500MW hydrogen power plant at Carson, southern California. BP, and partner Edison Mission Energy, would take petroleum coke, a refinery by-product and synthetic form of coal, to create the hydrogen. The plant will capture and store 4 million tonnes per annum of carbon dioxide which, like the Peterhead project, will enable incremental oil production. This project is scheduled to be complete in 2011.

For further details:

Edgar Filing: BP PLC - Form 6-K

GE Energy

BP press contacts

Dennis Murphy  
GE Energy  
+1 678 844 6948  
dennis.murphy@ge.com

Robert Wine  
BP Press Office  
+44 (0)20 7496 4827

Ken Darling or Howard Mastro  
Mastro Public Relations  
+1 518 786 6488  
kenneth.darling@ge.com  
howard.mastro@ge.com

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: 18 July 2006

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