

State Issues Permit to Transform NRG Dover Energy Center

NEWS FROM THE DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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Project will reduce air emissions by more than 90 percent and create up to 75 jobs

DOVER (Nov. 22, 2011) – Governor Jack Markell and DNREC Secretary Collin O’Mara announced that an air quality construction permit has been issued to NRG Energy Center Dover for a project that will transform its current coal-fueled facility in Kent County into one of the nation’s cleanest power plants.

The Governor and Secretary O’Mara met with NRG Thermal President Michael Carroll at the facility today to tour the plant and see the numerous planned improvements. The Governor also announced that NRG will receive a \$500,000 grant from the Delaware Energy Efficiency Investment Fund, its first, which was established last year by the Delaware General Assembly (HB 129). The program helps local businesses making strategic capital equipment investments that reduce operating costs and support job creation, while reducing energy consumption and improving environmental performance. The project will create up to 75 construction jobs over the course of a year.

“This project represents another significant milestone for Delaware, as we transition to a cleaner energy economy,” said Governor Markell. “NRG’s investments in Kent County will create local jobs, reduce energy consumption and improve air quality for citizens. The state’s energy efficiency grant

supports NRG's investment in technology that powers a cleaner future for the company and the community."

According to Lee Davis, President of NRG's Northeast Region, "We welcome this grant as we move forward to repower the plant, helping fulfill NRG's commitment to operate our generation assets as cleanly and efficiently as possible. The project will also create a significant number of construction jobs over one year, and when complete, the facility will generate enough electricity to power more than 50,000 average Delaware households."

"NRG's investment in this initiative is a testament to the company's commitment to a sustainable future" said Alan Levin, director of the Delaware Economic Development Office. "It is also an example of what can be accomplished with public-private partnerships. Together, we will ensure a cleaner, safer and more economically secure state for our citizens."

NRG Energy, through its wholly owned subsidiary, NRG Thermal LLC, owns and operates the NRG Energy Center Dover LLC. The facility was built in 1984, commissioned in 1985 and currently consists of a 190,000 pound per hour coal-fueled steam boiler, two existing 45 MW simple cycle combustion turbines, and an 18MW electrical steam turbine generator that produces electrical power and heat, or steam production, as a combined heat and power cogeneration unit. Electric power is sold to PJM, part of the Eastern interconnection grid operating an electric transmission system serving Delaware and other states. The steam is sold to Kraft Foods and Procter and Gamble for their process needs.

Under the permit, NRG Energy will retire its existing coal-fueled steam boiler, while continuing to serve its steam and electric customers. The company will install a natural gas low nitrogen oxide (NOx)-fired boiler and will convert one of two existing combustion turbines to a combined cycle operation that includes installing a heat recovery steam generator,

replacing an existing stack, and adding emissions control equipment to reduce emissions of NO_x, carbon monoxide, and volatile organic compounds (VOCs). Fuel efficiency of the natural gas fired cogeneration facility is expected to improve by 30 percent per unit of energy delivered.

The project aligns with the state's public health, environment, and energy goals of reducing air emissions and providing clean, reliable and cost-effective power from existing sources as the state transitions toward cleaner sources of energy, including combined cycle natural gas and renewable energy.

DNREC Secretary Collin O'Mara noted that NRG Energy's transition from coal to natural gas will significantly reduce or eliminate releases of NO_x, sulfur dioxide (SO₂), mercury, acid gasses, and other chemicals related to the combustion of coal. In 2010 NRG Energy Center Dover was the sixth highest ranked facility on Delaware's Air Toxics Release Inventory (TRI) report. The project will virtually eliminate all hydrochloric acid emissions, substantially reduce harmful emissions, and drop NRG Energy Center Dover from the TRI report entirely, once the natural gas fired cogeneration facility is operational.

"This project will transform the state's last legacy coal-burning unit into one of the cleanest heat and power generators in the country," said Secretary O'Mara. "NRG deserves recognition for taking this bold action to move towards a high efficiency natural gas facility, cutting down on their emissions and contributing to the goal of improving air quality in Delaware."

Following NRG's investment at the Dover Energy Center and the shut down of Indian River Unit 3 at the Indian River Power Plant in 2013, the only remaining coal unit in Delaware will be Indian River Unit 4. NRG is currently investing \$360 million in emissions control upgrades that will make the plant

among the cleanest existing coal-fired units in the nation.

Using cleaner-burning natural gas at the Dover plant will result in significant emissions reductions, including SO₂, NO_x, particulate matter, mercury and other air pollutants. The project will prevent more than 4 million pounds of SO₂, 800,000 pounds of NO_x and 120,000 pounds of particulate matter from being emitted into the air annually. This results in reductions of 99 percent of SO₂ and 92 percent of NO_x emissions – two air pollutants that can cause serious respiratory conditions – and more than 65 percent of the smokestack particulate emissions. In addition, 117,000 pounds of hydrochloric and sulfuric acid, 14 million pounds of fly ash and bottom ash, and virtually all mercury and lead emissions produced from coal combustion will be eliminated.