Required Information in response to New York Energy Highway RFI

1-Respondent information

a. Respondent's name, address and primary contact information including name, title, address, telephone and email

Respondent's name: Entergy Nuclear Power Marketing, LLC. ("ENPM"), acting as agent for Entergy Nuclear Operations, Inc. ("ENOI"), Entergy Nuclear IP2 LLC ("ENIP2"), Entergy Nuclear IP3 LLC ("ENIP3) and Entergy Nuclear FitzPatrick LLC ("ENF"),

Respondent's address: 440 Hamilton Ave, White Plains, NY 10601

Primary contact: Marc Potkin, Vice President Power Marketing

Address: 440 Hamilton Ave, White Plains, NY 10601

Phone: 914-272-3391

Email: mpotkin@entergy.com

b. Brief summary of Respondent's background and relevant experience

Since 2006, ENPM has managed all origination and New York Independent System Operator (NYISO) bidding and settlement activities for 2900 MW of nuclear generating capacity for the Indian Point and FitzPatrick stations. ENPM has successfully competed in a number of competitive, market-based RFP processes to supply energy and capacity in New York State. In addition, ENPM has structured and successfully executed long-term Power Purchase Agreements (PPAs) with the New York Power Authority (NYPA), Long Island Power Authority (LIPA), Con Edison and the other investor-owned utilities in New York. All transactions with ENPM have been market-based and have not relied on subsidies here in New York or in the other deregulated markets where Entergy's nuclear units are located.

2- Project description

a. Type of proposed project (generation, transmission or combination)

To best serve the interests of New York's consumers, ENPM proposes to offer long-term, fixed price and/or indexed priced power into any competitive RFP or solicitation process that is established by the Task Force or that may be undertaken as a result of the New York State Energy Highway Initiative.

b. Size of proposed project, with expected capability in energy and capacity

Indian Point is a two unit, pressurized water reactor site (IP2 and IP3). IP2 and IP3 generate 1028 MW and 1041 MW of virtually carbon-free, base-load energy, respectively.

The James A. FitzPatrick (JAF) Nuclear Power Plant is a single unit boiling water reactor site. JAF generates 838 MW of virtually carbon-free, base-load energy.

With high annual capacity factors and extremely low forced outage rates, IP2, IP3 and JAF are able to supply a large portion of the region's energy and capacity requirements.

According to the NYISO's 2012 Load & Capacity Data "Gold Book", Indian Point and JAF plants, produced 24,261 GWh of electricity in 2011, representing approximately 15% of the total energy consumed in NYS and approximately 30% of the energy consumed in Westchester County and New York City.

c. Proposed project location (NYISO zone, town, county)

IP2 and IP3 are located in NYISO Zone H, Buchanan, NY, in Westchester County and are directly connected to NYC via Con Ed's 345 kV Buchanan substation. (Please see the links below for additional information)

http://www.entergy-nuclear.com/plant_information/indian_point.aspx and

http://www.safesecurevital.com/

JAF is located in NYISO Zone C, Scriba, NY in Oswego County. (Please see the link below for additional information)

http://www.entergy-nuclear.com/plant_information/FitzPatrick.aspx

d. Fuel source and availability of fuel/infrastructure, as appropriate

Uranium

e. Earliest date project can be operational

N/A- Existing generation already in service

f. Experience, market availability and suitability of project technology

JAF has been in service since July 1975

IP2 has been in service since September 1973 and IP3 since April 1976

The capacity factors for the last 3 years are listed below. The 3 year average capacity factor for Entergy's three New York units is 92.7% (including the 4 refueling outages shaded in gray) below.

The suitability of existing nuclear technology to meet the State's initiative is discussed in detail in the Project justification section (3) below.

	2009	2010	2011
IP2	98.8%	81.9%	98.2%
IP3	84.7%	98.9%	90.5%
JAF	99.0%	85.1%	97.1%

3-Project justification

How the proposed project described above could address the State's objectives and goals.

a. Reduce constraints on the flow of electricity to, and within, the downstate area; and expand the diversity of power generation sources supplying down state.

Indian Point is located in Zone H in southeastern New York, an area of the State that is subject to transmission constraints that limit transfers into that area. Indian Point generates over 2000 MWs of base-load energy that is not constrained by the Leeds–Pleasant Valley transmission transfer limits and is therefore fully deliverable to the lower Hudson Valley and Westchester County. The key benefits include: (i) the ability to provide base load power on a 24 x 7 basis to the high load centers in southeastern New York unaffected by the significant transmission constraints to its north; and (ii) as a dynamic resource, the ability to provide critical ancillary services to most effectively manage system reactive needs.

In addition to its output being virtually carbon free, nuclear power provides critical fuel diversity in the downstate area to counter an overreliance on natural gas in the downstate region. Historically, New York City and Long Island have had to rely on extra-market, reliability rule measures, known as minimum oil burn rules, to protect against black-outs

during peak operating conditions due to the loss of gas supply. Most new power plant capacity added in New York and New England in the past decade relies on natural gas to generate electricity. Without the fuel diversity provided by Indian Point, New York City's existing dependence on natural gas for power production would be dramatically increased. In addition, the State's ability to meet its RGGI goals would be severely affected.

b. Assure that long-term reliability of the electric system is maintained in the face of major system uncertainties.

The operation of IP2, IP3 and JAF helps assure that the long term reliability of the system is maintained by virtue of their fuel source, generating capability and location. In addition to generating over 22,600 GWh of virtually carbon-free energy annually, another benefit from the operation of Indian Point and FitzPatrick is the continuous, dynamic, voltage support that is provided to maintain the voltage performance of the bulk power system in downstate and western New York. Over time, as generating facilities have retired and as load has grown in certain areas, New York has substantially increased its reliance on capacitor bank installations to address the system's reactive needs thus making the availability of dynamic resources in certain locations, such as Oswego and the Lower Hudson Valley, all the more critical.

c. Increase efficiency of power generation, particularly in densely populated urban areas.

The existing Indian Point and FitzPatrick nuclear units, operate at a high capacity factor, provide energy that is virtually free of carbon emissions, serve as efficient alternatives to delivering power over long distances and have been identified as necessary to meet the bulk power system's reliability requirements.

d. Contribute to an environmentally sustainable future for New York State

Environmental benefit to the region - Nuclear power is one of the cleanest sources of energy. Indian Point and FitzPatrick emit very low levels of greenhouse gases, such as carbon dioxide (CO2), the gases which have been linked to global warming. Emissions of sulfur dioxide (SO2) lead to the formation of acid rain. Nitrogen oxide (NOx) is a key precursor of both ground-level ozone and smog. Indeed, absent nuclear generation, the State's long-advanced RGGI goals would be significantly compromised. During 2010*, environmental emissions avoided due to nuclear power plant operation in New York included 28,000 tons of sulfur dioxide, 15,000 short tons of nitrogen oxide and 24 million metric tons of carbon dioxide. Based on Indian Point's and FitzPatrick's 2010 generation output, these units were collectively responsible for over 54% of the avoided environmental emissions attributed to nuclear plants operations in New York. (JAF 15.2%, INDIAN POINT 39.0%)

* Source: Emissions avoided by nuclear power are calculated using regional fossil fuel emissions rates from the Environmental Protection Agency and plant generation data from the Energy Information Administration and NYISO 2011 Load & Capacity Data "Gold Book"

e. Create jobs and opportunities for New Yorkers

Jobs –Indian Point and FitzPatrick provide employment to 1730 highly skilled, full-time employees (Indian Point - 1100 and JAF 630) and over 200 contractor jobs in New York State today.

Fitzpatrick is one of Oswego County's largest employers and has an annual payroll of approximately $ 70 Million from full-time employees and contractors. JAF pays over $19 Million in annual property taxes. Dedicated JAF employees continue to focus on community involvement through their contributions to more than 60 community initiatives.

Indian Point has an annual payroll of approximately $130 Million from full-time employees and contractors. Indian Point pays over $26 Million in annual property taxes. Dedicated Indian Point employees contribute thousands of volunteer hours throughout the communities in the region.

Entergy and its employees also contribute over $2.0 Million to various charities in New York State.

4- Financial

a. Prospects of a private-public partnership

ENPM will not request a subsidy in any form, directly or indirectly, or any incremental funding from New York consumers as a condition to enter into long term power contracts.

b. General financial structure and funding options

ENPM will not seek to lean on the State's ability to secure financing on more attractive terms nor will it otherwise request any other financial backing from the State.

5- Permit/approval process

a. Federal, State and local permits needed to develop and operate the project

ENPM's power supply sources – The Indian Point and FitzPatrick plants are subject to many federal, State, and local permit approval processes and regulatory programs. This response is not intended to be exhaustive regarding those programs. Indian Point and FitzPatrick are existing sources, and so do not need permits applicable only to new sources. Permits regarding continued operation or modification of the facilities may

apply, depending on the particular facts of the permit program or of the modification sought. Indian Point and FitzPatrick hold all permits necessary to operate, as they have done safely, reliably, and economically for many years. Permits required for operation include, but are not limited to, (i) licenses to own and operate a commercial nuclear reactor issued by the U.S. Nuclear Regulatory Commission (NRC); and (ii) federal, state, and local environmental approvals such as State Pollutant Discharge Elimination System ("SPDES") permits issued by the New York State Department of Environmental Conservation (NYSDEC).

b. Permitting status, including NYISO interconnection status *See* responses to "a" and "c."

As existing resources, the Indian Point and FitzPatrick plants already have Interconnection Agreements in place and possess capacity deliverability rights for their output.

c. Key uncertainties in federal, State and local project permitting, and suggestions for how such uncertainties can be addressed.

The current terms of the NRC licenses for IP2 and IP3 end on September 28, 2013 and December 12, 2015, respectively. Application for renewal of those licenses for 20 years each was filed with the NRC in April 2007. Under federal law, Indian Point's NRC licenses will be extended automatically while license renewal proceedings remain pending. FitzPatrick's NRC license has been extended through 2034.

IP 2 and IP3's SPDES permit was issued September 2, 1987, and has been administratively continued under New York law since its original term ended. DEC issued a draft renewal SPDES permit in November 2003, and administrative litigation regarding this permit is pending before NYSDEC. FitzPatrick's SPDES permit was issued August 1, 2008.