

LS Power Associates, L.P.
Comments on New Jersey
Electric Power and Capacity Needs

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I. EXECUTIVE SUMMARY

New Jersey is facing serious system reliability issues over the next several years absent the construction of new, efficient, in-state generation resources. The load in New Jersey continues to grow – at a rate among the highest in all of PJM Interconnection, L.L.C. (PJM) – and the installation of new generation resources is not keeping pace with current generation retirements. New environmental regulations will necessitate substantial, yet-to-be announced generation retirements throughout PJM and in New Jersey further exacerbating the issue. New Jersey continues to import a substantial amount of its energy requirements, with the generation that has been constructed offering little relief and the continued threat of energy being exported to New York providing concern.

New Jersey is at a critical point in planning to meet its energy future. The resources to “bridge the gap”– demand resources and reactivations of mothballed units – to new generation have been exploited. The recent PJM market prices for capacity indicate a need for new generation to be constructed in New Jersey, yet retirements outpace new construction. The little generation that is being constructed consists predominately of peaking generation, which does not address the energy issues in the State. The continued and growing reliance on out-of-state energy resources worsen air quality issues in New Jersey and provide no in-state economic benefits.

Although recent short term auction results in PJM support the conclusion that new generation is needed in New Jersey, the key obstacle to the construction of new generation within New Jersey is the lack of long-term revenue certainty afforded by the current PJM market. A new generation resource cannot attract the capital necessary to construct based on the limited one or three-year contract term offered by PJM. The regulatory uncertainty as to how the PJM market will operate in the future aggravates this issue.

LS Power Associates, L.P. (LS Power) proposes, and the consumer advocates support, that long-term contracts are the solution to getting new, efficient, in-state generation constructed. LS Power proposes a modification to the current Basic Generation Service (BGS) auction to achieve this goal. This is a proposal that will fit within the current PJM market construct and will not burden ratepayers or be a repeat of the NUG contracts from decades ago. LS Power

proposes to conduct this process on a pilot basis for a small piece of the overall need in New Jersey – consistent with recommendations from the consumer advocates. Following this proposal is the only means to guarantee new generation will be constructed. Recent attempts to modify the market structure on a regional basis in PJM have failed with no reason to expect a different result today.

Given the lead time to construct new generation resources, New Jersey must act now before reliability concerns materialize and consumers are burdened with additional, substantial and unwarranted capacity and energy costs.

II. BACKGROUND

A. PJM

PJM is the regional transmission organization that coordinates the wholesale electricity in all of New Jersey and all or parts of 12 other states and the District of Columbia. PJM's role as a federally regulated RTO means that it acts independently and impartially in managing the regional transmission system and the wholesale electricity market.

The PJM market of interest to these comments is the capacity market, which relies on the Reliability Pricing Model (RPM). Implemented in 2007, the RPM was intended to create send forward price signals to attract needed investments in reliability in the PJM region by making capacity commitments three years into the future. This RPM approach, in contrast to PJM's previous short-term capacity market, includes incentives that are designed to stimulate investment both in maintaining existing generation and in encouraging the development of new sources of capacity – resources that include not just generating plants, but demand response and transmission facilities.

The RPM model works in conjunction with PJM's Regional Transmission Expansion Planning (RTEP) process to ensure the reliability of the PJM region for future years. PJM's long-term regional planning process provides a broad, interstate perspective that identifies the most effective and cost-efficient improvements to the grid to ensure reliability and economic benefits on a system wide basis.

RPM includes the continued use of self-supply and bilateral contracts by load-serving entities (LSEs) to meet their capacity obligations. The capacity auctions under the RPM obtain the remaining capacity that is needed after market participants have committed the resources they will supply themselves or provide through contracts.

RPM includes a locational component with locational pricing for capacity that reflects limitations on the transmission system's ability to deliver electricity into an area and to account for the differing need for capacity in various areas of PJM. New Jersey is wholly located within the EMAAC Locational Deliverability Area (LDA). EMAAC, in addition to SWMAAC and WMAAC, comprise the MAAC LDA. An LDA represents a geographic area within PJM that

has limited transmission capability to import capacity to satisfy such area's reliability requirements. This is graphically represented below.



B. New Jersey Basic Generation Service

After New Jersey implemented retail choice in August 1999, the state adopted a four-year transition period. During the first three years, (i.e., August 1, 1999 through July 31, 2002), the four New Jersey Electric Distribution Companies (EDCs) supplied those customers who did not switch to a competitive retailer through supply arrangements specified in restructuring settlements using pre-established rates or rate-making processes.

Each year since 2002, the four New Jersey EDCs - Public Service Gas & Electric Company (PSE&G), Atlantic City Electric Company (ACE), Jersey Central Power & Light Company (JCP&L), and Rockland Electric Company (RECO) - have procured several billion dollars of electric supply to serve their BGS customers through a statewide auction process held in February. BGS refers to the service of customers who are not served by a third party supplier or competitive retailer. This service is sometimes known as Standard Offer Service, Default Service, or Provider of Last Resort Service. The Auction Process has consisted of two auctions

that are held concurrently, one for larger customers on an hourly price plan (BGS-CIEP) and one for smaller commercial and residential customers on a fixed-price plan (BGS-FP).

In last year's Board proceeding for the BGS auction conducted earlier this year, LS Power filed comments¹ proposing to modify the current BGS-FP auction to provide a third auction open to developers of new, in-state, efficient generators to compete for a long-term contract with the EDCs. In its order dated December 10, 2009², the Board denied LS Power's request but directed the BPU Staff to develop a process to review the State's power and capacity need. The Technical Conference held on June 24, 2010 was part of this ongoing review and is the subject of these comments.

¹ IMO the Provision of Basic Generation Service for the Period Beginning June 1, 2010, Docket No. EO 0905035, LS Power letter dated September 25, 2009

² IMO the Provision of Basic Generation Service for the Period Beginning June 1, 2010, Docket No. EO 09050351, DECISION AND ORDER, November 10, 2009

III. NEW JERSEY IS FACING SERIOUS SYSTEM RELIABILITY ISSUES

The PJM 2009 RTEP summarizes well the reliability issues that are facing New Jersey as noted in the excerpt below:

Since 2003, a number of factors have continued to collectively and progressively impact system reliability in Mid-Atlantic PJM:

- Load Growth
- Deactivation/retirement of generation resources
- Sluggish development of new generating facilities
- Continued reliance on transmission to meet load deliverability requirements and to obtain access to more economical sources of power from sources to the west
- Power exports to New York City and Long Island from northern New Jersey³

The 2009 RTEP goes on to state, “Together, these collectively have a sustained negative impact [on] system reliability in New Jersey...”⁴ LS Power explores these issues in more detail below with a focus on New Jersey.

A. Load Growth

The load growth in New Jersey is anticipated to be among the highest in all of PJM – in excess of 2% over the next 5 years – which will further increase the generation capacity deficit in New Jersey.⁵

B. Substantial Existing Generation is At-Risk and Continues to Be Retired

1. Older, inefficient generation continues to be retired.

Nearly 6,000 MW of generation has been retired across the PJM footprint since 2002 with over 3,000 MW pending retirement in the next few years.⁶ Mr. Herling from PJM indicated during the Technical Conference “... the deactivations [in New Jersey] between what has been retired already and what is pending retirement... approaches 2,000 megawatts.”⁷ This

³ PJM, 2009 Regional Transmission Expansion Plan, Page 165

⁴ Id. at Page 273

⁵ PJM, 2010 PJM Load Forecast Report, January 2010, Page 33

⁶ PJM, Generator Deactivations and Pending Deactivation Requests, June 17/18, 2010

⁷ Tr. at 11/22-24

constitutes the amount of generation that has requested deactivation with PJM, for which PJM is “only required to be given 90-day notice on a retired generator.”⁸

A substantial amount of additional generation continues to be at-risk of retirement – both in New Jersey and across the PJM footprint. On May 26, 2010, American Electric Power announced plans to place 10 coal-fired units totaling 1,925 MW on “extended start-up status” keeping the units online in January, July and August.⁹ Aging, smaller coal-fired units such as these are having issues recovering their ongoing costs in the current marketplace. The 2009 State of the Market Report for PJM identifies this concern for a broader set of units:

There is a set of sub-critical coal units in 2008 and 2009 and a set of supercritical coal units in 2009 that did not recover avoidable costs even with capacity revenues. The total installed capacity associated with coal units that did not cover avoidable costs in 2009 was 11,250 MW. There were 122 coal units in PJM in 2009 with capacity less than or equal to 200 MW. Of those units, 35 did not cover avoidable costs and 52 were close to not covering avoidable costs.

The coal plant technologies have higher avoidable costs and are more dependent on net revenues received in the energy market. In 2009, with lower load levels and, generally, lower price levels relative to operating costs, some coal-fired units in PJM did not fully recover avoidable costs even with capacity revenues. If this result is expected to continue, the retirement of these plants would be an economically rational decision.¹⁰

2. New environmental regulations will force additional generation retirements.

New federal and state environmental regulations will have a severe impact on the viability of aging, uncontrolled generation in New Jersey and throughout the entire PJM footprint. The smaller coal-fired units without emission controls will be hit particularly hard, which is supported in statements by Mr. Kormos from PJM during the Technical Conference.

In PJM in total we have seen roughly 10,000 to 11,000 megawatts of older inefficient coal units that, again, with some of the new environmental regulations, we probably would agree are prime candidates for retirements. Some of those, as discussed, are in New Jersey.¹¹

⁸ Tr. at 34/13-14

⁹ The Wall Street Journal, American Electric Power To Idle 10 Coal-Fired Generation Units, May 26, 2010

¹⁰ Monitoring Analytics, LLC, 2009 State of the Market Report for PJM, Volume 1, Page 21

¹¹ Tr. at 33/23-25 and 34/1-3

The President and CEO of PJM, Terry Boston, most recently predicted on June 25, 2010¹², that the Mid-Atlantic region will “suffer immensely” as it struggles to keep pace with the rapid retirement of coal-fired power generation. The article goes on to state “From a reliability standpoint, Boston said, the main problem is that these to-be-retired plants are generally the ones near load centers. So when they go, he said, so does the voltage support and reserves near the areas that need it most. In an ideal world, Boston said, natural gas-fired generation would act as the bridge between the coal-fired generation and the renewable energy resources of the future.”

In New Jersey, there is particular concern regarding the second phase of the High Electric Demand Day (HEDD) regulations, which will require compliance by 2015 – 2017. Mr. O’Sullivan from the New Jersey Department of Environmental Protection (NJDEP) highlighted this concern during the Technical Conference:

Phase II is going to be a much bigger challenge... We were looking for approximately 60 percent overall reduction in NOx emissions and that effects... here about 4,630 megawatts of generation in New Jersey... So there’s a big challenge over the next five to seven years.¹³

As Mr. O’Sullivan from the NJDEP stated, “The remainder of the country and some of our imports will be challenged by the federal rules that are about to be coming out.”¹⁴ The fact is that thousands of megawatts of generation – both in-state and out-of-state generation that New Jersey relies upon – is at serious risk for retirement in the next several years.

C. New, Efficient Generation is Not Being Constructed in New Jersey

1. The amount, quality and type of generation incited by RPM is of concern

According to PJM, approximately 680 MW of generation has been “placed in service” in New Jersey since the beginning of 2007 when RPM was implemented.¹⁵ However, a closer look at this generation provides concern in the amount, quality and type of generation being “placed in service”.

¹² SNL Article, PJM chief: ‘We will suffer immensely’ as carbon is regulated, coal plants retire, June 25, 2010

¹³ Tr. at 19/11-15 and 20/4-5

¹⁴ Tr. at 15/22-24

¹⁵ PJM, New Jersey Power Supply Load and Capacity Data, June 24, 2010 at Slide 4

The majority of the generation PJM references consist of uprates (~ 300 MW) of existing facilities and reactivations (~ 130 MW) of facilities that previously announced plans to retire. The opportunity for uprating of facilities is limited and the implication that additional generation is being “added” through these reactivations is of particular concern. One of the reactivations is the Howard M. Down (Vineland) Unit 9 – a 17 MW oil-fired unit that originally was placed in service in 1960 and has since announced plans to retire again in September.¹⁶ The other reactivation is the Parlin Energy Center plant originally placed in service in 1991, which has operated at a capacity factor of less than 3% since returning to service.¹⁷ These reactivations are merely a “patch” – providing only capacity with limited energy – until newer, more efficient and environmentally advanced generation is constructed.

The remaining generation is a number of small landfill gas facilities totaling ~ 30 MW and an expansion of the Cumberland natural gas-fired peaking facility which, according to PJM, totals 225 MW. However, only one of two planned units have been placed in service at the Cumberland site representing half of the capacity reported by PJM. Construction has not begun and does not appear to be committed for the remaining unit. As such, a total of approximately 140 MW of truly new generation – the majority being just a single expansion of a peaking facility at an existing site – has been placed in service in New Jersey since the inception of RPM.

2. The current trend continues through the 2013/14 Delivery Year

PJM identifies that approximately 850 MW of generation is expected to be placed in service in New Jersey by the 2013/14 Delivery Year. Again, this consists primarily of uprates (~ 433 MW) and reactivations (~ 185 MW). While LS Power is not familiar with the specific units being reactivated, it should be clear that these are reactivations of aging, inefficient existing units that were otherwise planning on retiring similar to the Howard M. Down (Vineland) Unit 9 and Parlin Energy Center. These units will not be expected to contribute much, if any, to the actual energy needs in New Jersey. Additionally, as was the case with the Howard M. Down (Vineland) Unit 9, these reactivations are not long-term solutions and will likely be planned for retirement again given new environmental regulations.

¹⁶ PJM, Pending Deactivation Requests, June 18, 2010

¹⁷ U.S. Department of Energy, Energy Information Administration, EIA-923 Electric Power Generation & Fuel Consumption

The remaining generation is, again, primarily new peaking generation representing ~ 231 MW.¹⁸ The new units appear to be peaking units at existing sites in Northern New Jersey sponsored by PSEG Power.¹⁹

3. New generation is not keeping pace with retirements and does not help the energy situation in New Jersey

In summary, for the first seven years of RPM (2007 – 2014), PJM anticipates that approximately 370 MW of truly new generation will be placed in-service in New Jersey – generation that predominately consists of natural gas-fired peaking facilities at existing sites. The new, peaking generation will have limited contribution to the energy needs in New Jersey – likely operating less than 5% or 10% of the year. In contrast to the limited addition of new generation, nearly 700 MW of existing generation has been or will be retired in New Jersey in this same time frame²⁰ and the load is forecasted to grow by more than 2,000 MW.²¹ As such, the generation deficit in New Jersey will increase by approximately 2,500 MW during this time frame.

4. The generation in the current PJM interconnection queue is not an indication of expected generation to be placed in service.

There are currently several thousand megawatts of generation in the PJM interconnection queue in New Jersey. However, this represents generation that is merely under study with no commitment that any of it will be placed in service. In fact, PJM stated that they “have seen a very, very high dropout rate in [its] interconnection queue over the ten years, over 85% of an energy basis.”²² In total, PJM has seen 34,000 MWE of new generation requests in New Jersey withdraw and never enter into service.²³

¹⁸ PJM, New Jersey Power Supply Load and Capacity Data, June 24, 2010 at Slide 14

¹⁹ Tr. at 80/11-18

²⁰ PJM, New Jersey Power Supply Load and Capacity Data, June 24, 2010 at Slide 8

²¹ PJM, 2008 Load Forecast Report, Page 28 and 2010 Load Forecast Report, Page 33

²² Tr. at 10/25-11/1-2

²³ PJM, New Jersey Power Supply Load and Capacity Data, June 24, 2010 at Slide 6

D. New Jersey Imports A Substantial Amount of Capacity and Energy

1. New Jersey does not have sufficient in-state resources to meet its peak demand.

PJM presented information during the Technical Conference indicating New Jersey has had a reserve margin between negative 12% and negative 17% over the past 5 years.²⁴

2. New Jersey relies heavily on imports to meet its energy needs.

As Mr. Herling from PJM stated during the Technical Conference, "... New Jersey is an importer of energy, a substantial amount of energy."²⁵ New Jersey has imported nearly one-third of its electricity on average over the past 5 years.²⁶ The 2009 RTEP states:

The dependence of... Eastern PJM on bulk power transfers from western sources has been growing steadily since the integration of western markets into PJM began in 2002 with the integration of Allegheny Power.²⁷

3. New transmission continues to be planned and constructed to solve reliability issues and increase import capability to the eastern parts of PJM.

Since 2006, PJM has approved six new major 500 kV and 765 kV backbone upgrades representing over \$5 billion of investment. PJM continues to evaluate the need and timing for many of these backbone upgrades without consideration of alternative solutions such as local generation. Mr. Kormos with PJM made it clear during the Technical Conference that PJM does not consider new generation as a solution for reliability issues nor can it order new generation to be built:

PJM has no ability or authority to require generation to be built, even if it is by far the most cost-effective... Actually, our obligation is on the reliability side that if the generation does not materialize, we will be required to put the transmission in place to ensure that the power stays on in New Jersey for the future.²⁸

²⁴ PJM, New Jersey Power Supply Load and Capacity Data, June 24, 2010 at Slide 13

²⁵ Tr. at 9/21-22

²⁶ PJM, New Jersey Power Supply Load and Capacity Data, June 24, 2010 at Slide 18

²⁷ PJM, 2009 Regional Transmission Expansion Plan, Page 167

²⁸ Tr. at 56/23-24 and 57/9-14

PJM does not analyze locations where generation may be a more economic alternative than a transmission system upgrade. For example, if PJM's analysis indicates New Jersey cannot meet its load with a combination of internal resources and imports via the transmission, PJM only has the authority to order the construction of transmission upgrades and will not analyze generator additions which may be the lowest cost solution.

E. New Jersey Faces a Continued Threat of Generation Being Exported to New York

New Jersey is particularly impacted by the export of generation from PJM to New York. Of particular interest, the 2009 RTEP states:

Exports to New York City and Long Island have the same system impact on reliability as new load in New Jersey... Merchant transmission projects comprising more than 3,000 MW of potential exports to New York City and Long Island are in service, under construction or currently active in PJM's interconnection queue... Approximately 34 percent of that amount – 1,015 MW – is already in commercial operation.²⁹

As such, New Jersey continues to be at risk for several thousand megawatts of additional generation potentially being exported to New York. This represents approximately 10% of New Jersey's current load raising serious reliability concerns as additional exports come to fruition.

²⁹ PJM, 2009 Regional Transmission Expansion Plan, Pages 39, 262 and 272

IV. THE SOLUTION FOR NEW JERSEY IS NEW, EFFICIENT GENERATION

A. Demand Response Does Not Supplant the Need for New Generation

1. RPM has been successful in implementing demand response.

RPM accommodates and incents demand side resources by allowing the resources to offer into the Base Residual Auction (BRA) on an equivalent basis as a capacity resource. In the recent BRA for the 2013/14 Delivery Year, every demand resource that bid in MAAC cleared – a total of 5,871.1 MW, comprising nearly 10% of the cleared capacity in MAAC. Of this, over 1,500 MW will be located within New Jersey. This represents an increase of over 80% of cleared demand resources in New Jersey and over 25% in MAAC relative to the 2012/13 Delivery Year.

2. The type and amount of demand response in MAAC for the 2013/14 Delivery Year is now of concern.

Mr. Kormos from PJM expressed concern regarding the amount of demand response at the Technical Conference:

The concern we have actually right now is as we get more demand response instead of generation capacity, the more likely we are to have to use it; and the more we use it, potentially the less participation people will want to be in those categories.³⁰

As a result of this concern, PJM has been investigating the demand response “saturation”. Mr. Kormos from PJM explained this at the Technical Conference as well:

Our concern is that our current construct that contractually allows us to operate ten times per year -- or six hours worth of time ten times a year – that we’re saturating the effectiveness of that; that we will either have to expand those windows, make it more times per year or longer hours. That’s the saturation... We’d like to see it shift into other constructs that would be more viable.³¹

The PJM Resource Adequacy Planning Department released a Demand Resource Saturation Analysis in May 2010 addressing these issues. Of particular interest, the analysis identifies the Demand Resource saturation limit in MAAC to be 9.3% of coincident peak load, or

³⁰ Tr. at 13/11-15

³¹ Id. at 204/23-25 and 205/1-4,6-7

5,813 MW for the 2013/14 Delivery Year. This is slightly lower than the amount of Demand Resources that cleared (5,871.1 MW) indicating Demand Resources are already saturated in MAAC. The analysis concludes with a recommendation from PJM to cap the amount of Demand Resources at the proposed saturation level and expand the Demand Resource interruption window from six hours to ten hours.³²

Therefore, demand resources do not appear to be a viable option to meeting future capacity and energy demand obligations nor can they be used to “bridge the gap” as Mr. Allegretti from Constellation suggested stating, “Capacity additions don’t come overnight. And you can have a gap... But the good news is we have a new tool and that tool is demand response... to bridge those gaps...”³³ The fact is that in New Jersey, demand resources have already been used to “bridge the gap” and New Jersey now finds itself at the end of that bridge.

B. New Generation is Needed as Early as the 2013/14 Delivery Year

The BRA for the 2013/14 Delivery Year identifies a potential capacity shortage in EMAAC during that period. A total of 33,007 MW were offered in EMAAC with 32,835 MW clearing the auction – leaving merely 172 MW of capacity in EMAAC to participate in incremental auctions. This is important as the BRA does not procure 2.5% of the capacity needs, or over 900 MW in EMAAC. This Short-Term Resource Procurement Target is held back for procurement in incremental auctions, allowing capacity resources an alternative to the three-year lead time in the BRA. Some capacity resources, such as demand response, may prefer the less than two-year lead time afforded in the incremental auctions.

The limited capacity available for participation in the incremental auction is especially concerning given the amount of demand response procured in the BRA for 2013/14 already exceeds the proposed cap by PJM. Given the demand response saturation, it is doubtful that additional demand resources will be allowed to participate in the incremental auctions. Without additional demand resources, it is unclear what type of capacity, if any, will be available on such a short timeframe to satisfy this unmet need. In fact, the only capacity that may be able to participate will be the 172 MW that did not clear or additional reactivations – all of which will likely be more expensive than the \$245/MW-day BRA clearing price and likely aging, inefficient

³² PJM Interconnection, LLC, Demand Resource Saturation Analysis, May 2010

³³ Tr. at 89/8-9,12-14

generation. LS Power has requested PJM include in its analysis of the 2013/14 BRA auction the impact on pricing if the Short-Term Resource Procurement Target was procured in the BRA and expects the results will indicate clearing prices substantially higher than \$245/MW-day.

C. New Generation is Beneficial Anywhere in New Jersey With Southern New Jersey Being of Particular Concern

The capacity and reliability issues are not unique to any single area or location in New Jersey. Although Northern New Jersey historically has had greater capacity and reliability issues, it is clear these issues extend throughout the state and generation is needed in Southern New Jersey as well. The results of the 2013/14 BRA results bear this out where the entire state cleared at one price along with the entire EMAAC at a price higher than any previous BRA. This indicates the capacity situation in New Jersey is getting worse across the entire state (and the entire EMAAC region) with no apparent benefit to locating a new generating plant in one part of the state over another.

The completion of the eastern portion of the Susquehanna-Roseland Line is expected to address many of the reliability issues that have plagued northern New Jersey. Mr. Kormos from PJM indicated during the Technical Conference that “Until that 500 kV line is in place, I think [Northern New Jersey] is sort of our most fragile area.”³⁴ Mr. Herling from PJM went on to state that Southern New Jersey presented the next area of concern:

The next area of concern obviously would be if the status of Oyster Creek were to change. The transmission system getting down to that area would need significant upgrading or obviously replacement capacity, but that's a big piece of generation in that area that we could not do without right now. So we'd either have to replace the generation or get some transmission in there in a hurry.³⁵

The NJDEP preliminarily determined that closed-cycle cooling and environmental restoration are the only viable compliance options for Section 316(b) compliance at Oyster Creek. Should the draft NJPDES permit be issued in its current form, closed cycle cooling towers, representing a capital cost of \$700 million to \$800 million, would be required to be in operation by 2019 at Oyster Creek. According to Exelon, this “... would call into question the

³⁴ Tr. at 35/10-11

³⁵ Id. at 35/14-21

economic viability of operating Oyster Creek... and [Exelon Generation Company, LLC] would close Oyster Creek if... the installation of cooling towers [is required].”³⁶

Contributing to the issues facing Southern New Jersey’s electric supply is the area has the highest load growth rate in all of New Jersey and 2nd highest in all of PJM.³⁷ Mr. Herling from PJM summed up the need for new generation in Southern New Jersey in his response to a question from Commissioner Asselta:

Well, PJM would not specifically try to direct generation to be placed anywhere but obviously additions of generation in Southern Jersey would be beneficial to the state.³⁸

D. Planning for New Generation Resources is Not Conducted on a Long-Term Horizon and is Not Consistent with the Timeframe used for Transmission Planning

The market signals for new generation in PJM are currently provided on an up to three-year timeframe with RPM. In contrast, the planning horizon for new transmission resources extends out for a period of 15 years with the RTEP. As Mr. De Pillo from PSEG Power Operations and Asset Management stated during the Technical Conference, “... there’s a little bit of a disconnect right now between the RTEP and RPM...”³⁹ As a result, PJM is currently recommending new backbone transmission facilities be put in place that will not be needed for another five years – in 2015.⁴⁰ This is two years beyond the current “planning horizon” for new generation resources. This is understandable, as it may take five years to plan and construct new transmission resources; however, this inconsistency makes it more likely new transmission will be constructed instead of new generation. Compounding this concern, as discussed earlier, is PJM can only order new transmission to be built:

Whether you would take Oyster Creek and put a combined cycle plant there in place is probably an option that should be evaluated... We can help provide the information. We ultimately won’t order it.⁴¹

³⁶ Exelon Generation Co LLC, 10-Q, 4/23/2010, Page 78

³⁷ PJM, 2010 PJM Load Forecast Report, January 2010 at Table B-1

³⁸ Tr. at 45/22-25

³⁹ Tr. at 189/11-13

⁴⁰ PJM, PJM Board Review of 2010 RTEP Analysis, June 17, 2010

⁴¹ Tr. at 57/4-10

Ms. Brand from the New Jersey Department of the Public Advocate raised concern with the cost implications this may have for ratepayers at the Technical Conference:

... when we, for example, build transmission facilities near a plant that's going out, how do we make sure the ratepayers get their money's worth and they have the ability to utilize those facilities. And the answer, well, we hear that in Maine apparently all worked out for the best. The fact is we have no ability to make sure of that.⁴²

This echoes a common theme at the Technical Conference – the current PJM market isn't structured to ensure the most cost-effective solution is ordered – whether it is generation, transmission, or another means. Mr. Weishaar representing the PJM Industrial Customer Coalition put it well at the Technical Conference:

A question that we continue to grapple with is: Is RPM delivery the goods; is RPM the solution to resource adequacy; is RPM a cost-effective solution to resource adequacy. Certainly, if you raised the price to a thousand dollars per megawatt day for an extended period of time, you will get resources, you'll get demand resources, you'll get generation resources. The question though is, is that a cost-effective solution. And arguably it is not.⁴³

Transmission solutions will not always be the best solution for New Jersey to meet its energy needs. The continued expansion of the transmission system to increase imports will incent the continued reliance on older, less efficient, and less environmentally advanced generation in the western states. As discussed further in the next section, this will have negative environmental consequences for New Jersey. Additionally, backbone transmission projects have proven to be difficult to license leading to delays and continued higher capacity and energy pricing. Furthermore, New Jersey will not only pay for new transmission, but continue to pay for out-of-state generation resources, and not see any of the economic development benefits associated with new, in-state generation.

⁴² Id. at 141/6-13

⁴³ Id. at 94/9-17

**V. NEW GENERATION WILL PROVIDE ECONOMIC AND ENVIRONMENTAL
BENEFITS TO NEW JERSEY**

A. New Generation Will Lower Energy Costs in New Jersey While Providing Economic Development.

New, in-state, combined cycle generation is the right solution for New Jersey's challenged electric supply situation. New generating units in New Jersey will displace more expensive units in the capacity supply stack thereby reducing the RPM clearing price and corresponding cost to New Jersey ratepayers. Absent the construction of new generation, RPM clearing prices will continue to rise. The RPM clearing prices in New Jersey rose over 50% from the 2012/13 Delivery Year to the 2013/14 Delivery Year increasing capacity costs to New Jersey load by nearly \$750 million in one year. New Jersey could see additional capacity cost increases totaling over \$1 billion annually as RPM clearing prices continue to rise given continued load growth and likely generator retirements. The impact of new generation could be dramatic on savings for New Jersey ratepayers – for every \$5/MW-Day reduction in RPM clearing prices, New Jersey ratepayers will save approximately \$40 million/year.

In addition to capacity benefits, new, in-state, combined cycle generation will displace less efficient, higher operating cost generation and reduce congestion costs thereby reducing the cost of energy to New Jersey ratepayers. A new, combined cycle generator would likely operate in excess of 60% of the year. In contrast, one-third of the generation capacity currently installed in New Jersey – that New Jersey is paying for through RPM – generally operates less than 10% of the time.⁴⁴ As Mr. La Rossa from PSE&G identified during the Technical Conference, "... when it's 95 degrees out... 2,200 megawatts is sitting idle in New Jersey today."⁴⁵ He admitted that "We got beat by Pennsy. No doubt about it. Those generators got beat out by Pennsy today. Open marketplace. They lost."⁴⁶ The reason is the 2,200 megawatts is aging, inefficient, expensive generation that is relied upon only when more efficient generation is not available. New Jersey ratepayers will finally get something of value for the capacity they are paying for

⁴⁴ SNL Financial LC, SNLxL Wizard, Power Plants Database

⁴⁵ Id. at 166/3-6.

⁴⁶ Id. at 166/12-14

with new, in-state, combined cycle generation. This was echoed by Ms. Brand from the New Jersey Department of the Public Advocate during the Technical Conference:

I also have to tell you that from where I sit and for the people that I represent, we do not agree that everything is just working fine. What we know is that New Jersey is in the top ten states in terms of overall energy prices, that people are having difficulty paying their electric bills, especially in the recession.⁴⁷

In addition to the potential for tens of millions of dollars in capacity price and energy savings for New Jersey consumers, new, in-state generation will result in economic development in the State including local employment, local purchases and tax revenues.

B. Continuing and Growing Reliance on Out-of-State Generation Has Negative Environmental Consequences For New Jersey.

New Jersey has little control over the environmental quality of energy imported from out-of-state. Mr. O’Sullivan from the NJDEP indicated during the Technical Conference that “... about 30 percent on average [of New Jersey’s] air pollution is from out-of-state, but that’s a very rough figure.” Mr. O’Sullivan further stated that in one instance, “... a hundred percent almost of the sulfur dioxide non-attainment issue [in Warren County] is caused by one power plant [in Pennsylvania].”⁴⁸ New Jersey’s air quality is hindered by out-of-state resources – the very same resources upon which New Jersey depends on for reliable electric service.

As indicated by Mr. La Rossa from PSE&G during the Technical Conference, a significant portion of the energy imported into New Jersey likely originates in Pennsylvania. In 2008, Pennsylvania generators exported over 75,000 gigawatt-hours of electricity. To put that in perspective, retail electricity sales in New Jersey totaled just over 80,000 gigawatt-hours, of which over 20,000 gigawatt-hours were imported.⁴⁹

The need for new, clean, efficient in-state resources becomes clear upon review of the stark difference in environmental profile of New Jersey generation resources as compared to

⁴⁷ Tr. at 138/3-10

⁴⁸ Tr. at 51/20-25

⁴⁹ U.S. Department of Energy, Energy Information Administration, 2008 State Electricity Profiles, March 2010 at Table 1

Pennsylvania. This contrast is presented in Tables 1 and 2 below. It should also be noted that while New Jersey participates in the Regional Greenhouse Gas Initiative, Pennsylvania does not.

Table 1 - State Generation Profile⁵⁰

Generation Type	New Jersey	Pennsylvania
Coal (%)	15%	53%
Nuclear (%)	55%	35%
Natural Gas (%)	27%	8%
Other (%)	3%	4%

Table 2 - State Generator Emission Profile⁵¹

Emission	New Jersey	Pennsylvania
SO ₂ (lb/MMBtu)	1.2	7.7
NO _x (lb/MMBtu)	0.7	1.8
CO ₂ (lb/MMBtu)	695	1,228

Generating its own energy in-state, through state-of-the-art natural gas-fired combined-cycle resources, presents New Jersey with great opportunity to actively improve environmental quality. A state-of-the-art combined cycle resource will result in a dramatic environmental improvement compared to the average New Jersey or Pennsylvania generator with the potential to reduce emissions by several thousand tons each year.

⁵⁰ Id. at Table 5.

⁵¹ U.S. Department of Energy, Energy Information Administration, 2008 State Electricity Profiles, March 2010 at Table 1

VI. THE KEY OBSTACLE TO NEW GENERATION IS REVENUE CERTAINTY

A. The Recent RPM Clearing Prices Support New Generation.

As discussed previously, the most recent RPM BRA for the 2013/14 Delivery Year resulted in clearing prices of \$245/MW-day in New Jersey.⁵² This clearing price is near the Net Cost of New Entry (CONE) in EMAAC, which was determined by PJM to be \$261.06/MW-Day for the 2013/14 Delivery Year.⁵³ The Net CONE is the PJM-determined cost (net of energy and ancillary revenues) of building new generation which, in New Jersey, is based in part on a hypothetical combined cycle facility. RPM clearing prices at or near the Net CONE should support the construction of new generation. LS Power believes that, assuming a long-term contract is available, the recent RPM clearing prices are at a sufficient level to incent new generation to be constructed in New Jersey.

B. The Contract Term Afforded by RPM is Not Sufficient to Attract Capital for New Generation.

The issue is not the RPM clearing prices – the price is sufficient to support new generation – the issue is the length of time that such prices can be “locked in”. RPM only provides revenue certainty for a period of one year in most situations. The exception is the remote possibility to receive a three-year commitment as part of the New Entry Pricing; however, meeting the necessary conditions is quite difficult. In either case, a one or three year commitment is not sufficient to attract the financing necessary to construct new generation resources. This is evidenced by the letters from two leading project finance lenders (Credit Agricole and Union Bank) included as Attachment A discussing the inability to finance a new generation facility based on the current RPM construct. The perspective of project lenders is vital to understanding current obstacles for new generation development and, unfortunately, was not represented at the Technical Conference. This position, however, is echoed by statements made by Mr. Weishaar representing the PJM Industrial Customer Coalition at the Technical Conference.

⁵² PJM, 2013/2014 Base Residual Auction Report, June 9, 2010

⁵³ PJM, 2013/14 Delivery Year Planning Period Parameters, May 17, 2010

From a customer perspective, we actually view RPM itself as one of the primary obstacles to integrated practical – and I emphasize practical – cost-effective solutions to resource adequacy challenges... Price certainty is a problem... They are not capable of forming capital to make investments in new generation and new resources given the construct we have.⁵⁴

Mr. Kormos from PJM also raised questions at the Technical Conference regarding the effectiveness and intent of RPM as a solution to long-term needs.

I would offer that RPM was never meant to be end-all and be-all for the capacity markets... I would argue on a short-term basis RPM has filled that need short-term... I would also agree I don't know long-term. I'm not sure if the long-term signals are being set appropriately...⁵⁵

Even Mr. Meehan from NERA Economic Consulting, who believes the market is “working well”, recognized that new generators are “not going to make the decision to enter based on either three or five years.”⁵⁶

It is apparent that the current one or three-year term offered by RPM does not provide adequate revenue certainty to support a decision to invest the hundreds of millions of dollars necessary to construct new, large-scale generation

C. The Uncertainty Regarding the Future of RPM Poses Additional Risk

RPM is relatively new – incepted in 2007 – with little, and somewhat sporadic, pricing history to rely upon to make long-term investment decisions. The underlying market continues to change with existing load and generation leaving or entering/returning to PJM.⁵⁷ Furthermore, RPM underwent considerable modification in 2009 that resulted in changes that also have a material impact on RPM clearing prices.

The uncertainty regarding the future of RPM creates an additional hurdle for attracting capital for new generation. Mr. De Pillo from PSEG Power Operations and Asset Management reinforced this message at the Technical Conference:

⁵⁴ Tr. at 93/12-16, 94/23 and 95/1-3

⁵⁵ Id. at 196/21-23 and 197/16-18

⁵⁶ Id. at 67/17-19.

⁵⁷ Duquesne Light Co. announced its intention to leave PJM in November 2007 and subsequently remained in PJM; American Transmission Systems, Inc. filed to integrate in PJM in August, 2009; Duke Energy Ohio, Inc. and Duke Energy Kentucky, Inc. filed to integrate in PJM in June 2010

As a developer, we require a certain amount of regulatory certainty to make these types of capital commitments. The markets we rely upon for committing this capital have been under almost constant pressure to fundamental changes... This uncertainty, whether real or preserved around the market construct, discourage not only the developers, but also the financiers who basically look at forward markets and call into question whether a particular construct will be there two or three years down the line to kind of management the earning certainty they're looking for.⁵⁸

The discussion surrounding fundamental changes to RPM will only intensify as RPM clearing prices continue to rise. RPM is currently a subject of discussion among several states, with New Jersey, Maryland and Pennsylvania all investigating how to incent new generation in the RPM market. Mr. Kormos from PJM even stated at the Technical Conference that “We are committed to continue working on RPM. Ultimately, there may be a replacement.”⁵⁹

D. New Jersey Endorsing RPM Will Not Help

Mr. De Pillo From PSEG Power Operations and Asset Management suggested during the Technical Conference that the BPU consider “... an affirmative commitment to competitive markets and the BGS structure...”⁶⁰ Unfortunately, this action will not solve the issue. It will not provide the revenue certainty needed and it will not change the uncertainty regarding RPM going forward – there are many other states and stakeholders in PJM that also have an interest and can potentially effectuate a change.

⁵⁸ Tr. at 83/5-9 and 83/12-18

⁵⁹ Tr. at 196/19-20.

⁶⁰ Id. at 85/6-8

VII. LS POWER PROPOSES LONG-TERM CONTRACTS AS THE SOLUTION TO INCENT NEW, IN-STATE GENERATION

A. LS Power Offers a Proposal to Modify the Current BGS Auction Process

The details of LS Power’s proposal to modify the current BGS auction process (the “Proposal”) are included as Attachment B. LS Power suggests the Board consider implementing the Proposal on a pilot basis, consistent with the suggestion of Ms. Brand from the New Jersey Department of the Public Advocate at the Technical Conference:

You take a thousand megawatt tranche and you see what you can do with it and see what it would look like and see what you would get.... If it works, you should do it again.⁶¹

The Proposal is to add a third competitive auction process under BGS that would incent new, efficient, in-state generating resources with long-term contracts of 15 years or longer to serve a portion of the BGS-FP load. A total of 1,000 MW would be reserved to facilitate the development of new, efficient, in-state, combined cycle resources with a net summer rating of at least 100 MW. The eligible generators would offer fixed cost capacity pricing with guarantees for performance and efficiency. All of the market capacity and energy revenues from the selected eligible generators would revert back to the basic generation service customers to offset the capacity charges for the selected eligible generators. The 1,000 MW that would be reserved represents approximately 5% of the peak load in New Jersey, such that this is a small portion of the entire New Jersey load.

The Proposal also provides the benefit of mitigating the severe market concentration and potential market power issue in the PJM capacity market. According to the PJM Independent Market Monitor in the 2009 State of the Market Report, “[t]he MMU found serious market structure issues, measured by the three pivotal supplier test results, by market shares and by HHI, but no exercise of market power in the PJM Capacity Market during calendar year 2009.” As Mr. Wieshaar representing the PJM Industrial Customer Coalition noted during the Technical Conference:

⁶¹ Tr.. at 186/25 and 187/1-3,7-8

Competition needs to play a role where competition can play a role. Part of the big problem with RPM and with capacity markets, and we just can't seem to get around it, is that there are high levels of concentration of generation ownership in RPM. When you look at RPM and as a result of mitigation the first 120 to 125,000 megawatts of generation on the supply curve is mitigated to zero. Why? Because market power is rampant.⁶²

To mitigate market concentration in New Jersey and not exacerbate the problem, the Proposal limits participation by developers with an ownership interest in less than 50% of the existing in-state generation.

B. Long-Term Contracting is Supported by the Consumers

The two individuals representing the interests of the consumers – Ms. Brand and Mr. Weishaar – both support the concept of long-term contracting. Ms. Brand from the New Jersey Department of the Public Advocate stated:

Long term contracts -- I also -- I guess would challenge the assumption this morning that long-term contracts are some form of out-of-market tool. I think they are within the market. When economic actors negotiate a contract or start to look for a -- through a competitive process of some sort for the best deal that they can get it is a market tool. It may be outside of the market that we have been utilizing, this three-year market, but it's just a different market tool. And it may be one that will help provide, you know, for a portion of our BGS needs at a price that is more stable and potentially cheaper. ... let's not put all our eggs in this three-year market basket or one-year market basket, let's look at a mix that has three-year, one-year short-term solutions but also some long-term solutions.⁶³

Mr. Weishaar from the PJM Industrial Customer Coalition added:

I think we need to move in a direction of competitive procurement. I don't think RPMs work... A staggered portfolio where you have contracts of different lengths seem to make sense.⁶⁴

C. Long-Term Contracts Fit Within the Current RPM Market Structure.

Several parties have cautioned that offering long-term contracts would undermine the current market structure. This is just not the case if it is done on a measured basis. Ms. Brand from the New Jersey Department of the Public Advocate put it very well stating:

⁶² Tr. at 184/10-18

⁶³ Id. at 138/7-16 and 173/19-23

⁶⁴ Id. at 183/2-3,8-9

I also challenge some of the statements that were said this morning that you can't pull out a thousand megawatts and try to see if you can procure it through a long-term arrangement because that's actually precisely what we are doing with solar. We are seeing long-term contracts, enabling the development of solar. Hopefully, that will end up being another generation supply for the State of New Jersey and it has been used in other states and it hasn't brought the market to a crash.⁶⁵

Ms. Brand went on to say this type of process “will result in some more competition and some lower prices. But I think lower prices are good. I don't think that they are something that we should look at as a negative that somehow deflates the market.”⁶⁶ Mr. Kormos from PJM reinforced that long-term contracting could fit within the construct of RPM.

I would offer that RPM was never meant to be end-all and be-all for the capacity markets. We always envisioned to be a piece of it. We envisioned there would be longer term contracts. There are ways to self supply. There are ways to literally pull yourself out of RPM.⁶⁷

The fact is that there are several entities in PJM, such as municipal utilities and electric cooperatives, currently procuring new generation through long-term contracts. New Jersey doing so, on behalf of its ratepayers, would be no different.

D. Long-term Contracts Will Not Burden Ratepayers.

One of the concerns raised during the Conference regarding long-term contracts was what would happen if the BGS customers left to go to a third party supplier. Mr. Meehan from NERA Economic Consulting cautioned:

...what concerns me is the situation where you have a long-term contract, you're maybe - - you're more affluent or you're higher use BGS customers who can leave, but yet you have, if this thing goes out of the market, you can have a very small base of customers who aren't attractive to suppliers who end up bearing the cost of this contract or you could have such a small base that there is no way to bear the cost of this contract.⁶⁸

Mr. Allegretti from Constellation raised a similar concern:

“[d]oesn't every customer in New Jersey have choice. I look across the country -- I don't know what the figures are for New Jersey, but I'll tell you what they are in Massachusetts

⁶⁵ Tr. at 138/17-25 and 139/1

⁶⁶ Id. at 140/5-9

⁶⁷ Id. at 196/21-25 and 197/1

⁶⁸ Tr. at 183/5-13

and Connecticut over half the load in those states has migrated away from utilities and onto retail supply contracts in the 13, 14 years that those markets have been open. And it's accelerating, more customers are moving. The thought that in ten years there will be any customers left on utility supply is hard to see at this point. And when you lock in a 15-year capacity commitment, who is going to pay for it.”⁶⁹

Ms. Brand from the New Jersey Department of the Public Advocate corrected Mr. Allegretti’s assumption that all customers have choice by pointing out that:

Not every customer has choice and not every customer can control their usage to a degree where it makes sense for them to play in market the way other customers do. I totally get it on the commercial/industrial side. It makes perfect sense. But on the residential side, there are people who have either reduced as much as they can reduce; or even if they could reduce a little more, it's not going to pay for the equipment that might be necessary for them to do that. So to sit here and say that there aren't still captive customers, I think it's not accurate. It may be accurate for commercial/industrial customers, but definitely not for residential customers.⁷⁰

The proposal as put forth by LS Power only modifies the BGS-FP auction which is the BGS for residential and small commercial customers. These customers are less likely to migrate away from BGS supply as demonstrated below. Large commercial and industrial customers are unaffected by this proposal.

Furthermore, EDECA⁷¹ was passed in August, 1999; almost eleven years ago. EDECA provided for, among other things, retail access and utility customers were free to choose their energy provider. A look at the switching statistics shows that after almost 11 years of retail access, that out of nearly 3 million residential and small commercial customers (those served by the BGS-FP auction) a total of 12 customers have switched (this is 0.0004% of the residential customers).⁷² LS Power would argue that given this trend there is little concern that there will not be residential customers still getting their energy through the BGS-FP auction and the concerns raised above are specious at best.

⁶⁹ Id. at 209/1-12

⁷⁰ Id. at 210/24-25 and 211/1-3

⁷¹ Electric Discount and Energy Competition Act

⁷² New Jersey Board of Public Utilities, <http://www.state.nj.us/bpu/divisions/energy/switching.html>

E. Long-Term Contracts Will Not End Up Like the NUG Contracts

Another concern raised during the Technical Conference was that the long-term contracts would end up like the “NUG” contracts that are a part of the stranded cost ratepayers are still paying for. The concern is unfounded under the LS Power proposal given the vast difference between the NUG contracts and the contracts that would be entered into as a part of the LS Power proposal. To compare the contracts contemplated hereunder to the NUGs is really an apples to oranges comparison.

The NUGs are the non-utility generator contracts that were primarily the result of the cogeneration plants developed under the 1978 Public Utilities Regulatory Policy Act (“PURPA”). Under PURPA, if a developer met certain efficiency standards with a plant that generated both electricity and thermal energy (typically steam) for use by a co-located industrial user, then the utility was obligated to purchase the electricity at the utility’s “avoided cost” which is the cost of the utility to acquire their next MW of electricity. The purpose of PURPA was to increase the energy efficiency in the United States and was very successful at shutting down old, environmentally-challenged industrial boilers with very efficient, environmentally advanced cogeneration plants. These cogeneration plants entered into contracts of 15, 20, and up to 30 years with the utilities. Again, if the developer met the efficiency standards and accepted the utility’s avoided cost pricing for capacity and energy, then the utility had no choice but to enter in the contract with the developer.

Under the LS Power proposal and consistent with the BGS auction, the process will be a competitive process. The Board has full discretion to approve or not approve the contract and the utility is not forced into executing the contract if the Board rejects the contract. Additionally, the structure of the contract is vastly different from the structure of the NUG contract. Under the NUG contract the developer received all of the capacity and energy margins. Under the LS Power proposal, the developer will receive a fixed capacity payment to recover their return of and return on their investment and their fixed operation and maintenance costs, but the energy margins will be returned to the ratepayers to further reduce the cost of energy. The competitive process, the return of energy margins to the ratepayer, and the reduction in the overall cost of energy to the ratepayers make these contracts vastly different than the NUGs.

Ms. Brand again from the New Jersey Department of the Public Advocate agreed that New Jersey should move to long-term contracting and the experience with the NUG's should not be a deterrent:

Listen, I know the NUGs did not turn out how everybody wanted, but that doesn't mean that you're going to repeat those mistakes necessarily and that you automatically preclude anything that is of any length in terms of arrangement just because there were some bad ones entered into previously. Maybe we've learned a few things in the last 20 years or so, but you do need to mix and you do need to make some commitment from a customer to pay for something before a lot of things that are in the queue will get built.⁷³

F. Modifying RPM is Not a Viable Solution to Long-Term Contracting

During the Technical Conference, the prospect of modifying the RPM process to incorporate a longer-term contract and to let PJM solve the lack of new generation development on a regional basis was raised. While including longer-term solutions in the RPM construct may be preferable to some, it is not a practical solution to the near term capacity and energy issues facing New Jersey.

As pointed out by Mr. Hoatson from LS Power at the Technical Conference, LS Power and others in early 2009 filed with the Federal Energy Regulatory Commission (FERC) to extend the New Entry Pricing term from 3 years to 10 years and make New Entry Pricing more achievable. This was supported by the BPU and PJM even supported extending the New Entry Pricing term to 7 years. Unfortunately, FERC rejected the extension stating:

...the extension of the lock-in period go beyond the intent of the original provision, intended only to address the issue of lumpy investments in a small LDA. PJM's proposal would further bifurcate capacity markets by giving new suppliers longer payments and assurances unavailable to existing suppliers providing the same service. Thus, it would result in further price discrimination between existing resources, including demand response, and new generation suppliers... We also recognize that a longer commitment period may aid the developer in financing a project. However, as PJM notes, RPM was designed to provide long-term forward price signals and not necessarily long-term revenue assurance for developers, and we must therefore balance the benefits of the longer commitment period (to the extent it fosters new entry by making project financing easier or cheaper) against the possible uplift payments in excess of auction clearing prices that loads may have to bear due an extension of the NEPA term. In our view, no party has

⁷³ Tr. at 175/13-22

made the case that extending the NEPA term to five or seven years strikes a superior balance to the existing provisions.⁷⁴

LS Power and others subsequently filed with FERC for a rehearing on their order and FERC denied the rehearing request.⁷⁵ While the preferred method might be to change the RPM, it would be very difficult to get the support from FERC and other stakeholders and would be a very lengthy process. Mr. Kormos from PJM points out that the process is “typically an 18-month to two-year process.”⁷⁶ He further noted, “Any changes to [our operating agreement] require a two-third majority vote of our members to support a change”⁷⁷ and suggested, “This is a very long and tedious process because of just the makeup of PJM and how we function and ultimately the due process this needs to go through, not only in our membership but then ultimately at FERC as well. So I think starting sooner than later is good.”⁷⁸

Another concern with changing RPM and having PJM resolve the lack of new generation on a regional basis is that this could result in new generation being built out of state, where it may be easier to permit and less expensive to build, therefore not achieving the desired goal of developing new in-state resources and all the benefits described above. New Jersey would continue to pay for out-of-state resources and not receive the in-state economic development benefits associated with construction of new, in-state generation.

On the other hand, the Board is in complete control of modifying the BGS auction process and it could be done in a timely manner resulting in new generation being built in the state and not somewhere out of state in the larger region.

⁷⁴ FERC Docket ER05-1410, ORDER ACCEPTING TARIFF PROVISIONS IN PART, REJECTING TARIFF PROVISIONS IN PART, ACCEPTING REPORT, AND RQUIRING COMPLIANCE FILINGS, Issued March 26, 2009.

⁷⁵ FERC Docket ER05-1410-013, et. al. ORDER ON CLARIFICATION AND REHEARING AND ON COMPLIANCE FILINGS, Issued August 14, 2009

⁷⁶ Tr. at 61/2-3

⁷⁷ Id. at 60/8-9

⁷⁸ Id. at 200/18-23

VIII. NEW JERSEY MUST ACT NOW TO INCENT NEW GENERATION

For the many reasons outlined above, LS Power recommends the Board immediately take steps to implement the auction as described in Attachment B to be conducted no later than November 1 of this year to allow developers sufficient time to be operational by June 1, 2014 and to be able to participate in the 2014/15 BRA which will be held in the 2nd quarter of 2011. LS Power has outlined a proposed process and schedule to implement its proposal in Attachment C.

Attachment A

NEW YORK BRANCH

July 1, 2010

Mr. Joseph Esteves
CFO
LS Power Development, LLC
1700 Broadway
New York, New York 10019

You have asked for our views on the financing feasibility of new construction of electric generating plants in the PJM area, specifically in the New Jersey area. We assume that such generating plants would be “merchant” generators that would earn energy payments in the spot market and would be eligible to receive capacity payments dictated by the RPM structure currently in effect.

The primary issue is that, based on our understanding of the RPM structure, capacity payments, at any point in time, will be known for a maximum of three years in advance. This relatively short time period for revenue certainty is significantly cut back for new construction projects that can take two years to build. At the start of construction, which is when all the funding would need to be committed, the lender would have only one year of pricing certainty during the projected operating period of the plant. So in year 2 of operation of the facility, the lender would be fully exposed to the RPM pricing uncertainty.

In addition, while it is possible to obtain some price certainty on the energy payments by entering into financial hedges, those agreements seldom extend for more than four to five years into the future. So even with these hedges, a project in construction would have revenue visibility for only two to three years of operations.

In our view this level of revenue certainty is not adequate to broadly attract project-based construction financing. The RPM structure provides some short term revenue stability that would induce non-recourse acquisition finance for existing generators, but it is not that helpful for new construction projects that cannot generate until two years out.

The lender markets for these types of projects broaden when there are long-term, fixed price contracts that provide revenue certainty. There is very limited appetite for “merchant” risk in the banks participating in the project finance market. Merchant risk tends to be accepted in markets where the price risk can be hedged out for at least three years and the leverage is comparatively low.



For these reasons, it would be very difficult for us to provide a project financing for a new-build under the RPM model as it presently operates. Without extending price certainty for more than three years, it would be difficult to structure a project financing for a new-build that could be broadly syndicated to the project finance banks. However, if there were some capacity to secure some longer hedges or contracts, we would be optimistic about the prospects for arranging project finance for new construction projects.

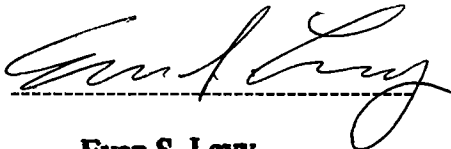
As you know Credit Agricole CIB, the corporate and investment banking arm of the Credit Agricole Group (the world's seventh largest and Europe's third largest bank on the basis of Tier I capital), is a leading project finance lender as evidenced by our following rankings (2009 PFI International):

- #2 among Global PF Mandated Lead Arrangers at USD 7.4 Billion
- #1 in number of transactions at 80
- #1 among Americas PF Mandated Lead Arrangers at USD 1.6 Billion

Americas Initial Mandated Lead Arrangers				
	Lead Manager	US \$ (m)	%	No. of deals
1	Credit Agricole CIB	1,631.6	8.1	26
2	Mitsubishi UFJ Financial Group	1,511.1	7.5	28
3	WestLB AG	1,317.2	6.6	21
4	BNP Paribas SA	1,067.4	5.3	19
5	Societe Generale	1,019.9	5.1	14
6	Mizuho Financial Group	745.6	3.7	7
7	ING	737.5	3.0	11
8	UniCredit Group	593.6	3.0	9
9	Sumitomo Mitsui Finl Grp Inc	532.6	2.7	6
10	Santander	524.8	2.6	11

Source: Project Finance International, Jan 13, 2010

Kind regards,



Evan S. Levy
Director



VIA EMAIL

June 30, 2010

Joseph Esteves
Chief Financial Officer
LS Power Development, LLC
1700 Broadway, 35th Floor
New York, NY 10019

Dear Joseph:

We are pleased to provide LS Power with our feedback on the prospects for financing new-build electric generating plants in the PJM market region, and specifically in New Jersey. For the purposes of this analysis, we have assumed that a developer would construct a plant over a period of 2-3 years and would subsequently sell its output into the merchant electric markets. In PJM, we understand that these markets generally include the energy market, capacity market ("RPM"), and the market for various ancillary energy products.

In general, lenders to power projects that require large capital investments closely scrutinize the project's revenue stability to determine how much debt financing can be provided. These lenders are accustomed to seeing long-term, fixed price contracts that can provide certainty of repayment, and to the extent that pricing for open or "merchant" capacity exists, lenders will typically give very little credit to revenues that cannot be financially hedged or contracted.

Based on our understanding of the existing RPM structure within PJM, a project can only lock in capacity payments for a rolling three year period at the most. Thus, for projects where all capital sources need to be identified and committed at the onset of construction, would-be lenders have little to no visibility as to the pricing of capacity revenue after the term of construction, i.e. if a project takes 2-3 years to construct, lenders could rely on one year or less of known RPM payments.

The current market for hedging energy and other ancillary products provides very little additional leverage capacity. In our experience, counterparties that would contract with a project to purchase these products for resale in the PJM market are not willing to enter into transactions longer than four to five years. Therefore, after taking the 2-3 years that it would take to construct a project into account, would-be lenders could only rely on 1-2 years of hedged revenues after construction completion at the point in time that they would normally commit their capital at the onset of construction activity.

In summary, the prevailing market dynamic in PJM alone, without the ability to secure long-term off-take contracts, is not supportive of project-based financing. While the financing community is generally supportive of stand-alone project financings that have substantial cash flow certainty, the short-term horizon of the RPM market currently does not provide the level of cash flow certainty sought by lenders.

Union Bank has a long-standing relationship with LS Power, and we actively compete to lead and participate in lending activities that support their business activities. In the past four years alone, we have committed over \$390 million to LS Power-controlled projects. That being said, we do not believe that we would be able to finance a new-build project in New Jersey that relies primarily on RPM and merchant energy revenues. Moreover, given our extensive history as a market leader in the project finance sector within North America, we are confident that other lenders share our view on this matter.

We are constantly reviewing and tracking industry developments, and if there were long-term contracts for a project to avail itself of in PJM, we feel that would be a very constructive dynamic that would warrant a reassessment of our view.

Union Bank (formerly known as Union Bank of California) is a leader in energy investing and financing with an energy portfolio aggregating over US\$13 billion. We provide capital for power generation including renewable energy; transmission and distribution; oil & gas reserves; pipelines and refining companies.

Our commitment to the energy space has been uninterrupted for over 25 years. To date, we have been involved in over 30 renewable energy projects, aggregating to over 3,000 MW, including wind, solar, geothermal, and hydro.

Please note that this letter does not constitute an offer or commitment nor an agreement of exclusivity by Union Bank or any of its affiliates to negotiate or otherwise participate in any transaction. Any such offer or commitment would be in writing and forthcoming only upon negotiation of a mutually satisfactory term sheet, completion of satisfactory due diligence, receipt of all necessary approvals, and finalization of documentation satisfactory to us.

Kind regards,



Pascal Uttinger
Vice President
MUG Power & Utilities
Tel. 213 236 5549

Attachment B

LS Power Proposal to Modify the Current Basic Generation Service (BGS) Auction Process

1. Establish an auction process for the procurement of basic generation service that shall be known as the Basic Generation Service Long-Term Contract Process, or BGS-LTCP, for the purpose of facilitating the development of new, efficient, in-state, combined-cycle electric generators with a net summer output rating of at least 100 MW or larger, limited to participants with an aggregated ownership interest, including affiliates, in no more than 50% of the total existing in-state generation at the time of the auction (“eligible generators”). The existing basic generation service procurement processes shall be maintained in addition to BGS-LTCP.
2. The BGS-LTCP process shall be conducted on a pilot basis with the pilot auction commencing no later than November 1, 2010 for commercial operation no later than June 1, 2014 with a preference for those eligible generators capable of commercial operation prior to June 1, 2014.
3. For the pilot auction commencing no later than November 1, 2010, the BGS-LTCP shall reserve 1,000 megawatts from the existing BGS-FP procurement process to be procured by electric public utilities serving as basic generation service providers and supplied by eligible generators.
4. To maximize economic benefits and job creation in the State, eligibility shall be limited to eligible generators only.
5. Eligible generators participating in the BGS-LTCP shall be required to offer and the Board shall consider in selecting the winning eligible generator: a) fixed cost pricing, including return-of and return-on investment, b) variable cost pricing (excluding fuel and taxes) which would be a pass-through of actual costs (excluding fuel and taxes), and c) guarantees for performance and efficiency.
6. In selecting the winning eligible generator, the Board shall also give preference to those eligible generators that provide other environmental, economic, and community benefits and

can demonstrate certainty of completion of development and permitting activities necessary to meet the desired in-service date.

7. The electric public utilities serving as basic generation service providers participating in BGS-LTCP shall have the right to the capacity, energy, and ancillary services from a selected eligible generator up to the megawatt limit set by the resulting BGS-LTCP contract.
8. In the pilot auction to commence no later than November 1, 2010, each public utility shall only be required to enter into a contract(s) totaling a maximum of 500 MW.
9. The selected eligible generator shall enter into the long-term contract with the interconnected electric public utility serving as a basic generation service provider.
10. In the pilot auction to commence no later than November 1, 2010, the resulting BGS-LTCP contract shall bind the electric public utilities to a long-term contract with a selected eligible generator for at least 15 years.
11. The electric public utilities serving as basic generation service providers shall be required to allocate RPM's capacity credits obtained from the selected eligible generator to the basic generation service suppliers at no cost, thereby reducing the cost of basic generation service.
12. The energy output of the selected eligible generator shall be managed by a third-party energy manager on behalf of the electric public utility serving as a basic generation service provider and all margins from the energy sales will revert back to the electric public utility's basic generation service customers.
13. The Board shall have complete discretion in approving any contract that results from this process, consistent with the discretion in the current BGS auction processes.
14. The Board shall allow for the full recovery of all costs associated with the resulting BGS-LTCP contract from ratepayers through a non-bypassable, irrevocable charge.

Attachment C

LS Power Proposed Process and Schedule

LS Power recommends the Board:

- a. Accept the BGS-LTCP procurement process described in Attachment B;
- b. Make the determination that the BGS-LTCP procurement process described in Attachment B provides energy at costs consistent with “market conditions” and with other requirements of EDECA;
- c. Authorize the BPU Staff to immediately work with parties to develop and complete the BGS-LTCP process described in Attachment B and conduct the pilot auction no later than November 1, 2010 (see proposed schedule below); and
- d. Allow for the recovery of all the costs associated with the BGS-LTCP long term contract from ratepayers through a non-bypassable, irrevocable charge in accordance with the similar recovery mechanism outlined in EDECA.

LS Power proposes the following schedule to support conducting the pilot auction no later than November 1, 2010.

BPU Schedule

Action	Duration
BPU Decision accepting the BGS-LTCP procurement process and authorizing staff to work with parties to develop the BGS-LTCP procurement process	0 weeks
Working group meetings to discuss procurement process structure	1 weeks
Utilities file procurement process design and plan	4 weeks
Parties file comments, working group meetings, BPU hearing	3 weeks
BPU decision authorizing procurement process	1 week
Procurement process conducted	2 weeks
BPU approval of award*	3 days
Execution of Contracts with Utilities*	2 days

*Similar to the BGS auction - the BPU conducts a separate meeting to approve the auction results and winners have 2 days to execute contracts that have been previously commented on.