

## AUDRAIN INFORMATION MEMORANDUM

### Overview

NRG Energy, Inc. (NRG) acquired a 100% undivided interest in Duke Energy Audrain, LLC from Duke Energy North America on May 10, 2001. NRG's interests in the Audrain project are held by its direct, wholly owned subsidiary, NRG Audrain Holding LLC (Audrain). Audrain's operations are carried out through its wholly owned subsidiaries NRG Audrain BondCo LLC and NRG Audrain Generating LLC (Audrain Generating, formerly known as Duke Energy Audrain, LLC). Audrain Generating was established to develop, construct, lease and operate the 640MW gas-fired simple cycle merchant generation facility located in Vandalia, Missouri, approximately 105 miles northwest of St. Louis (the "Project").

### Project History

Audrain was designed and constructed by Duke Energy Audrain under a turnkey, lump sum Engineering & Construction (E&C) Contract. Audrain achieved Substantial Completion and met performance guarantee requirements under the E&C Contract on May 9, 2001.

### Site Description

Audrain and related equipment are situated on a site totaling approximately 105 acres at an elevation of just over 762 feet. The site is located 60 miles north of Interstate 70, 105 miles from St. Louis. The site was previously used for agriculture.

### Electricity Interconnection

Ameren completed the appropriate interconnection and system studies. Ameren designed, procured, and constructed the switchyard as well as other system upgrades needed to interconnect Audrain to Ameren. Ameren operates and maintains the new switchyard as necessary to reliably and safely interconnect the facility to the electric transmission system.

Audrain has an Interconnection Agreement with Ameren dated January 2001. The Interconnection Agreement established and defined the respective responsibilities regarding the provisions of the installed equipment and facilities, and Audrain interconnecting equipment, and all that was necessary to interconnect the plant to the Ameren electric transmission system. These facilities include protection and controls, metering equipment, and all necessary connection, switching, transmission, distribution, safety engineering, communication and protective equipment. The interconnection facility was designed in accordance with the findings from the Ameren Facility Study, dated September 19, 2001. Ameren has completed construction and testing of its installed facilities.

Under the Interconnection Agreement, Duke paid Ameren for actual costs incurred to design, construct, modify, test and install its facilities, and for easements, right of way, permits, and the like, to connect the plant to the electric system. Each company operates, maintains, repairs and inspects its respective interconnection facilities at Audrain's expense.

In addition, the Interconnect Agreement specifies the responsibilities of either party for billing, dispute resolution, insurance, limitation of liability, indemnification, warranties, default and termination.

### **Fuel Supply and Transportation**

Panhandle Eastern Pipeline Company (PEPL) owns and operates the natural gas interconnection under a 20-year interruptible natural gas agreement. The natural gas fuel supply to the facility is transported by way of a PEPL interconnection. The interconnection is designed to supply a minimum flow rate of 500 dekatherm per hour at the delivery point at the site. A pressure regulating station reduces the gas pressure to 350 psig operating pressure as required by GE specifications.

### **Long-Term Power Purchase Agreement**

At this time, NRG does not have any long-term power purchase agreements in place for its interest in Audrain. NRG Power Marketing (NPM) sells and markets the offtake produced by Audrain.

### **Equipment Configuration**

Audrain's power train includes eight General Electric MS7001EA turbines and Brush generators. The CTGs are fired exclusively by natural gas. Electrical generators connected to the eight CTGs are connected to the switchyard through 4 individual generator step-up transformers (two generators per transformer). These transformers raise the generated voltage to 345 kV for connection into the AmerenUE electrical system under the terms of the 30-year Interconnection Agreement.

The CTGs are equipped with inlet air fogger systems and dry low NO<sub>x</sub> (DLN) combustion systems. The Audrain Project's combustor is guaranteed to meet a NO<sub>x</sub> emissions limit of 9 ppm and the facility's NO<sub>x</sub> levels were guaranteed by DFD under the Environment & Compliance Contract at 9 ppm. Since Commercial Operation, the CTGs have averaged NO<sub>x</sub> emissions below 8.5 ppm during base load operations.

### **Circulating Water System**

Audrain Station CTGs have a closed loop circulating water system that is treated with ethylene glycol for freeze protection.

**Plant Control System**

Audrain has a central control room which houses modern state-of-the-art computer equipment including a Mark V turbine control system, distributed control system (DCS), vibration monitoring system, and CEMS. The CTGs are controlled by independent GE Speedtronic Mark V turbine control systems that provide primary control and engineering functions for the turbine generators. The Fisher-Rosemount Delta V DCS system provides plant process control, including Balance of Plant. A Bentley-Nevada 3300 Vibration Monitoring system monitors the turbine generator units.

**Emissions Control System**

Cisco hardware and VIM Technical software are included as part of the 8 fully automated and redundant CEMS to continuously monitor air pollution concentrations in flue gas from the CTGs. Audrain currently meets emission permit requirements.

**Water Treatment System**

Audrain utilizes potable water from the Monroe County Water District as makeup water for the fire main and demineralized water service for the CTGs. The treatment system is provided, as required, under contract with Ecolo Chem Inc. for demineralized water makeup to the demineralized storage tank, two demineralized water feed pumps, three demineralized forwarding pumps, and a 380,000 gallon demineralized water storage tank are permanent plant equipment.

**Operations and Maintenance**

The O&M agreement between Audrain and NRG Operations dated October 12, 2001 provides for the administration, operations, and maintenance of Audrain and will remain in effect for a term of ten years after the effective date, with subsequent five-year renewals at Audrain's discretion.

A Duke Energy Audrain Contract and Procurement Agreement provides warranties for all machinery, engineering and design, and for situations involving corrections, additions, repairs or replacements, excluding defects attributable to the manufacture of the turbines, which are provided in the Turbine Contract with GE.

**Water Supply and Waste Water Disposal Management**

The water supply for firewater and demineralized water service is provided from the Monroe County Water District as described above. The portable, trailer mounted system is a single train system sized for 215 gallons per minute makeup requirement.

**Property Taxes**

Under the financing structure for the Audrain generating facility, the project is exempt from real and personal property taxes in exchange for annual grant payments by NRG Audrain Holding LLC to the local taxing authorities. The annual grant payments are \$350,000 through 2006. Beginning in 2007, the annual grant payments increase annually by the increase in the Consumer Price Index, but not more than 3% per year.

**Financial Information**

Available upon execution of a Confidentially Agreement.

**Insurance**

NRG maintains insurance coverage that for Audrain is sufficiently comprehensive in scope and amount. Audrain's insurance is on a full replacement value basis. Audrain is included in NRG's corporate policy for third party liability.

**Employees**

Audrain has 10 employees.

**Permits and Regulatory Approvals**

Audrain has obtained all permits, licenses and approvals required for operations and is operating in compliance with its emissions permit.

**Environmental Matters**

Similar to other gas-fired plants using GE-7EA technology, Audrain is significantly more environmentally friendly than other fossil fuel based generation such as coal or oil. Audrain has been designed and constructed to comply with all current environmental rules and regulations.