
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported):

September 24, 2007

NRG Energy, Inc.

(Exact name of registrant as specified in its charter)

Delaware

001-15891

41-1724239

(State or other jurisdiction
of incorporation)

(Commission
File Number)

(I.R.S. Employer
Identification No.)

211 Carnegie Center, Princeton, New Jersey

08540

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code:

609-524-4500

Not Applicable

Former name or former address, if changed since last report

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
 - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
 - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
 - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 8.01 Other Events.

NRG Energy, Inc. ("NRG") announced that NRG and South Texas Project Nuclear Operating Company will file a Combined Construction and Operating License Application today with the Nuclear Regulatory Commission to build and operate two new nuclear units at the South Texas Project nuclear power station site. A copy of the press release is included as an exhibit to this Form 8-K and is hereby incorporated by reference.

Item 9.01 Financial Statements and Exhibits.

Exhibit Number - Document

99.1 Press Release, dated September 24, 2007

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

September 24, 2007

NRG Energy, Inc.

By: */s/ J. Andrew Murphy*

*Name: J. Andrew Murphy
Title: Exec VP & General Counsel*

Exhibit Index

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release, dated September 24, 2007

NEWS RELEASE

FOR IMMEDIATE RELEASE

NRG Energy Submits Application for New 2,700 Megawatt Nuclear Plant in South Texas

—First nuclear plant license application in 29 years—

—Plant will produce no greenhouse gas emissions—

PRINCETON, NJ, September 24, 2007—NRG Energy, Inc. (NYSE: NRG) and South Texas Project Nuclear Operating Company (STPNOC) will file a Combined Construction and Operating License Application (COLA) today with the Nuclear Regulatory Commission (NRC) to build and operate two new nuclear units at the South Texas Project (STP) nuclear power station site. The total rated capacity of the new units, STP 3 and 4, will equal or exceed 2,700 megawatts (MWs) – enough to power more than two million homes. NRG expects to bring the units on line in 2014 and 2015 in order to provide reliable and affordable power to fuel Texas' continued growth and economic prosperity.

“It is a new day for energy in America. Advanced technology nuclear power plants like STP 3 and 4, generating a vast amount of electricity cleanly, safely and reliably, will make an enormous contribution toward the greater energy security of the United States,” said David Crane, NRG’s President and Chief Executive Officer. “But equally, this announcement heralds a new day for the environment. Advanced nuclear technology is the only currently viable large-scale alternative to traditional coal-fueled generation to produce none of the traditional air emissions—and most importantly in this age of climate change—no carbon dioxide or other greenhouse gases.”

This license submittal continues NRG’s leadership role in moving U.S. electrical generation to new, cost-effective baseload power that does not contribute to global climate change and is the first license application submitted to the NRC for a new nuclear plant in 29 years.

STP 3 and 4 are being developed as part of the Company’s *Repowering* NRG initiative to build approximately 10,000 MW of new, highly efficient, clean power generation facilities that leverage NRG’s existing facilities’ infrastructure, support a diverse fuel mix to reduce foreign energy dependence, and implement technologies that reduce NRG’s carbon intensity.

The South Texas Project Nuclear Operating Company, which currently operates units 1 and 2, will operate the new units as well.

The U.S. Department of Energy projects that the United States will need 40 percent more electricity by 2030. According to the Electric Reliability Council of Texas (ERCOT), energy needs in Texas alone will grow by 10,000 MWs by 2014. STP 3 and 4 will help meet this growing demand without increasing U.S. dependence on foreign sources of oil. These new units also will help reduce demands on domestic supplies of natural gas, on which Texas currently depends on for most of its power generation requirements.

“This is an historic event for the future of nuclear power in America. Around the world, consumers are benefiting from clean, efficient nuclear power. Finally, as a result of years of hard work, our nation is now on the verge of taking greater advantage of this technology. I’m excited to see an investor-owned company submit the first combined operating license application in nearly 30 years, and I hope it is the first of many to come,” said United States Senator Pete Domenici (R-NM), who serves as ranking member of the Senate Energy and Natural Resources Committee.

“Nuclear power is an essential component of any comprehensive national energy plan,” said United States Senator Mary Landrieu (D-La.). “It has been 20 years since we have built a nuclear power plant, and it is long past time that we build a new one. According to the Nuclear Energy Institute, 35 new nuclear power plants are needed in the next 40 years to keep pace with our escalating energy demand. A new power plant in Texas will prove to help combat the impact of global climate change and allow America to continue on a path toward energy independence.”

The STP site in Matagorda County, Texas is considered to be one of the best sites in America for nuclear expansion. The 12,220-acre site and 7,000-acre cooling reservoir were originally designed for four units. The two new units will be built adjacent to the currently operating STP units 1 and 2.

“We are very pleased to be a part of this milestone application for the first new nuclear plant in decades,” said Judge Nate McDonald, Matagorda County Judge. “The South Texas Project has an outstanding record of safety and excellent performance and is a good neighbor in our community. We welcome this expansion to Matagorda County and look forward to helping bring additional clean, safe nuclear power to Texas.”

NRG has chosen Advanced Boiling Water Reactor (ABWR) technology for the new units to be built at the STP site. The technology reflects 50 years of continued evolution of boiling water reactor (BWR) technology and combines the best features of the worldwide BWR fleet with advanced technology enhancements that improve safety, performance and longevity. ABWR technology is certified by the NRC and has an impressive construction and operational track record. This includes setting world records for construction time and bringing the units in on budget.

Four ABWR units have been successfully commissioned in Japan, with another three units under construction in Taiwan and Japan. The Tokyo Electric Power Company, Inc. has more than a decade of experience in ABWR operations and has provided their expertise to supporting STP's planned two-unit expansion.

"We have chosen NRC-certified, operationally proven technology and the best possible, most experienced team to build STP 3 and 4," added Crane. "We expect to build these facilities on time, on budget and to the exacting standards that will guarantee excellence in safe and reliable nuclear operations."

In June 2006, NRG filed its letter of intent to submit an application with the Nuclear Regulatory Commission to construct STP units 3 and 4. STPNOC, together with a contracting team successfully led by GE-Hitachi Nuclear Energy (GE-H) and Bechtel, has prepared the COLA for STP units 3 and 4 in just over one year for submittal to the NRC.

With the COLA submitted, the NRC begins an estimated two-month acceptance review process. It is then anticipated that the NRC could take up to 42 months for its detailed review process including staff discovery, site visits, company responses, hearings and NRC Environmental Impact Statements. Assuming this schedule, NRG would hope to receive its license approval and begin construction in 2010. With this time frame, STP unit 3 should come on line in 2014 and unit 4 in 2015.

The multibillion dollar investment is expected to generate more than \$9 billion of economic benefit principally in the South Texas area, require 4,000 to 6,000 construction workers, and result in about 800 new operating staff positions at the plant.

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 standing together in 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.

About the South Texas Project

STP's reactors supply power to Houston, Austin, San Antonio, Corpus Christi and surrounding areas. The plant is managed by the STP Nuclear Operating Company and units 1 and 2 are owned by NRG Energy (44 percent), CPS Energy (40 percent) and Austin Energy (16 percent). STP's twin reactors produce nearly 2,700 megawatts of electricity, enough to power more than 2.1 million homes. More information about the South Texas Project is available at www.stpnoc.com.

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 the proposed timing and NRG's expectations regarding the South Texas Project and nuclear power plant expansion and typically can be identified by the use of words such as "will," "expect," "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, general economic conditions, permitting and regulatory obstacles, and construction delays.

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.

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Fact sheets and photos on the STP expansion will be available at www.nrgenergy.com.

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