Dynegy Marketing and Trade, LLC and Invenergy, LLC appreciate and are supportive of PJM’s efforts to incent performance during critical periods; however, there are several flaws with the PJM proposal that need to be addressed, including, unrealistic expectations by PJM of performance, an uncertain mitigation scheme and must-offer requirement, extremely asymmetrical risk / reward profile, continued reliance on sub-annual products, fuzzy “mandate” and officer certification requirement around fuel firming. In addition to pointing out these flaws this paper will suggest alternatives that will address the concerns of PJM at a much lower cost, obviating the need for a major redesign of the capacity market.
Comments on the PJM Capacity Performance Proposal

JOINT COMMENTS OF DYNEGY AND INVENERGY

FAULTY ASSUMPTIONS

PJM’s proposal includes several flawed assumptions that need to be addressed:

- That all risk should flow to the generator
- That dual-fuel capability or fuel on the ground is a panacea
- That all gas-fired generators have equal access to fuel-firming products
- Gas-fired generators should maintain the same flexibility during “critical days” on the pipeline as regular days
- Every generator owner will have uncommitted units to help mitigate the inevitable penalties
- Sub-annual products are compatible with winter reliability and proper price-formation in RPM
- A mentality that generators did not want to run during the Polar Vortex and capture high energy prices
- That there has been sufficient time for the stakeholder process to undertake a major capacity market redesign

1. All risk should flow to the generator – PJM believes that with an extreme enough penalty generators will schedule their forced outages during non-critical periods. PJM has a gross conceptual error in the fact that their performance expectation is for a 0% forced outage rate, which is not achievable. The supposed Risk Premium of 7% is consumed by only 3.5% forced outage hours, including the buy-back of the day-ahead position. The currently proposed maximum penalty of 250% of capacity revenues is untenable.

2. PJM believes fuel on the ground\(^1\) or dual-fuel capability\(^2\) to be a panacea, yet a significant percentage of units forced out during the polar vortex period had dual-fuel capability or fuel on the ground and couldn’t utilize it.

3. PJM thinks that gas-fired generators all have the same access to fuel-firming products but it is demonstrably not true. Pipelines have different tariffs and products as well as potentially limited availability of the products needed for fuel-firming. Some gas-fired units are behind LDCs, which may further limit availability of these products.

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\(^1\) Figure 3 & 5, Problem Statement on PJM Capacity Performance Definition
\(^2\) Figure 7, Problem Statement on PJM Capacity Performance Definition
4. PJM believes that gas-fired generators should maintain their flexibility to ramp and cycle during critical periods on the pipeline (critical days, OFOs, etc.) as non-critical days. PJM should understand that the real constraint is the limitations placed on it by the pipeline and / or LDC, which can isolate the generator from the pipeline if it doesn’t comply.

5. Every generator owner will have uncommitted units to mitigate the inevitable penalties – PJM is advocating for an inefficient market where generator owners must withhold capacity from the market in order to mitigate their risk of the 250% penalty for non-performance during critical periods. This is extremely troubling and could result in a concern over market power and overprocurement of supply to meet projected demand.

6. PJM believes that sub-annual products are compatible with winter reliability and proper price-formation in RPM – PJM is equating Limited Demand Response (a 60 hour product) and Extended Summer Demand Response (26 week product) with the Base Capacity product (PJM estimated 51 week product). Clearly both of the sub-annual products are inferior to the Base Capacity product and incompatible with maintaining winter reliability. PJM may not have had the same result during the polar vortex if they had procured all annual products.

7. PJM’s approach assumes generators did not want to capture high energy prices during the severe weather. The proposal is premised on punitive measures in the form of financial penalties to get generators to perform.

8. PJM issued its Capacity Performance problem statement on August 1, 2014 and held a limited set of meetings to discuss the problem. It issued its Capacity Performance proposal on August 20, 2014 and held two, meetings to discuss the proposal along with an opportunity to submit questions for an FAQ and provide feedback by September 17, 2014. In full disclosure, PJM is holding one additional meeting on September 24, 2014 prior to a board discussion on November 4, 2014. For a proposal that seeks to radically change the meaning of capacity, this is insufficient time to discuss the issue with meaningful dialogue. By comparison, PJM’s Triennial Review that evaluates CONE and the Demand Curve which PJM has done several times since the inception of RPM and has experience in working through took sixteen meetings. This short amount of time doesn’t allow for meaningful stakeholder discussion.

RECOMMENDATIONS: WHAT PJM SHOULD DO TO INCENT PERFORMANCE

1. Pay for performance instead of relying on extreme penalties to cure non-performance
   a. Those who perform better than the Pool-wide EFORd (or other performance metric) are paid a premium (based on best-in-class performance for each unit class)
   b. Those who perform worse than the Pool-wide EFORd (or other performance metric) pay a penalty
      i. At some level of non-performance (say 35% or so) the entire capacity payment is forfeit for that season
      ii. The penalties collected are used to pay those who perform
c. Premiums and penalties are assessed on all annual products (DR included)

2. Better align power & gas day times and nomination cycles

3. Improve day-ahead market clearing times

4. Give more notification time for gas units to procure and nominate / schedule fuel during hot and cold weather periods
   a. Understand the limitations placed on gas-fired units and optimize accordingly
   b. Allow updating offer curves in real-time to reflect intra-day fuel pricing & availability
   c. Allow generators to recover the cost of fuel procured based on a PJM commitment that is subsequently canceled, reduced or extended, including balancing and other related charges.

5. Change PJM’s operational behavior during critical periods
   a. Understand the limitations placed on gas-fired units and optimize accordingly
   b. Recognize that some units may only be able to provide limited flexibility based on a ratable take of gas regardless of where units are pulling gas from (behind an LDC or direct from a pipeline)
   c. Utilize flexibility of dual-fuel units and those who can get variable no-notice service

6. Investigate the fuel firming products available on a pipeline specific basis

7. Remove uncertainty around:
   a. Mitigation
      i. Allow full cost recovery for fuel-firming and dual-fuel as well as other weatherization costs
      ii. Fully compensate units for the performance expected
   b. Must-offer requirement

8. Eliminate or clarify the required elements of the Officer Certification

9. Revisit RPM structure to improve price-formation
   a. Eliminate 2.5% holdback
   b. Eliminate sub-annual products

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