



NRG and Powerspan Announce Large-Scale Demonstration of Carbon Capture and Sequestration (CCS) for Coal-Fueled Power Plants

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Demonstration to be Among Largest CCS Projects in the World

PRINCETON, N.J. & PORTSMOUTH, N.H.--(BUSINESS WIRE)--Nov. 2, 2007--NRG Energy, Inc. (NYSE:NRG) and Powerspan Corp. today announced their memorandum of understanding to demonstrate at commercial scale one of the most promising technologies for carbon dioxide (CO₂) capture from conventional coal-fueled, electric power plants -- Powerspan's ECO2(TM) technology. The post-combustion, regenerative process uses an ammonia-based solution to capture CO₂ from the flue gas of a power plant and release it in a form that is ready for safe transportation and permanent geological storage.

To date, CO₂ capture demonstrations on coal-fueled power plants have been conducted only at pilot scale, or one to five megawatts (MW) of electricity. This CCS demonstration, which will be conducted at NRG's WA Parish plant near Sugar Land, Texas, on flue gas equal in quantity to that from a 125 MW unit, is expected to capture and sequester about one million tons of CO₂ annually -- ranking it among the world's largest CCS projects and potentially the first to achieve commercial scale capture and sequestration from an existing coal-fueled power plant.

Once captured, the CO₂ is expected to be used in enhanced oilfield recovery operations in the Houston area. Powerspan's ECO2 demonstration facility will be designed to capture 90 percent of incoming CO₂ and is expected to be operational in 2012.

"NRG is very proud to partner with Powerspan to help bring their ECO2 technology to commercial scale," said David Crane, President and CEO, NRG Energy, Inc. "As part of our aggressive effort to 'get the carbon out of coal,' we are proud to help demonstrate the viability of this promising technology for post-combustion carbon capture at WA Parish, one of the largest and best baseload coal facilities in the country. As our country's leaders move to consider climate change legislation, they should be confident that the power sector is already acting in anticipation of Government action in order to support the rapid transition to a low-carbon economy. The successful deployment of 'clean coal' technology like ECO2 is absolutely essential to our common goals of reliable and affordable electricity, enhanced energy security and substantially reduced greenhouse gas emissions."

"Large-scale, integrated CCS demonstrations provide commercial validation of the critical enabling technologies needed to reduce CO₂ emissions significantly while maintaining coal-fueled power plants as a vital component of our nation's electricity supply," said Powerspan's CEO, Frank Alix. "We are grateful to be working with an industry-leading company like NRG in the commercial demonstration of our ECO2 technology and look forward to its broader application to reduce the impact of coal-fueled power plants on climate change."

Under the memorandum of understanding, NRG and Powerspan will design, construct, and operate a 125-MW CO₂ capture facility at the WA Parish Plant and supply the captured CO₂ for safe transportation and permanent geological storage in order to demonstrate the technical, economic, and environmental performance of a large-scale CCS system that potentially could be deployed on existing coal-fueled generating facilities globally. NRG will work with government and non-government entities to provide additional funding for the project.

NRG is actively implementing a repowering program to bring an additional 10,000 MW of power to America using diverse fuel sources and technologies including no- and low-carbon generation technologies such as a commercial scale gasified coal (IGCC) plant in New York, two new nuclear units in Texas and wind power in Texas and California.

The ECO2 process is a post-combustion CO₂ capture process for conventional power plants that is differentiated from other approaches by its simpler capital equipment design and significantly lower energy consumption. The technology is suitable for retrofit to the existing coal-fueled, electric generating fleet as well as for new coal-fueled plants. The regenerative process is readily integrated with Powerspan's patented Electro-Catalytic Oxidation, or ECO(R), process for multi-pollutant control of sulfur dioxide (SO₂), nitrogen oxides (NO_x), mercury, and fine particulate matter from power plants.

Under a cooperative research and development agreement announced in May 2004, Powerspan is collaborating with the U.S. Department of Energy National Energy Technology Laboratory on the development of the CO₂ removal process for coal-fueled power plants. The CO₂ capture takes place after the NO_x, SO₂, mercury and fine particulate matter are captured. Once the CO₂ is captured, the ammonia-based solution is regenerated to release CO₂ and ammonia. The ammonia is recovered and sent back to the scrubbing process, and the CO₂ is in a form that is ready for geological storage. Ammonia is not consumed in the scrubbing process, and no separate by-product is created. The process can be applied to both existing and new coal-fueled power plants and is particularly advantageous for sites where ammonia-based scrubbing of power plant emissions is employed.

About NRG

A Fortune 500 company, NRG Energy, Inc. owns and operates a diverse portfolio of power-generating facilities, primarily in Texas and the Northeast, South Central and West regions of the United States and also in Australia, Germany and Brazil. NRG is a member of USCAP, a diverse group of business and environmental organizations calling for mandatory legislation to achieve significant reductions of greenhouse gas emissions. NRG is also a founding member of "3C--Combat Climate Change," a global initiative with 42 business leaders calling on the global business community to take a leadership role in designing the road map to a low carbon society. More information on NRG is available at www.nrgenergy.com.

Safe Harbor Disclosure

This news release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Such forward-looking statements are subject to certain risks, uncertainties and assumptions and include NRG's

expectations with respect to carbon capture and sequestration and typically can be identified by the use of words such as "will," "expect," "estimate," "anticipate," "forecast," "plan," "believe" and similar terms. Although NRG believes that its expectations are reasonable, it can give no assurance that these expectations will prove to have been correct, and actual results may vary materially. Factors that could cause actual results to differ materially from those contemplated above include, among others, hazards customary in the power industry, general economic conditions, permitting and regulatory obstacles, construction delays, and changes in government regulation of environmental emissions.

NRG undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. The foregoing review of factors that could cause NRG's actual results to differ materially from those contemplated in the forward-looking statements included in this news release should be considered in connection with information regarding risks and uncertainties that may affect NRG's future results included in NRG's filings with the Securities and Exchange Commission at www.sec.gov.

About Powerspan

Powerspan Corp., a clean-energy technology company based in Portsmouth, New Hampshire, is engaged in the development and commercialization of proprietary multi-pollutant control technology for the electric power industry. Visit www.powerspan.com for more information.

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