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SENT VIA EMAIL

June 9, 2006

Steven Herling
Vice President Planning
PJM Interconnection, LLC
955 Jefferson Avenue
Norristown, PA 19403

Re: Comments Of PSE&G To The May 2006 PJM RTEP Baseline

Dear Steve:

The following comments are submitted on behalf of Public Service Electric and Gas Company ("PSE&G") to the PJM May 2006 PJM RTEP Baseline presented to the PJM Transmission Expansion Advisory Committee ("TEAC") on May 23, 2006 ("May 2006 Baseline"). PSE&G support PJM's initiation of this new process which allows stakeholders to provide written comments to PJM staff and the PJM Board on the RTEP baseline before such baselines are submitted to the PJM Board for approval. This should aide in increasing the accuracy, robustness and transparency of PJM's transmission planning process.¹

¹ A longer time period to allow stakeholders to analyze the baseline would be more beneficial. We recommend that parties be given between 60 and 90 days to provide comments to allow thoughtful review of the baseline, its assumptions and recommendations.

I. Introduction

PSE&G is a public utility company organized under the laws of the State of New Jersey. PSE&G is presently engaged in, among other things, the transmission and distribution of electricity and the distribution of natural gas in New Jersey. PSE&G owns transmission facilities in PJM. PSE&G is a provider of last resort (“POLR”) to the retail electric and gas customers in the state of New Jersey that have not selected a competitive retail supplier. PSE&G’s affiliates own and operate generation and sell electric energy at wholesale in PJM and other regions. These affiliates also have certain long term contracts to sell POLR service in New Jersey, Maryland, Connecticut, New Hampshire and Massachusetts.

PSE&G remains committed to robust competitive markets and the RTO model which enables those markets. Regional transmission planning is one of the core functions that RTOs must provide to ensure a reliable system and one that supports a competitive market. PJM currently has a strong transmission planning process that evaluates the need for transmission projects to meet the reliability needs of the region. PJM’s RTEP also evaluates the need for transmission projects to address historical unhedgeable congestion as a market back-stop.

In the recent past, a flaw that we have seen in the PJM transmission planning process is that it has not used an adequate planning period. At the 2005 PJM Annual Meeting, we expressed our concern that the PJM planning process was using too short of a planning period. At the time, PJM was operating with a five year transmission planning process which, in our opinion, was inadequate. PJM and stakeholders rallied together to address this problem.

On January 17, 2006 PJM and the PJM Transmission Owners filed a revised transmission owners' agreement which among other things, established a minimum ten year planning period.² Since then, PJM staff and stakeholders have been working diligently toward the development of a longer term planning horizon and we are now starting to see the results of that process. PSE&G strongly believes that this simple change to the process – expanding the planning period – should provide significant benefits in terms of reliability and market support to the PJM region.

PSE&G recognizes that the longer planning period also brings challenges. There is greater uncertainty as the planning period gets longer. The generation interconnection queue, for example is only 7 years, and PJM does not currently have a process to estimate what generation will likely be in place beyond that 7 year period. Changes in demand side resources likewise are not modeled to show likely long-term new entry. We respectfully suggest that PJM cannot ignore the differences in these planning periods and expect the long-term transmission planning process to produce reasonable results.

Transmission planning is heavily dependent upon assumptions and models. If the assumptions are skewed the results will also be skewed. In the May 2006 Baseline, PJM has a broad array of well developed data available to it for the 5 year portion of the plan. Our comments to this five year portion of the plan are precise and focus on (i) specific changes of circumstances that appear to render certain projects no longer necessary and (ii) specific questions regarding why certain committed generation projects were not included in the PJM modeling and whether certain ratings used by PJM in their modeling were accurate.

Our comments and questions with respect to the longer term portion of the plan tend to be more policy driven. PJM has made certain planning assumptions, which we contend are flawed.

² Consolidated Transmission Owners Agreement, Rate Schedule No. 42, Order Accepting Proposed Tariff Revisions For Filing, Subject to Revisions, PJM Interconnection, L.L.C. et al., Docket Nos. ER06-487-000, et al., 114 FERC P 61,283 (March 17, 2006).

For example, PJM's long-term portion of the plan does not properly consider what new generation resources or demand side resources will be in place in those later years. Assuming no new generation or demand side resources in those later years affects the planning results.

Additionally, PJM has proposed a new element of the RTEP process that recommends that the PJM Board approve certain projects "for development". This is a new concept and needs further discussion and precision before the PJM Board should proceed with it. The details of what "approval for development" means is still unclear. Further, who will pay for these development costs if the projects are cancelled is not settled. The PJM Board should not be asked to approve what are clearly overlapping projects until these details are addressed.

PSE&G is actively participating in the ongoing PJM RPPWG stakeholder group which is evaluating certain changes to the current PJM RTEP process. We are continuing to submit our comments and concerns to improve those proposed changes in that stakeholder process. PSE&G has also raised certain issues at FERC with respect to the manner in which PJM is implementing its cost allocation methodology. Those issues are currently pending in an open proceeding at FERC³ and PSE&G has the same concerns that it is expressing in that proceeding with respect to the cost allocation recommendations set forth in the May 2006 Baseline.

The comments set forth herein are limited to the PJM May 2006 RTEP Baseline proposal within the context of the current Schedule 6 of the PJM Operating Agreement ("OA") and do not address the detailed issues being discussed in the RPPWG or in the ongoing FERC allocation proceeding.

³ *Order On Cost Allocation Report And Establishing Hearing And Settlement Judge Procedures*, PJM Interconnection, L.L.C., Docket Nos. ER06-456-000, 115 FERC ¶ 61,261 (May 26, 2006).

II. Summary

PSE&G' comments to the PJM May 2006 Baseline include:

- **Project b0315-230KV - Linden South Waterfront.**

Our recommendation is to remove this project from the May 2006 RTEP Baseline and not submit this project to the PJM Board for approval at this time. Originally, this project was proposed to address Eastern MAAC reliability criteria. PJM announced at the May 23, 2006 TEAC meeting that the project was no longer needed for Eastern MAAC reliability needs, as a result of certain actions that Jersey Central Power and Light Company (“JCP&L”) was undertaking. This project was planned and sized to meet the reliability needs of the Eastern MAAC criteria. A project of this size and scope may not be needed to meet the reliability needs of the northern PSE&G zone and may not be the optimal solution to meet the more limited reliability needs of the northern PSE&G zone. In future years, the PSE&G northern zone may have the need for a different transmission project to meet reliability needs. We are continuing to work with PJM toward evaluating the revised needs of this region and developing the project(s) that optimally meet those needs. *If the JCP&L actions are not taken or not effective, we would continue to support the need for this project in the 2011 timeframe. PSE&G further requests additional clarification and verification from PJM that the project is not needed for Eastern MAAC reliability.*

- **Projects b0227.1, b0328.1, b0328.2, b0328.3, b0328.4, b0343, b0344, b0345, b0347.1, b0347.2, b0347.3, b0347.4.**

We recommend that PJM respond to certain specific questions with respect to the modeling of these twelve projects and make appropriate adjustments in the modeling prior to submitting these projects to the PJM Board for approval. Specifically, it appears that certain committed

generating units were not modeled and the load data used in the modeling was stale. Further, we note certain abnormalities in the ratings of certain facilities used in the modeling. These findings could be material and some of them standing alone would eliminate the need for some or all of these proposed transmission projects. If there is not a legitimate need for these transmission projects, it would be imprudent to approve them in the baseline plan. As a result, we request that PJM provide stakeholders and the PJM Board with clarifications as to these issues and make any needed corrections to the model.

- **Flaws in planning assumptions/lack of rigor in long term plan.**

The comments also note certain specific flaws that appear to exist the later years of the planning process. These flaws include the failure to properly assess what new generation is likely to come on line in these later years. Further, we note that the longer range aspects of the baseline do not undergo the same rigorous evaluations as the five year plan. Specifically, it appears that there is no thermal or voltage analysis of the plan after 2011. As to the lack of rigor in the longer term planning process, we recommend that the Board be aware of these frailties and ensure that a rigorous review be implemented on an ongoing basis. If it is later determined that these projects do not offer the anticipated reliability benefits, they should be cancelled.

- **Approval for Development.**

PSE&G recommend that these projects not be presented to the PJM Board at this time. Rather, we recommend that these projects be presented to the PJM Board for approval either: (i) for full approval and cost allocation recognizing that they can be cancelled later; or, (ii) that PJM further refines this new concept of *approval for development* so that there are clear parameters as to what it is and how it works. PJM has added a new category to the RTEP – *approval for development*. The May 2006 Baseline recommends that numerous projects be approved by the

PJM Board for development. We recognize that some projects may need further study before the PJM Board is comfortable approving them for construction and cost allocation. Approving these projects for development, however, does not appear to be part of the PJM RTEP process as set forth in Schedule 6 of the Operating Agreement. Further as discussed above in the introduction, clarification of what *for development* means is required to ensure consistency between projects and transmission owners. It appears that PJM does not plan on assessing cost responsibility for such projects. The consequences of this need to be better understood and formalized. If a major transmission project in western PJM is approved for development, can the transmission owner spend millions of dollars in right of way acquisition? If the project is later cancelled (before it is approved for construction and cost allocation) because it is determined it is not needed for reliability and too expensive to address congestion – can that transmission owner then seek to collect its development costs from PSE&G customers in the East? If this is what is being contemplated – the proposed cost allocation and details of what is being studied and being spent would need to be addressed in advance so that customers have notice of what charges they may be responsible for at a future date.

III. Comments

A. Cancel/Defer Project b0315-230KV - Linden South Waterfront

PSE&G has been working closely with PJM staff since early 2005 to develop of transmission planning solution in New Jersey that would alleviate a load deliverability issue in Eastern MAAC for 2011. Project b0315 was identified as the solution. The project, which is estimated to cost \$220 million, involves building an underground 230 kV circuit from Linden to the South Waterfront in the heavily populated area of northern New Jersey. PSE&G has been working diligently on this project.

At the May 23, 2006 TEAC meeting, PSE&G learned for the first time that PJM would be relying upon certain actions of JCP&L, in the form of reconductoring certain transmission facilities and re-rating certain other transmission facilities, that apparently addressed the load deliverability problem in Eastern MAAC. As a result of JCP&L's actions, PJM advised that there was no longer an Eastern MAAC load deliverability problem in 2011 that would be eliminated by project b0315. Accordingly, PJM revised the May 2006 Baseline by modifying the cost allocation for project b0315 to 100% PSE&G zonal load.

We do not know the details of or the effectiveness of the JCP&L actions that appear to have addressed the underlying load deliverability problem in the region. Assuming that the JCP&L actions are achievable and effective, we fully support them. Indeed, this is exactly the type of practice that PJM should be engaging in – looking for the optimal solution to address the transmission needs of the region. If minor changes on the JCP&L system can eliminate the need for all of or a portion of a \$220 transmission project, they should.

Assuming that the JCP&L changes are effective, the transmission planning model for the PSE&G zone shows that there is not a load deliverability violation in the northern PSE&G zone in 2011 that would need a project of the size or magnitude of project b0315. Since, according to PJM, the JCP&L zone does not need the b0315 project, and the analysis then shows that the northern PSE&G zone does not require the b0315 project on a stand alone basis – there is no longer any justification for the PJM Board to approve the project at their June 2006 meeting.

Should PJM or the PJM Board determine, after further evaluation, that the JCP&L actions may not be effective or achievable, then project b0315 would be needed for Eastern MAAC load deliverability. In such event, PSE&G would support the approval of such project

by the PJM Board, together with cost allocation that reflects a reasonable allocation of costs to the JCP&L zone and PSE&G zones or other zones as appropriate.

B. Address modeling issues for Projects b0227.1, b0328.1, b0328.2, b0328.3, b0328.4, b0343, b0344, b0345, b0347.1, b0347.2, b0347.3, b0347.4.

The twelve identified projects are related and intended to address a load deliverability problem in MAAC. These projects are all in the APS and Dominion zones and are estimated to cost approximately \$868 million. In reviewing these projects, we have five specific issues that our planning experts have identified as requiring further clarification. In some instances, changes to even one of these items could alleviate the need for one or more of these projects. Perhaps these issues are explainable, but due to the large dollar amounts involved in these projects, and the fact that the customers in the PSE&G zone have been allocated approximately 14% of the costs of these projects in the May 2006 baseline, we believe that these issues require further evaluation before these projects are approved by the PJM Board. To the extent any of these issues require changes in the May 2006 Baseline, such changes would be necessary prior to PJM Board approval.

First, certain committed generation has not been modeled. The details set forth in Attachment A show certain generating units that are currently either on-line or have signed an ISA. It appears that this additional generation capacity was not included in the PJM modeling in the load deliverability test used to justify these transmission projects. As a result, approximately 56.4 MW in MAAC was not included in the model. Additionally, as described in Attachment A, 222 MW of additional generation capacity committed to come on line in MAAC by 2006 does not appear to have been modeled. One project is an oil fired unit and is 142 MW. The other

is an 80 MW wind unit. These units signed ISAs in March and May of 2006 and would affect the modeling results of these twelve projects.⁴

Second, it appears that PJM used a February 2005 load forecast for its model. The February 2005 model referenced 64,368 MW of load in MAAC. The 2006 load forecast for MAAC is measurably lower at – 63,777 MW. A lower load forecast in MAAC would reduce the need for emergency imports, which we believe is what is driving these eight projects.

Third, more than 600 MW of wind generation has and is committed to come on line in MAAC. The PJM model did not include that wind generation and thus appears to underestimate the generation in MAAC and again appears to overestimate the need for emergency imports. We recognize that wind generation does not have the same capacity benefits as other generation resources. Despite this there should reasonably be some recognition of energy and capacity value of this wind generation.

Fourth, we need clarification with respect to the limiting factor at the Mt. Storm – Doubs 500 kV facility. The overhead circuit has the same 2598 MVA rating for both emergency and normal conditions. This appears very unusual to us and would suggest that there could be a flaw in one of these ratings. The normal rating may be too high or the emergency rating may be too low, but it is highly unusual that they are the same. A significant change in either rating could significantly change the modeling results.

Fifth, and potentially most significant, a 640 MW generation station at Eastalco 230 kV, Queue # G51_W62 has committed to build a natural gas generation station near the Doubs

⁴ At a minimum, all “committed generation” should be modeled. Even where that commitment comes in the middle of the planning period, ignoring that generation would not be prudent and would result in overestimating the needs of the region.

facility with an in-service date in 2009. This unit signed an ISA in 2006.⁵ Once built in 2009, this plant will push counter-flow against the constraint and should significantly relieve and potentially alleviate it. Including this project in the modeling appears to be prudent and appropriate.

Each of these items could potentially have significant impacts on whether some or all of these 12 transmission projects are needed or not. Accordingly, we encourage PJM to further evaluate these matters and for the PJM Board to act carefully in their approval process to ensure that the planning and modeling process included all pertinent information.

C. Flaws in Planning Assumptions

As PJM's planning horizon is lengthened and more uncertainty is brought to bear, the adequacy of PJM's planning assumptions and procedures takes on an even greater importance. Flaws in the assumptions or procedures for transmission planning can have significant consequences on both the reliability of the interstate grid as well as on the wholesale and retail electric markets. For example, one planning assumption made by PJM in the long term planning process (for years 6-15) is to assume historical rates of load growth for the entire period, but to assume no new generation or demand side resources beyond the terms of the specific tools in place – i.e. generators that currently have signed interconnection agreements in the 7 year queue scaled up. A planning process that assumes historical rates of load growth and no new generation entry or demand side resources in those later years simply appears flawed. PSE&G believes that this issue requires further attention. Indeed, some state regulators in the PJM region

⁵ According to the PJM website (<https://www.pjm.com/planning/project-queues/queue-gen-active.jsp>), the Eastalco project completed the ISA process and signed the ISA in 2006. Further discussions with PJM suggest that while the generator has signed the ISA, the interconnecting transmission owner may not yet have signed. We see no legitimate reason not to include the project in the modeling under these circumstances. Further, even if the ISA was signed recently and PJM did not have time to evaluate the impacts on these 8 projects they should evaluate that impact now.

have plans underway to increase “Distributed Resources/Demand Response” and current MADRI policy goal is an extra 3% peak reduction. Further consideration should be given to how these initiatives are considered in the long term planning horizon.

Some parties may claim that it would not be prudent to include new generation or demand side resources in the planning assumptions unless the generation has a signed interconnection agreement in place or has otherwise committed. We disagree for several reasons. While there may be some greater risk associated with resources that are not in the current queue, by PJM’s own rules load is required to maintain a 15% reserve margin of generation capacity. Therefore, as load grows, PJM’s own rules require that generation capacity also increases. Second, historical patterns demonstrate that generation gets built when expected revenues support new entry. Third, assuming no new generation or demand side resources, while assuming historical rates of load growth, is an extreme worst-case scenario that is overly conservative and not consistent with prudent transmission planning.

Another point that PSE&G has with respect to the planning assumptions relates to the level of detailed scrutiny applied to the 6-15 year planning process. PSE&G respectfully suggest to PJM and the PJM Board that the long-term planning process assumptions must be corrected to follow more standard planning practices.

D. Approval For Development

It appears that PJM has added a new category to its RTEP process – “approval for development”. The May 2006 Baseline recommends that numerous projects be approved by the PJM Board for development. We recognize that some projects may need further study before the PJM Board is comfortable approving them for construction and cost allocation. Approving these projects for development, however, does not appear to be part of the PJM RTEP process

as set forth in Schedule 6 of the OA. Further as discussed above, clarification of what *for development* means is required to ensure consistency between projects and transmission owners. It appears that PJM does not plan on assessing cost responsibility for such projects. The consequences of this need to be better understood and formalized.

PSE&G recommends that the “approve for development” projects are premature to be presented to the PJM Board at this time. Rather, we recommend that these projects be presented to the PJM Board for full approval and cost allocation recognizing that they can be cancelled later or that PJM further refines this new concept of *approval for development* so that there are clear parameters as to what it is and how it works.

Very truly yours,

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