IN THE MATTER OF THE BOARD'S INVESTIGATION OF CAPACITY PROCUREMENT AND TRANSMISSION PLANNING BPU - Docket No. EO-11050309

Comments of NRG Energy, Inc.
Before the New Jersey Board of Public Utilities
June 17, 2011

Good Morning President Solomon, I am Ray Long, Vice President, Government Affairs for the Northeast Region, NRG Energy, Inc. NRG Energy is a Fortune 250 wholesale power generation company headquartered in Princeton, New Jersey. We own and operate nearly 26,000 megawatts of electric generating capacity, or enough to support nearly 21 million homes. NRG's retail businesses, Reliant Energy and Green Mountain Energy Company, both of which are licensed in New Jersey, combined serve more that 1.8 million residential, business, commercial and industrial customers.[1]

NRG is also the parent company of New Jersey Power Development LLC, which is one of the successful Long-Term Capacity Agreement Pilot Program ("LCAPP") applicants and was awarded a Standard Offer Capacity Agreement ("SOCA") by the Board to develop 660 MWs of new, clean gas-fired electric generation capacity in Old Bridge, New Jersey.

Introduction:

The New Jersey Board of Public Utilities ("Board") has established a pressing reliability need for new in-state generation. The Board found that New Jersey cannot simply rely on low load growth projections and promised interstate transmission lines as the sole means of ensuring its energy security. NRG appreciates the opportunity to discuss its efforts to help New Jersey achieve the LCAPP objectives. NRG is:

- Supportive of the Board's efforts to solve identified reliability problems in New Jersey through the LCAPP program;

[1] Through subsidiaries, NRG Energy is also developing a combined heat and power / solar facility at the University Medical Center of Princeton at Plainsboro and a plasma gasification facility at the Atlantic County Utilities Authority landfill site.

- Enthusiastic about the Old Bridge project and the benefits that it will bring to New Jersey;
- Concerned about the impact that material changes to PJM's Minimum Offer Price Rule ("MOPR") will have on viability of the LCAPP projects; and
- Optimistic that there are solutions that can move the LCAPP projects forward that are consistent with PJM's rules but that also ensure that the LCAPP program goes forward as intended.

NRG's Old Bridge Project:

The development of a capital-intensive project such as NRG's Old Bridge project results in economic, environmental, and reliability benefits that extend beyond the project itself. The project will directly employ workers, indirectly increase New Jersey employment through the supply chain, and as a result of creating such jobs, produce further economic benefits. As the legislature intended when it adopted LCAPP, NRG's Old Bridge project will:

- Increase reliability by adding 660 MWs of new, clean in-state electric generation capacity in a area of the state that faces local transmission constraints;
- Create approximately 800 direct construction jobs during the 36 months it will take to construct the facility, and 26 to 30 permanent jobs for the ongoing operation and maintenance of the facility;
- Add more than 2,200 total direct, supply chain and induced New Jersey jobs during the construction phase, and 147 such jobs during the post-construction phase, representing an aggregate economic output of approximately $500 million; and
- Result in significant environmental benefits through the use of clean burning natural gas as the fuel source for the facility.

The Objectives of the LCAPP Program:

The objective of LCAPP, as noted by the New Jersey Legislature, is to provide the necessary incentives to bring new "real steel" into the electric generation capacity market in New Jersey, which will enhance the reliability of the electric system, bring increased employment and construction opportunities to our state. As noted in the State's just released Draft Energy Master Plan ("EMP"), the recent LCAPP proceeding: "was an attempt to address the problem that [PJM's Base Residual Auction] BRA capacity price outcomes are not bankable and do not support new generation entry in and around New Jersey."[2]

The State has Made a Clear Determination of the Need for New Generation in New Jersey:

The Legislature found it necessary to establish the LCAPP program to develop new electric generation facilities to, among other things, meet impending reliability problems by ensuring sufficient in-state generating capacity in a timely and orderly manner. The Board, in its May 16th Order initiating this proceeding, recognized a number of events which are expected to occur over the next five to eight years that will have a direct and substantial impact on both the reliability of supply and reliability of the transmission grid in New Jersey.[3]

Specifically, the Board recognized that as the economic recovery in New Jersey takes hold, it will increase the State's overall growth in demand in the long term.[4] Further, based upon PJM's own analysis, the Board is concerned that brownouts are likely in New Jersey due to delay of the entire Susquehanna-Roseland transmission line.[5] Meanwhile, interconnection queue delays contribute to delays in bringing new generation to market, and are stoking fears that new generation facilities cannot be brought on-line when needed. Longer-term, the Board has recognized that, as a result of the planned retirement of the Oyster Creek nuclear facility in 2019 and additional exports of power out of New Jersey, the State will face even greater uncertainty that adequate service reliability will be maintained.[6]

---

[2] Draft EMP at 22.

[3] May 16th Order at 2.

[4] Draft EMP at 30.

[5] May 16th Order at 4.

[6] May 16th Order at 3.

The Plusses and Minuses of the Reliability Pricing Model:

NRG is ready and willing to build generation in New Jersey. However, the market constructs and economics must support the large, capital-intensive and long-term investments that new generation projects entail. PJM's Reliability Pricing Model ("RPM") has been successful at encouraging the development of demand response resources and encouraging some *incremental* investment necessary to keep existing plants operating reliably.

The existing capacity market, however, is imperfect in that it provides only short-term price signals and does not provide sufficient long-term price-risk management tools.[7] Both of these elements are essential to incent competitive development of *new* generation resources in New Jersey. Specific barriers to developing and constructing new gas generation resources in New Jersey, include:

- Revenue risks from changes in regulations and laws, new transmission development, variations in load, and fuel prices make competitive developers reluctant to build new power plants without a means of hedging those risks over a period of time sufficient to allow them to earn a return on the capital required to build new plants;

- Because PJM' BRA prices are sensitive to even a little excess supply, building a billion dollar power plant in a capacity market that may become "flooded" by new generation entails significant financial risks to recovering that investment over twenty-to-thirty years that can only be offset with a secure long term revenue stream;

- There are few natural counterparties who will enter into long-term contracts for new power plants to be built in New Jersey in order to offset the risks identified above;

- PJM's policy of building new transmission lines for reliability purposes regardless of their economics makes it too risky to commit to and finance long-term investments in large power generation projects in New Jersey, which can be rendered uneconomic by new transmission; and

[7] NRG has previously supported incorporating a 10 year price "lock-in" into the RPM rules. Those efforts to date have been unsuccessful, but would help address these concerns.

- RPM does not provide the State with any means of ensuring that good, high-paying jobs associated with new construction or operating a power plant are located within New Jersey.

Thus, while NRG continues to support the competitive wholesale electricity markets, we recognize that there is also a role for the State of New Jersey to encourage the construction of new in-state generation resources where necessary to ensure system reliability and provide related benefits.

The State Designed the SOCA Contracts to Overcome these Barriers:

The State implemented LCAPP with the intent of addressing the key barriers facing NRG and other developers as they seek to develop new generating capacity in New Jersey. The SOCA was intended to provide stable capacity prices sufficient to allow the three LCAPP awardees to bring new, clean, efficient generation capacity to New Jersey.

- The associated reliable SOCA revenue stream mitigates some of the capacity market price volatility and risk that would otherwise discourage NRG from building the Old Bridge project;

- Reduces revenue risks from changes in regulations and laws, new transmission development and variations in electricity load that otherwise would have made NRG reluctant to build in New Jersey;

- The SOCA mandates a creditworthy counter-party sufficient for NRG to develop the Old Bridge project; and

- The Old Bridge project ensures that jobs stay in New Jersey.

However, as the Board is aware, the viability of the three projects that received awards under the 2,000 MW LCAPP program are at risk because of recent changes in the MOPR rule of PJM.

Challenges Facing the LCAPP Projects:

As a result of the rule changes put in place by PJM and FERC in April 2011, it will be much more difficult for projects such as Old Bridge to comply with the "must clear" obligation imposed under the SOCA.[8]

The "must clear" obligation was realistic at the time the LCAPP awards were made by the Board. PJM's market rules at that time allowed projects approved by State regulators to meet identified reliability needs to bid into the RPM in a manner that assured they could meet the must clear obligation (*i.e.*, as price takers).

However, on April 12, 2011, FERC eliminated the rule allowing units identified by New Jersey as necessary to preserve system reliability to clear in the RPM auction.[9] This rule change has a detrimental impact on the ability of LCAPP generation projects to clear the RPM auction. Instead of bidding into the market as price takers, a new entrant is now required to bid *at least* 90 % of the cost of new entry, or about $190/MW-Day, in today's dollars. Because prices in the last auction cleared lower than the minimum offer price mandated by PJM, there is a significant risk that a unit bidding into RPM for the 2015/2016 delivery year may not clear at this higher, mitigated, price. As noted in the Draft Energy Master Plan, FERC's action could prevent any or all of the LCAPP generators from clearing in the RPM auctions, which would effectively eliminate the benefit of the bargain associated with the three SOCA awards.[10]

Solutions for Moving Forward with the LCAPP Projects:

The State has identified a host of reliability, environmental and economic benefits to moving forward with the LCAPP contracts:

---

[8] On January 28, 2011, when LCAPP became law, the legislation required selected LCAPP generators with executed SOCAs to: offer capacity, electricity, and ancillary services into the PJM wholesale markets as required by PJM market rules. NJSA 48:3-98.3c.(11). The law further required the selected LCAPP generators to participate in ***and clear*** the annual Base Residual Auction ("BRA") conducted by PJM as part of its Reliability Pricing Model ("RPM") for each delivery year of the entire term of the SOCA Agreement. NJSA 48:3-98.3c.(12).

[9] *PJM Interconnection, LLC*, 135 FERC ¶ 61,022 (April 12, 2011) ("MOPR Order").

[10] Draft EMP at 68.

- Ensuring the reliability of New Jersey's electric system, particularly in the face of a robust economic recovery, retirement of existing coal and nuclear resources, etc.;
- Job creation in New Jersey;
- Providing environmentally friendly generation sources for New Jersey residents and businesses;
- Economic development in New Jersey for New Jersey; and
- FERC specifically stated that its rules were not intended to interfere with the right of New Jersey and other states to contract with new generation, and no additional approvals from FERC or PJM are required.[11]

We recommend that the State eliminate the must clear obligation from the SOCA contracts, while retaining the requirement that each of the contracted units *bid* into the RPM every year. Without this change, there is a very real risk that the Old Bridge project would receive no capacity revenues if it failed to clear in the RPM auction at the PJM-mandated minimum offer price of $191.25/MW-year. Not being able to count on a reliable stream of capacity revenues represents a nearly insurmountable barrier for potential developers that the LCAPP process was designed to overcome. However, by eliminating the "must clear" requirement from the SOCA, NRG can continue spending the money to develop the Old Bridge project and bring it on-line as planned, securing for New Jersey the benefits identified by the Board.

In addition to the benefits identified above, the construction of the Old Bridge project will markedly decrease the likelihood of capacity price spikes in upcoming RPM auctions, when retirements and load growth may well create a perfect storm of shortages and extremely high prices. Meanwhile, with the project, these same retirements and load growth should be anticipated to allow the Old Bridge project to clear in the BRA and to continue participating in the capacity markets as a price taker for the remainder of its expected life.

[11] FERC clarified that, "states are free to pursue their policy goals by financing new investments." MOPR Order at 194. Further, FERC stated that "the MOPR does not interfere with states or localities that for policy reasons seek to provide assistance for new generation entry if they believe such expenditures are appropriate for their state." MOPR Order at P 141.

Moreover, New Jersey can secure these benefits while continuing to engage with PJM and FERC on the existing rules. While there are still viable advocacy strategies at the FERC level, there is no guarantee that New Jersey will be able to persuade FERC to adopt a market structure that more readily accommodates long-term state-sponsored contracts.[12]

For the reasons discussed, it is crucial that we have access to a predictable stream of capacity revenues, such as the State intended to provide in the LCAPP legislation. In order to provide the necessary certainty in light of the changed MOPR rule, we recommend that the "must clear" obligation be removed from the SOCAs, which, in addition to the amendment of the SOCA, will require additional Board and legislative action.

<u>New Jersey Should Focus on the SOCA Contracts Already Issued:</u>

NRG's focus in this proceeding is to ensure that the 2,000 MWs of existing LCAPP contracts are successfully brought to market. Before the Board expands the existing LCAPP offerings, we urge the Board to consider:

- Allowing the existing LCAPP projects to enter the market, and thereafter conducting an analysis of the resulting system topography to determine whether more contracts are advisable;
- Whether 2,000 MW of new generation on would resolve the impending NERC reliability violations that the Board identified in the recently issued New Jersey Energy Master Plan; and
- Whether the LCAPP projects would provide a "reliability bridge" until additional transmission investment can be built (e.g. Susquehanna-Roseland), or even potentially defer or delay the need for additional transmission investment altogether.

NRG is concerned that taking the focus off of ensuring that these three projects successfully make it to market would be detrimental to the Board's goals of reducing energy prices, increasing reliability, and bringing new jobs to New Jersey.

[12] FERC's MOPR Order has been challenged by a number of parties, including the Board, the NJ Division of Rate Counsel and the PJM Market Monitor on rehearing.

Conclusion:

NRG is appreciative of this opportunity to speak at the Board's hearing on a matter so critical both to the economic future of New Jersey and the development of NRG's Old Bridge project. We look forward to working with the State of New Jersey to move this project forward so that New Jersey's goals of the LCAPP legislation will be realized.