

The 240MWe Facility is the Largest Post-Combustion Carbon Capture Project in the World

WASHINGTON, D.C. -- Secretary of Energy Rick Perry took part in a ribbon-cutting ceremony today to mark the opening of Petra Nova, the world's largest post-combustion carbon capture project, which was completed on-schedule and on-budget. The large-scale demonstration project, located at the W.A. Parish power plant in Thompsons, Texas, is a joint venture between NRG Energy (NRG) and JX Nippon Oil & Gas Exploration Corporation (JX).

"I commend all those who contributed to this major achievement," said Secretary Perry. "While the Petra Nova project will certainly benefit Texas, it also demonstrates that clean coal technologies can have a meaningful and positive impact on the Nation's energy security and economic growth." Funded in part by the U.S. Department of Energy (DOE) and originally conceived as a 60-megawatt electric (MWe) capture project, the project sponsors expanded the design to capture emissions from 240 MWe of generation at the Houston-area power plant, quadrupling the size of the capture project without additional federal investment.

During performance testing, the system demonstrated a carbon capture rate of more than 90 percent. At its current level of operation, Petra Nova will capture more than 5,000 tons of carbon dioxide (CO₂) per day, which will be used for enhanced oil recovery (EOR) at the West Ranch Oil Field. The project is expected to boost production at West Ranch from 500 barrels per day to approximately 15,000 barrels per day.

It is estimated that the field holds 60 million barrels of oil recoverable from EOR operations. The successful commencement of Petra Nova operations also represents an important step in advancing the commercialization of technologies that capture CO₂ from the flue gas of existing power plants. Its success could become the model for future coal-fired power generation