FILE

BEFORE THE OHIO POWER SITING BOARD

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In the Matter of the Application of American Municipal Power-Ohio, Inc., for	PUCO
a Certificate of Environmental Compatibility and Public Need for an) Case No. 06-1358-EL-BGN
Electric Generation Station and Related Facilities in Meigs County, Ohio.	

DIRECT TESTIMONY OF RANDY MEYER

- 1 Q. Please state your name and business address.
- A. My name is Randy Meyer. My business address is 2600 Airport Drive, Columbus, Ohio 43219.
- 2 Q. By whom are you employed, and what is your position?
- A. I am employed by American Municipal Power-Ohio, Inc. ("AMP-Ohio") as Director of Environmental Affairs.
- 3 Q. Please describe your duties and responsibilities in that position.
- A. I have overall responsibility for environmental matters for AMP-Ohio.
- 4 Q. Please describe your educational background and professional experience.
- A. I received a B.S. in Physical Geography (Earth Science) magna cum laude from the University of Cincinnati in 1982. In 1984, I received a Master of Environmental Sciences from Miami (OH) University. While at Miami, I interned at the Ohio River Valley Water Sanitation Commission.

My professional employment includes work at Battelle Memorial Institute's Columbus Laboratories (1984-1985). I was a Sanitarian II at the Warren County (OH) Combined Health District (1985-1986) working in the ground water and sewage disposal areas. From 1986 until 1994, I was employed by the Ohio Environmental Protection Agency (OEPA), with progressively more responsible positions, as an Environmental Specialist II, Environmental Engineer I, Environmental Engineer II and Environmental Supervisor. My work at the OEPA included a variety of assignments regarding sewage treatment, water quality, hazardous materials and RCRA.

In 1994, I joined AMP-Ohio in my current position as Director of Environmental Affairs. In that capacity, I am responsible for AMP-Ohio's environmental compliance programs for its entire generating and other operations including air, water, hazardous materials and other matters, the environmental aspects of new projects including generation and transmission, and assisting AMP-Ohio Members in environmental compliance.

I am a member of the Southwest Ohio Chapter of the Air and Waste Management Association. I achieved the designation as a Qualified Environmental Professional (QEP) by the Institute of Professional Environmental Practice in 2001, which was renewed in 2006. My Certificate Number is 12010032.

I have been responsible for a number of environmental publications, both for our members and the public, and frequently speak on environmental issues at conferences and the like.

- 5 Q. Are you familiar with AMP-Ohio's Application, as supplemented, for a Certificate of Environmental Compatibility and Public Need for an Electric Generation Station and Related Facilities in Meigs County, Ohio ("Application")?
- A. Yes.

6 Q. What is the purpose of that Application?

A. The purpose of that Application is to receive a certificate from the Ohio Power Siting Board to construct an electric generation station and related facilities in Meigs County, Ohio.

7 Q. Are you familiar with the contents of that Application?

A. Yes.

8 Q. Did you participate in completion of that Application?

A. Yes, Mr. Kiesewetter and I were the AMP-Ohio staff members primarily responsible for that Application and it was prepared under our direction and supervision. The environmental portions of the Application were my primary responsibility.

9 Q. To the best of your knowledge and belief, is the information in the Application true?

A. Yes.

10 Q. Are you familiar with AMP-Ohio's selection of technology for the AMPGS?

A. Yes.

11 Q. Which technology was selected?

A. Pulverized coal-fired electric generating units utilizing multiple emissions control technologies including Powerspan air pollution control technology.

12 Q. Why?

A. Pulverized coal-fired electric generation is a proven, reliable, cost-effective, and costpredictable source of electric power. Powerspan technology controls a number of
pollutants in the flue gas stream and requires less landfill space by creating a fertilizer
byproduct. It also holds great promise for CO₂ capture and sequestration ("CCS")

13 Q. As a part of your responsibilities, have you monitored developments in technology, including Powerspan?

A. Yes.

14 Q. Please provide an update on recent Powerspan developments.

A. A number of positive developments have occurred over the past several months. Pilot scale CCS is scheduled to begin in the first quarter of 2008 at FirstEnergy's ("FE") Burger Facility utilizing a 1 MW slipstream. According to Powerspan, the ECO₂ test should capture CO₂ at a ninety percent level (see Exhibit RM-1). Prior to that, FE announced the installation of the ECO system (that proposed for AMPGS) will be installed on Units 4 and 5 (312 MW total) of the Burger Plant (see Exhibit RM-2). On August 8, 2007 Powerspan and BP announced their collaborative agreement to develop and commercialize Powerspan's ECO₂ CCS process (see Exhibit RM-3). Finally, on November 2, 2007, Powerspan and NRG announced the large scale, 125 MW, demonstration of Powerspan's ECO₂ CCS process would be installed and operational by 2012, at NRG's WA Parish plant near Sugarland, TX (see Exhibit RM-4).

These developments validate AMP-Ohio's decision to utilize Powerspan at AMPGS.

- 15 Q. Are you familiar with an electric generation technology called Integrated Gasification Combined Cycle, also known as IGCC?
- A. Yes, and when I reference IGCC, I am referring to it as an electric generation technology.

16 Q. How does IGCC technology work?

A. Coal is partially oxidized in an oxygen blown gasifier to produce synfuel. The synfuel is cooled and then run through a clean-up process. After clean-up, the synfuel is burned in a combustion turbine for simple cycle electricity production. The exhaust gas from the combustion turbine then goes to a heat recovery steam generator for second cycle electricity production. The exhaust gases are then discharged to the atmosphere.

17 Q. Have you reviewed emission limits for certain current and proposed IGCC electric generation plants?

A. Yes.

18 Q. What did you conclude from that review?

A. First, as I explained above, IGCC is a fundamentally different type of power plant from pulverized coal, the same way that hydroelectric and nuclear generation are fundamentally different. With respect to air emissions, historically, permitted and actual emission rates at power plant IGCCs are similar to the permitted and actual emission rates at newer-generation controlled pulverized coal-fired power plants. The two IGCC plants currently in operation in the U.S., Polk County and Wabash, have emissions rates that are comparable to the emission rates proposed from AMPGS (see Exhibit RM-5). Factors, such as fuel blends, will cause the rates to vary slightly from project to project to account for the different attributes in the fuel. Recently, there have been some merchant IGCC power plants permitted with more restrictive emission rate figures; however, those

plants remain conceptual and/or proposed at this point. Recent permits for IGCC power plants do not include emission limits for carbon dioxide.

The IGCC power plants that are currently operating in the U.S. do not provide the operational reliability needed by AMP-Ohio, especially when those plants are operating in true IGCC mode, that is, without natural gas back-up. They also often require redundancies in major equipment components, such as additional gasifiers, that impact costs and operations. If AMP-Ohio had selected IGCC to power its flagship 1000 MW project, the difference in reliability would put AMP-Ohio on the market to purchase replacement energy. Considering the replacement purchases will need to be made on short notice, it is likely AMP-Ohio would have to purchase from some of the least efficient generation units available in the region, thus increasing the air emissions footprint of the project.

19 Q. Are you familiar with the proposed design of the landfill in the Application for the AMPGS?

A. Yes.

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20 Q. Are you familiar with the Staff Report of Investigation in this matter?

A. Yes.

21 Q. Are you familiar with the Staff's recommendations with respect to the design and proposed operation plan of the AMPGS landfill in the Staff Report of Investigation?

A. Yes.

22 Q. Was the Staff's recommendation different than that which was proposed by AMP-Ohio in its Application? A. Yes, especially regarding the order of opening the landfill's cells.

23 Q. Has AMP-Ohio since reached agreement with the Staff with respect to those landfill issues for the AMPGS?

A. Yes, we believe so, although at the time my testimony is being filed, the final language is still being drafted.

24 Q. What are the terms of that tentative agreement with respect to those landfill issues?

A. Under the terms of the revised conditions, AMP-Ohio will be able to begin operation pursuant to terms and conditions required by Ohio EPA as part of the permit process with the acknowledgement that placement will begin in Cell 1 and AMP-Ohio will address the Staff's concerns before beginning placement in Cell 2.

25 Q. Has AMP-Ohio considered the general environmental impact of AMPGS if constructed and operated as proposed?

A. AMPGS will demonstrate only a minimum adverse impact to the environment.

26 Q. Why?

A. As stated above, AMPGS is designed with state of the art, proven emissions control technologies in all environmental media. With respect to air emissions, AMPGS will replace generation from older, less efficient and much less controlled power plants, thus AMPGS will reduce AMP-Ohio's overall air emissions footprint. AMP-Ohio plans on retiring or repowering the R.H. Gorsuch Station more or less contemporaneously with the in-service date of AMPGS. In addition, we expect that some of our smaller, older Member-owned coal fired units will be retired as well. In fact, our Member, St. Marys, has just announced it will retire rather than repair its 10 MW, Unit # 6, in part in anticipation of its share of AMPGS. Because AMP-Ohio and its Members are so heavily

in the market for Base Load power and energy, these purchases come from primarily coal fired generation. Overall, generating the same amount of kWh from AMPGS as from current sources that are older, less efficient, and less controlled will significantly decrease the environmental impact associated with serving that 1000 MW of load.

27 Q. Have you estimated that impact?

A. Yes, Exhibit RM-6 shows the estimated reductions in emissions.

28 Q. Are you familiar with the environmental considerations associated with construction of AMPGS as a supercritical as opposed to subcritical design?

A. Yes.

29 Q. What are those?

- A. The change from subcritical to supercritical does not change the fundamental design or foot print of AMPGS. From an environmental standpoint, the primary result is less emissions and other environmental impacts as a result of the higher efficiency. If AMPGS can be cost effectively constructed as supercritical, the Board should provide that option in the Certificate.
- 30 Q. Based on your experience, education, and knowledge of the Application, and in your opinion, does the Application describe the nature of probable environmental impact from AMPGS?
- A. Yes.

31 Q. Based on your experience, education, and knowledge of the Application, and in your opinion, does the AMPGS represent the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations?

A. Yes.

32 Q. Based on your experience, education, and knowledge of the Application, and in your opinion, will the AMPGS comply with R.C. Chapters 3704, 3734, 6111 and all rules and standards adopted under those chapters, and comply with the rules and standards adopted under sections 1501.33, 1501.34, and 4561.32?

A. Yes.

- 33 Q. Based on your experience, education, and knowledge of the Application, and in your opinion, does the Application describe what the AMPGS's impact will be on the viability as agricultural land of any land in an existing agricultural district established under Ohio Revised Code 929 that is located within the site?
- A. There is no agricultural district in the vicinity of the plant.
- 34 Q. Based on your experience, education, and knowledge of the Application, and in your opinion, does the AMPGS incorporate maximum feasible water conservation practices, considering available technology and the nature and economics of the various alternatives?

A. Yes.

35 Q. Please briefly describe AMPGS proposed design in that regard.

A. Cooling water will be cycled through the cooling cells five times. The anti-degradation studies in our NPDES permit application demonstrate this approach minimizes degradation to the Ohio River at reasonable cost.

36 Q. Does this conclude your direct testimony?

A. Yes.

CERTIFICATE OF SERVICE

We hereby certify that a copy of the foregoing American Municipal Power-Ohio, Inc.'s Direct Testimony of Randy Meyer for Case No. 06-1358-EL-BGN was served upon the following parties of record or as a courtesy to proposed persons via electronic mail and/or via postage prepaid U.S. Mail on December 3, 2007:

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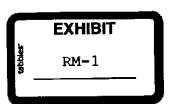
Testimony of Frank Alix before the Senate Committee on Energy and Natural Resources; Hearing on Recent Advances in Clean Coal Technology, August 1, 2007

Good morning Mr. Chairman and Members of the Committee. Thank you for the opportunity to share Powerspan's perspective on advances in clean coal technology. It is an honor to be invited here to speak. My name is Frank Alix and I am CEO of Powerspan Corp. Powerspan is a clean energy technology company headquartered in New Hampshire. I am a co-founder of the Company and a co-inventor on several of Powerspan's patents.

Powerspan has been in the business of developing and commercializing clean coal technology since its inception in 1994. In order to fund technology development, the company has raised over \$70 million from private, institutional, and corporate investors. Our most significant clean coal technology success to date has been the development and commercialization of our ECO® technology, which is an advanced multi-pollutant control technology to reduce emissions of sulfur dioxide (SO₂), nitrogen oxides (NOx), mercury (Hg), and fine particles (PM_{2.5}) in a single system. FirstEnergy Corp. of Akron, Ohio has been a major supporter, providing the host site for ECO commercialization activities, as well as substantial financial contributions.

Over the past three years, we have successfully operated a 50-megawatt (MW) scale commercial ECO unit at FirstEnergy's R. E. Burger Plant in Shadyside, Ohio. This unit has demonstrated that ECO is capable of achieving outlet emissions below current Best. Available Control Technology for coal plants, and comparable to outlet emissions from natural gas combined cycle power plants. ECO also produces a valuable fertilizer product, avoiding the landfill disposal of flue gas desulfurization waste. Furthermore, the ECO system minimizes water use because it requires no wastewater treatment or disposal.

Commercial ECO cost estimates prepared by prospective customers and their engineers indicate that ECO capital and operating costs would normally be about 20% less than the combined costs of the separate control systems required to achieve comparable reductions. For a 600 MW plant, this equates to an annual costs savings of \$5-10 million.



Although the utility industry has a conservative approach to new technology adoption, the environmental and economic advantages of our ECO technology has resulted in some significant commercial progress. Within the past year, FirstEnergy announced a commitment to install an ECO system on its Burger Plant, Units 4 and 5, an installation valued at approximately \$168 million. Additionally, AMP-Ohio recently announced a commitment to ECO for its proposed 1,000 MW plant in Meigs County, Ohio. This commitment was driven in part by the promise of a new technology Powerspan is developing for CO₂ capture, which we call ECO₂TM. The ECO₂ process is a post-combustion CO₂ capture process for conventional power plants. The ECO₂ technology is readily integrated with our ECO process and is suitable for retrofit to the existing coal-fired generating fleet as well as for new coal-fired plants.

Since 2004, Powerspan and the U.S. Department of Energy's (DOE) National Energy Technology Laboratory (NETL) have worked together to develop the ECO₂ process. The regenerative process uses an ammonia-based solution to capture CO₂ in flue gas. The CO₂ capture takes place after the NOx, SO₂, mercury, and fine particulate matter are captured. Once the CO₂ is captured, the ammonia-based solution is regenerated to release CO₂ in a form that is ready for geological storage.

Pilot scale testing of our ECO₂ technology is scheduled to begin in early 2008 at FirstEnergy's Burger Plant. The ECO₂ pilot unit will process a 1-MW flue gas stream and produce 20 tons of CO₂ per day, achieving a 90% CO₂ capture rate. We plan to provide the captured CO₂ for on-site sequestration in an 8,000-foot well. FirstEnergy is collaborating with the Midwest Regional Carbon Sequestration Partnership on the sequestration test project. This pilot program could be the first such project to demonstrate both CO₂ capture and sequestration ("CCS") at a coal-fired power plant.

The ECO₂ pilot program provides the opportunity to confirm process design and cost estimates, and prepare for large scale capture and sequestration projects. Initial estimates developed by the U.S. Department of Energy indicate that our ammonia-based CO₂ capture process could provide significant savings compared to commercially available amine-based

CO₂ capture technologies. Our own estimates, based on extensive lab testing, indicate that commercial ECO₂ systems should be able to capture and compress 90% of CO₂ from conventional coal-fired power plants at a cost of about \$20 per ton.

Regarding prospects for deploying ECO₂ at commercial scale, Powerspan and its commercial partners—Siemens, and Fluor—are currently evaluating opportunities to deploy commercial scale demonstration units that would process a 100-MW flue gas stream and produce approximately 1,000,000 tons of CO₂ per year for use in enhanced oil recovery or geological sequestration. A project of this size would be among the largest CO₂ capture operations in the world and would serve to demonstrate the commercial readiness of ECO₂ for full-scale power plant applications. With anticipated success of the ECO₂ pilot unit, we would expect our first commercial demonstration project to begin operating in 2011, and full-scale commercial units to be operating by 2015.

Although large scale-up projects, such as taking ECO₂ from a 1-MW pilot to a 100-MW commercial demonstration, contain some risk, we believe the risk is manageable because the equipment used in the ECO₂ process—large absorbers, pumps, heat exchangers, and compressors—have all been used in other commercial applications. The "technology" in ECO₂ is innovative process chemistry. Commercial application of this unique technology holds no special challenges that we can foresee, and therefore has a high probability of commercial success.

We agree with the recent MIT study on coal that places a high priority on the commercial demonstration of CO₂ capture from several alternative coal combustion and conversion technologies, as well as CO₂ sequestration at a scale of 1 million tons per year. However, such an undertaking will require substantial resources. The recently proposed 30% investment tax credit and \$10-20 per ton CO₂ sequestration credit is exactly the type of incentive needed and shows the Senate is prepared to provide the required leadership. It is important that such incentives apply to both pre- and post-combustion technologies, like ECO₂, and require that CO₂ capture and sequestration be accomplished at a reasonably large scale. Additionally, in order to move large-scale CCS projects ahead as rapidly as

possible, the incentives should apply to retrofits at existing coal-fired plants. Otherwise, we would need to wait for new plants to be built with CCS, which could unnecessarily delay such demonstrations for several years.

There is growing concern that the need to address climate change combined with the expanding use of coal presents an intractable problem, one where the tradeoff is between severe environmental or economic consequences. At Powerspan, we believe the necessary clean coal technology is near at hand, and the tradeoff need not be severe. Our ECO technology, which has the capability to produce a near zero-emission coal-fired power plant, is commercially available, is being commercially deployed, and will set a new emission standard for coal-fired plants. Our ECO₂ technology, which is being developed for 90% capture of CO₂ from conventional coal-fired plants, is on a well-defined path toward commercialization using currently available commercial equipment. The cost of wide spread deployment of CO₂ capture technologies such as ECO₂ appear manageable, particularly when one considers that post-combustion approaches such as ECO₂ preserve the huge investment in existing coal-fired power plants, and avoid the need to replace a major portion of the power generating fleet.

Thank you Mr. Chairman. I would be pleased to answer any questions that you or other Committee members may have.

News Release

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FIRSTENERGY TO INSTALL EMISSION CONTROL TECHNOLOGY AT R. E. BURGER PLANT

Akron, Ohio – FirstEnergy Corp. (NYSE: FE) announced today that FirstEnergy Generation Corp. plans to install an Electro-Catalytic Oxidation (ECO®) system on units 4 and 5 of its R. E. Burger Plant in Shadyside, Ohio. Combined, the units produce 312 megawatts (MW) of electricity, or enough to serve approximately 190,000 homes.

ECO is a multipollutant control technology for coal-based electric generating plants that was developed by Powerspan Corp., a New Hampshire-based clean energy technology company in which FirstEnergy has a minority ownership interest. The Burger Plant ECO scrubber system will reduce sulfur dioxide, mercury, other gases resulting from combustion, and fine particulates. The ECO process also will produce a highly marketable ammonium sulfate fertilizer co-product that will be sold in the fertilizer market.

Since early 2004, an ECO commercial demonstration unit has been operating successfully at the Burger Plant. It continues to operate and collect data regarding the ECO process. The Ohio Coal Development Office, a program of the Ohio Air Quality Development Authority, has been a major supporter of the ECO demonstration, contributing more than \$5.5 million to the project.



"We believe installing ECO enhances the viability of the Burger Plant and gives us more flexibility in our use of eastern coal," said Richard R. Grigg, executive vice president and chief operating officer for FirstEnergy. "In addition, we believe that ECO provides a cost-effective method for meeting environmental regulations, including the Clean Air Interstate Rule and the Clean Air Mercury Rule."

In 2005, FirstEnergy announced plans to install ECO on its 215-MW Unit 4 of the Bay Shore Plant in Oregon, Ohio. The decision to install ECO at the Burger Plant instead will result in additional scrubbed megawatts and better fits the coal-purchasing strategy for both plants.

Design engineering for the new Burger Plant ECO system will begin in 2007 with an anticipated start-up during the first quarter of 2011. The estimated cost of the system is approximately \$168 million.

Because FirstEnergy is planning to install Selective Non-Catalytic Reduction technology at the Burger Plant to remove nitrogen oxides (NO_X), the ECO unit will not be equipped with NO_X controls. However, due to ECO's unique design capabilities, the NO_X controls could be added later.

Powerspan also is developing a carbon-capture process – known as ECO₂[™] – that has demonstrated the capability to capture significant amounts of carbon dioxide (CO₂) in a laboratory environment. Pilot scale testing of this new technology is expected to begin at the Burger Plant in early 2008. The goal of this test project is to capture power plant CO₂, transport it to an 8,000-foot test well that was drilled at the Burger Plant earlier this year, and then sequester it underground. It could be the first such program to demonstrate both CO₂ capture and sequestration at a conventional coal-fired power plant.

FirstEnergy is a diversified energy company headquartered in Akron, Ohio. Its subsidiaries and affiliates are involved in the generation, transmission, and distribution of electricity, as well as energy management and other energy-related services. Its seven electric utility operating companies comprise the nation's fifth largest investor-owned electric system, based on 4.5 million customers served within a 36,100-square-mile area of Ohio, Pennsylvania, and New Jersey; and its generation subsidiaries control more than 14,000 megawatts of capacity.

Powerspan Corp., a clean-energy technology company based in Portsmouth, New Hampshire, is engaged in the development and commercialization of proprietary multipollutant control technology for the electric power industry.

Forward-Looking Statements: This news release includes forward-looking statements based on information currently available to management. Such statements are subject to certain risks and uncertainties. These statements typically contain, but are not limited to, the terms "anticipate," "potential," "expect," "believe," "estimate" and similar words. Actual results may differ materially due to the speed and nature of increased competition and deregulation in the electric utility industry, economic or weather conditions affecting future sales and margins, changes in markets for energy services, changing energy and commodity market prices, replacement power costs being higher than anticipated or inadequately hedged, the continued ability of FirstEnergy's regulated utilities to collect transition and other charges or to recover increased transmission costs, maintenance costs being higher than anticipated, legislative and regulatory changes (including revised environmental requirements), and the legal and regulatory changes resulting from the implementation of the Environmental Policy Act of 2005 (including, but not limited to, the repeal of the Public Utility Holding Company Act of 1935), the uncertainty of the timing and amounts of the capital expenditures needed to, among other things, implement the Air Quality Compliance Plan (including that such amounts could be higher than anticipated) or levels of emission reductions related to the Consent Decree resolving the New Source Review litigation, adverse regulatory or legal decisions and outcomes (including, but not limited to, the revocation of necessary licenses or operating permits and oversight) by the NRC (including, but not limited to, the Demand For Information issued to FENOC on May 14, 2007) and the various state public utility commissions as disclosed in our SEC filings, the timing and outcome of various proceedings before the PUCO (including, but not limited to, the Distribution Rate Cases for the Ohio Companies and the successful resolution of the issues remanded to the PUCO by the Ohio Supreme Court regarding the Rate Stabilization Plan) and the PPUC (including the transition rate plan filings for Met-Ed and Penelec and the Pennsylvania Power Company Default Service Plan filing), the continuing availability and operation of generating units, the ability of generating units to continue to operate at, or near full capacity, the inability to accomplish or realize anticipated benefits from strategic goals (including employee workforce initiatives), the anticipated benefits from voluntary pension plan contributions, the ability to improve electric commodity margins and to experience growth in the distribution business, the ability to access the public securities and other capital markets and the cost of such capital, the outcome, cost and other effects of present and potential legal and administrative proceedings and claims related to the August 14, 2003 regional power outage, the successful structuring and completion of a potential sale and leaseback transaction for Bruce Mansfield Unit 1 currently under consideration by management, any final adjustment in the purchase price per share under the accelerated share repurchase program announced March 2, 2007, the risks and other factors discussed from time to time in our SEC filings, and other similar factors. We expressly disclaim any current intention to update any forward-looking statements contained herein as a result of new information, future events, or otherwise.



POWERSPAN'
Clean Energy Technology

News Release

For Immediate Release August 8, 2007

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BP and Powerspan Collaborate to Demonstrate and Commercialize CO₂ Capture Technology for Power Plants

(Portsmouth, NH) BP Alternative Energy and Powerspan Corp. today announced their collaborative agreement to develop and commercialize Powerspan's carbon dioxide (CO₂) capture technology, called "ECO₂TM," for power plants. The scope of the agreement includes financial and technical support for pilot demonstration and commercial scale-up activities, which may include joint development of large-scale demonstration projects that would capture CO_2 from power station flue gas. The captured CO_2 would be sent for secure, long-term storage deep underground. Use of ECO_2 for large scale capture and storage of ECO_2 from power plants represents a major option for reducing greenhouse gases.

The ECO₂ process is a post-combustion CO₂ capture process for conventional power plants. The technology is suitable for retrofit to the existing coal-fired, electric generating fleet as well as for new coal-fired plants. The regenerative process is readily integrated with Powerspan's patented Electro-Catalytic Oxidation, or ECO[®], process for multi-pollutant control of sulfur dioxide, nitrogen oxides, mercury, and fine particulate matter from power plants.

"We consider Powerspan's ECO₂ technology among the most promising solutions for post-combustion capture of CO₂," said Jonathan Forsyth, CO₂ Capture Team Leader at BP Alternative Energy. "This is an opportunity for BP to broaden the scope of our low carbon power offering by including a CO₂ capture technology that is compatible with new and existing coal fired power stations. The priority in our collaboration with Powerspan is to successfully demonstrate the technology and advance it to full-scale commercial deployment as rapidly as possible."



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"BP's technical capability, experience with large projects, and commitment to advancing low carbon power solutions uniquely qualifies them to assist Powerspan in scaling up the ECO₂ technology for commercial application," said Powerspan CEO Frank Alix. "We look forward to working with BP on the demonstration and commercialization of the ECO₂ technology."

Pilot scale testing of ECO₂ technology is expected to begin at FirstEnergy Corp.'s R.E. Burger plant in Shadyside, Ohio, in early 2008. The ECO₂ pilot unit will process a 1-megawatt (MW) slipstream (20 tons of CO₂/day) from the 50-MW Burger ECO unit. The plan is to provide the captured CO₂ for sequestration on-site in an 8,000-foot test well drilled at the Burger plant earlier this year. FirstEnergy is collaborating with the Midwest Regional Carbon Sequestration Partnership on the sequestration test project. The Burger pilot program could be the first such program to demonstrate both CO₂ capture and sequestration at a conventional coal-fired power plant.

The ECO₂ pilot program provides the opportunity to confirm process design and cost estimates. Initial estimates developed by the U.S. Department of Energy (DOE) indicate that the ammonia-based CO₂ capture process could provide significant savings compared to commercially available amine-based CO₂ capture technologies.

In May 2004, Powerspan and the DOE's National Energy Technology Laboratory entered into a cooperative research and development agreement to develop a cost effective CO₂ removal process for coal-fired power plants. The regenerative process is readily integrated with Powerspan's ECO process for multi-pollutant control, and uses an ammonia-based solution to capture CO₂ in flue gas and release it for enhanced oil recovery or other form of geological storage. The CO₂ capture takes place after the NOx, 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-fired power plants and is particularly advantageous for sites where ammonia-based scrubbing of power plant emissions is employed.

BP is one of the world's largest oil and gas companies with operations in more than 100 countries across six continents. The company's main businesses are exploration and production of oil and gas; refining, manufacturing and marketing of oil products and petrochemicals; transportation and marketing of natural gas; and a growing business in renewable and low-carbon power, BP Alternative Energy. BP's low carbon interests combined in BP Alternative Energy include: BP Solar; the company's fast growing interests in wind power; gas-fired power generation; and BP's interest in Hydrogen Energy. For further information see: www.bp.com and www.bpalternativenergy.com.

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. www.powerspan.com.

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

—Demonstration to be among largest CCS projects in the world—

PRINCETON, NJ and PORTSMOUTH, NH; November 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 ECO₂TM 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."

EXHIBIT

Legged RM = 4

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[®], process for multi-pollutant control of sulfur dioxide (SO₂), nitrogen oxides (NOx), 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 NOx, 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.

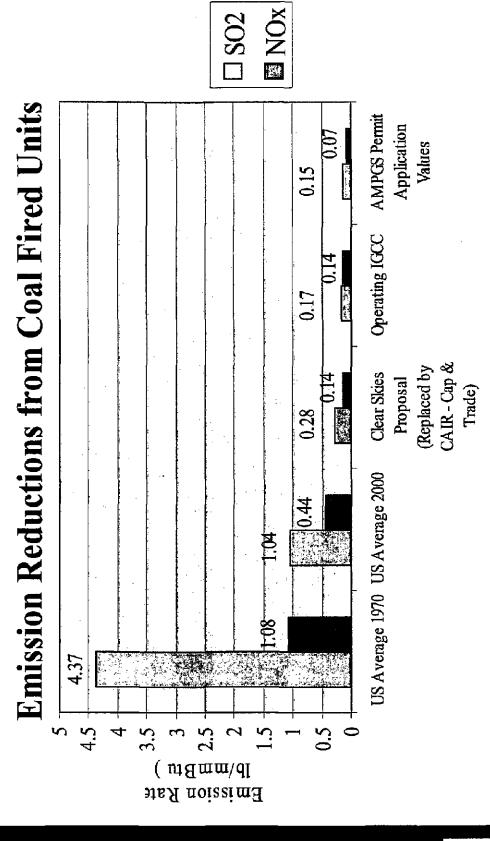
About Powerspan

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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EXHIBIT

RM-5



EXHIBIT RM-6

Annual Emissions (TPY)

AMPGS
Market – Based Power
RHGS
St. Marys Power Plant

Net Emissions Reduction from AMPGS

AMPGS Alternate Power

NO_x	PM	SO_2
3,184	682	6,820
13,967	2,610	49,292
6,689	1,454	65,437
747	244	4,253
21,403	4,308	118,982
18,219	3,626	112,162

AMPGSAlternate Power = Market-Based Power + RHGS + St. Marys Power Plant

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