RESPONSE TO REQUEST FOR INFORMATION

TO: Mr. Gil C. Quiniones
Co-Chair, Energy Highway Task Force
President and CEO
New York Power Authority
113 Main Street
16th Floor
White Plains, N. Y. 10601-3170

RE: REQUEST FOR INFORMATION (RFI) BY THE NEW YORK ENERGY HIGHWAY: RE-POWERING OF NORTHPORT POWER STATION

DATE: May 25, 2012

Dear President Quiniones:

The Northport Power Station ("Northport") is a 1500 MW generating facility located in the Town of Huntington, New York. Northport is a major factor in Long Island and New York State's energy generation. In 2009 the Long Island Power Authority ("LIPA") and Northport's owner National Grid commissioned a study to explore the possibilities of re-powering Northport which would result in increased MW generation, energy efficiency, and lower costs (all goals set out by the New York Energy Highway RFI). Below is Lewis & Greer P.C.'s response to the RFI as outlined and required by the New York Energy Highway Task Force seeking a re-powering of the Northport Power Station as a means to benefit ratepayers and taxpayers on Long Island. The Town of Huntington believes that it is in the best interest of the residents of the Town, Long Island and New York State for Northport to be re-powered. The re-powering would increase Northport's output and efficiency and allow the ratepayers in the Town of Huntington and Long Island to benefit from lower energy costs.

Respondent Information

For the Town of Huntington:

Lou Lewis, Esq.
Lewis & Greer, P.C.
510 Haight Avenue
Poughkeepsie, New York 12603
Phone: 845-454-1200
Fax: 845-454-3315
www.lewisgreer.com

This firm concentrates its practice in real property tax and energy related issues.

Project Description

Re-powering the 1500 MW Northport Power Station located in the Town of Huntington, County of Nassau, New York, NYISO Zone K. This facility consists of four 375 MW units on a nominal 250 acre site. Unit 1 started operation in 1967, Unit 2 started in 1968, Unit 3 started in 1972 and Unit 4 started in 1977. Each unit has a Combustion Engineering tangentially fired boiler and a General Electric G-2 type steam turbine generator. The units are dual fuel (i.e. natural gas and No. 6 fuel oil). There is also a black start gas turbine onsite. An offshore unloading platform, approximately two miles from the site, on Long Island Sound, allows No. 6 fuel oil deliveries from barges and oil tankers to an onsite tank farm consisting of five fuel oil storage tanks. The Iroquois gas pipeline, and its associated Eastchester extension, crosses onto Long Island at Northport. An Iroquois metering and emergency vent system is located onsite. A National Grid pressure regulator and gas heater facility supplies natural gas to each Northport unit via an individual unit meter and control station. The step-up transformers and onsite

electrical substation are owned by LIPA. The site currently uses once-through cooling utilizing an intake lagoon and discharge canal that connects to Long Island Sound. Northport is 38 miles east of Indian Point.

Stone & Webster Consulting has prepared a study[1] evaluating the options available for re-powering Northport with combined-cycle technology (the "S&W Study"). The S&W Study considered both traditional "hybrid" re-powering scenarios utilizing the existing steam turbines and "backyard" or site re-powering scenarios utilizing stand-alone new combined cycle units. The S&W Study consisted of two phases; the first phase considered the number of existing units which could be re-powered and the maximum incremental 440 MW of capacity which could be added to the site given the existing physical, technical, regulatory and other constraints of the site. The second phase of the Study examines the selected two re-powering cases in more detail.

Project Justification

The re-powering of Northport addresses many of the State's goals in regard to this RFI including assuring the long term reliability of the electric system in the face of major system uncertainties. It also constitutes a partial solution to the possible retirement of Indian Point - a major priority of the Governor's Office. Other State goals that the re-powering of Northport addresses are: maintaining reserve requirements on Long Island, increased energy efficiency, creating jobs and opportunities, helping New York become more environmentally friendly by helping to reducing the New York's carbon footprint and delivering electricity at beneficial prices to New York ratepayers.

[1] Stone & Webster Management Consultants, Inc., Re-powering Study for the Northport and Port Jefferson Power Stations, prepared for LIPA and National Grid, 2009.

A. Retirement of Indian Point

As the uncertainty of the future of Indian Point continues, New York needs to be prepared to make up the potential loss of 2,000 plus MW from the grid. Opposition to the continued operation of Indian Point has grown in part because of the Fukushima disaster and the Governor has stated that the risks of an accident at Indian Point are not worth its benefits, especially when power plants such as Northport can be repowered to help make up for the deficiency of power in the event of Indian Point not being re-licensed by the NRC.

New York State or the New York Control Area ("NYCA") is currently forecast to use 33,335 MW of power in the 2012 summer peak, (*See* New York Control Area Installed Capacity Requirements: Technical Study Report, December 2, 2011) and is expected to require as much as 37,834 MW in the summer peak of 2020 (*See* NYISO 2010 Reliability Needs Assessment). Indian Point currently provides over 2,000 of those MW and its loss would require an increase of over 6,000 MW from various sources to close the deficiency by 2020. One such source could be the 1,500 MW Northport Power Station. As outlined in the Project Description Section the re-powering of Northport could increase Northport's MW output by as much as 444 MW. The 444 MW increase standing alone would qualify as the fifth largest new MW generation addition of all proposed future generation projects in New York (*See* NYISO 2011 Load Capacity and Data "Gold Book").

B. Long Island load requirements

Long Island (Zone K) has a demand of 5,494 MW (Summer Peak 2011 Forecast) and is expected to require 5,845 MW by the year 2020. Long Island is unique in that it must generate a set percentage (101 percent of the peak load) of its power domestically or "on island" (Zone J,

New York City has a similar requirement). Currently Long Island's only proposed generation addition is a 32 MW Solar unit called Upton Solar farms. If no other generation projects are added between now and 2020 on Long Island, Long Island may not be able to meet its 101 percent peak load requirement. Since the re-powering of Northport could add 444 MW of power it alone could make up the on-island MW shortage possible in 2020.

C. Compensating for losses from Indian Point

In addition any surplus MW could be sold into the grid to other zones to help ease the 2000 MW loss from Indian Point. LIPA is currently importing power from as far away as Nine Mile Point, outside Oswego, New York. Re-powering Northport could erase the need and market conditions for importing power from Nine Mile Point, thus making Nine Mile Point's MW available to meet increased demand in places like Westchester County and New York City arising from the retirement of Indian Point. This would also meet the New York Energy Highway objective of freeing up space on transmission lines throughout the state. Re-powering Northport allows for a multitude of options to serve NYCA's generation needs.

Financial

The following chart excerpted from the above mentioned S&W Study is a cost estimate for two of the re-powering options for Northport.

Capital Cost Estimate for Northport Options

	Hybrid Option [3]	Backyard Option [3]
Project Cost[1]	$825 million[6]	$1.14 billion[7]
Gas, Electrical and Other Costs[2]	$760 million	$762 million
Total Cost	$1.6 billion	$1.9 billion
MW	763[4]	$15[5]
$ kW	$2076	$2332

[1]Includes engineering, procurement, and construction cost, demolition, existing equipment upgrades, and contingency. Project cost could range between ±10%.

[2]Includes switchyard upgrades, transmission upgrades, VAR support, natural gas tie-in, permitting, project development & management, spare parts, and start-up.

[3]2008 dollars and does not include the financing costs

[4]Results in 388 MW incremental increase in site capacity

[5]Results in 440 MW incremental increase in site capacity

[6]Includes $0.72 million demolition cost

[7]Includes $0.13 million demolition cost

Permit/Approval Process

The adoption of the Power NY Act of 2011, which codified a statewide permitting process for the siting of major electric generating facilities, has streamlined the permitting process for the re-powering of existing electric generation facilities. This development is very beneficial for a re-powering project such as the one advocated for in this submission, and could reduce the associated costs of the project. However until the final regulations for implementing the new Article 10 provisions are finalized some uncertainty regarding the permitting process remains.

Article 10 outlines a permitting process that requires any new power plant and/or re-powering of an existing power plant to file a preliminary scoping statement which outlines the proposed facility and any potential environmental and health impacts. Once the pre-application procedures are complete the actual application process begins which includes an amplification of the preliminary scoping statement in addition to a security plan for construction and operation of

the facility, an analysis of environment justice issue, an air quality impact analysis, a comprehensive demographic, economic and physical description of the community where the facility will be located, an analysis on the potential impact that the facility will have on the wholesale generation markets and a statement demonstrating that the facility is reasonably consistent with the most recent state energy plan. Northport it uniquely qualified to meet the Article 10 application requirements because many of those requirements are already met. As outlined in this RFI response the re-powering of Northport fits with the most recent New York State energy plan, Northport is currently operating and has a security plan for operation in place, the community the facility is located in already accommodates a major electric generation facility and constructing 400 plus MW of power at an alternative location isn't reasonable with the Northport location already fully operational, not to mention the location would have to be on Long Island to meet load capacity standards in Zone K. Also most of the environmental impact analysis has been completed in part during the commission of the S&W Study; requiring less work during the pre-application phase.

Finally a further examination of all permit requirements is not possible at this time as the Public Service Commission and Department of Environmental Conservation have not finalized their accompanying regulations. However below is a review of the permitting requirements outlined by the S&W Study prior to the adoption of Article 10 and which for all intents and purposes will be relevant even after the final adoption of article 10 regulations.

- Certificate of Public Convenience and Necessity from the NYPSC (CPCN).
- 404 Permit from the Army Corp of Engineers.
- Prevention of Significant Deterioration Permit (PSD) from the DEC.
- Part 201 State Air Permit from the DEC.
- Title V or Plant Operating Permit from the DEC.
- Coastal Zone Management Permit from the Department of State.

- SPEDES Permit from the DEC.
- SPEDES Permit for Construction from the DEC.
- 401 Water Quality Permit from the DEC.
- Tidal and Fresh Water Permit from the DEC.
- Coastal Erosion Permit DEC
- Determination of No Hazard to Navigation Permit from the FAA.
- Other permits may be required

Property:

The re-powering of Northport will occur at Northport's current location. The property is owned by National Grid and located at Waterside Avenue in the Town of Huntington, Suffolk County, New York. The property consists of over 250 acres on the North shore of Long Island and is zoned as Industrial property, specifically Electric Generating.

Projected In-Service Date and Project Schedule:

Regardless of whether the Hybrid or Backyard re-powering option is used to re-power Northport the interval from the initial bidding until commercial operation will take approximately 3 to 3 ½ years. The S&W Study estimates 3 years would be consumed by obtaining purchase power agreements (negotiations are currently underway with LIPA) and various permits, with the actual engineering and construction not to occur until after year 3. However, the regulations that are currently being promulgated regarding the recent adoption of Article 10 for the siting of Major Electric Generation Facilities will considerably reduce the permitting process timeline cutting years off the estimated completion date put forward in the S&W Study. According to Article 10, once the New York State Board of Electric Generation Siting has determined that the application for the facility has been complete a final board decision of the approval or disapproval of the proposed re-powering must be complete within (6) months. When you factor in Article 10 along with the fact that the negotiations of the purchase

power agreement between LIPA and National Grid have already begun the timeline set out by the S&W Study of 6 years decreases dramatically and the commercial operation should be possible within 3 ½ years.

Re-powering Northport is a necessary step in maintaining the reliability of the power grid in New York and Long Island. The re-powering will provide much needed MW to help capacity requirements on Long Island and alleviate the pressure of the New York power grid in the event that Indian Point is not relicensed. Re-powering Northport can accomplish the above mentioned goals and do so in a way which is consistent with current state energy policy, by having a minimal environmental impact while providing efficient affordable energy.

Respectfully submitted:

Lou Lewis, Esq.
Lewis & Greer, P.C.
510 Haight Avenue
Poughkeepsie, New York 12603
Phone: 845-454-1200
Fax: 845-454-3315
Visit our website at www.lewisgreer.com