



**State of New Jersey
Board of Public Utilities
Energy Division**

In the Matter of the Board's Investigation of :
Capacity Procurement and Transmission : **Docket No. EO 11050309**
Planning

Reply Comments of PJM Interconnection

I. INTRODUCTION

Pursuant to the New Jersey Board of Public Utilities' (NJ BPU) direction at the conclusion of the June 17, 2011 hearing that Reply Comments be submitted by July 12, 2011, PJM Interconnection, L.L.C. (PJM) submits these Reply Comments to answer questions raised by Commissioner Jeanne Fox during questioning of PJM witness Andrew Ott. Specifically, Commissioner Fox requested that PJM provide information about the rules for longer-term revenue certainty for new entrants in other RTO capacity constructs.¹ Additionally, Commissioner Fox requested that PJM provide information regarding the notice requirements for generation deactivation requests in PJM and other regions.² PJM submits these limited Reply Comments to address those requests.

¹ Tr. at 25, ln. 4-6.

² Tr. at 28, ln. 21-22.



II. COMMENTS

A. Longer Term Revenue Certainty for New Entrants

Only PJM and ISO New England have resource adequacy constructs that commit capacity across the RTO region on a forward basis (*i.e.*, beyond one year forward) and, thus, are the only RTOs with new entry pricing rules to provide longer term revenue certainty to new resources.³

The comments PJM submitted on June 17, 2011 describe the current New Entry Pricing Adjustment (NEPA) rules in RPM. NEPA provides a new entry project, in certain narrow circumstances, assurances that it will receive its “new entry” price, *i.e.*, the clearing price from the first year the new plant enters a constrained Locational Deliverability Area (LDA), for two additional years.⁴ PJM attempted to modify the rules in 2009, including extending the period of revenue assurance to five or seven years. The Federal Energy Regulatory Commission (FERC) concluded that it could not accept those changes, finding they would result in “price discrimination between existing resources, including Demand Response, and new generation suppliers” and did not strike the right balance between facilitating project financing and minimizing uplift payments from load.⁵

³ The New York ISO’s capacity market is not considered a forward capacity market by the Federal Energy Regulatory Commission. *See N.Y. Indep. Sys. Operator, Inc.*, 122 FERC ¶ 61,211, at PP 122-129 (2008). New York ISO’s capacity markets consist of: (1) a capability period auction which involves transactions for capacity for up to a six-month strip of time, Winter (November – April) or Summer (May – October); (2) a monthly auction for any month during the current capability period; and (3) a spot market auction for the upcoming month. California ISO, ERCOT, and SPP do not have capacity markets. The Midwest ISO facilitates a voluntary bilateral capacity market and currently is engaged in stakeholder discussions considering moving to a mandatory capacity commitment on a forward basis. PJM understands that MISO has completed its stakeholder process and plans to file a proposal with FERC shortly.

⁴ PJM Open Access Transmission Tariff, Attachment DD, section 5.14(c).

⁵ *PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,275, at P 149 (2009).



As PJM indicated in its earlier comments, and Mr. Ott explained during the June 17 hearing, PJM is engaged with stakeholders reviewing possible modifications to NEPA with the goal of filing with FERC any proposed changes by October 1, 2011. According to prior guidance from FERC, any reform of the rule must balance the need to support new entry with the requirement that there be no undue discrimination between new and existing resources.⁶

The ISO New England's resource adequacy construct is called the Forward Capacity Market (FCM). In 2006, the FERC approved a contested settlement agreement that created the FCM.⁷ Subsequent to approving the FCM, the FERC has explained that, "[w]hile the price paid to existing resources may change from year to year, new resources entering the market . . . will be able to opt to lock in prices for up to five years" and that "[t]his design element is intended to provide predictable revenues and facilitate financing for new capacity."⁸ Importantly, however, this provision was approved as part of a settlement. As such, the FERC did not address whether the proper balance was struck between longer-term revenue certainty and ensuring undue discrimination. The FERC explained that it approved the provision "as part of an overall settlement, not as an individual provision that was found to be just and reasonable in its own right."⁹

⁶ *PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,275 at P 149 (2009).

⁷ See *ISO New England, Inc.*, 135 FERC ¶ 61,029, at P 3 (2011) (citing *Devon Power LLC*, 115 FERC ¶ 61,340 (2006), order on reh'g, 117 FERC ¶ 61,133 (2006), *aff'd in relevant part sub nom. Me. Pub. Utils. Comm'n v. FERC*, 520 F.3d 464 (D.C.Cir. 2008)).

⁸ See *Devon Power LLC*, 119 FERC ¶ 61,150, at P 2 (2007) (quoting *Devon Power LLC*, 115 FERC ¶ 61,340, at P16).

⁹ *PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,275, at n. 65 (2009).



The FCM's new entry pricing rules may be found in Market Rule 1 of the ISO New England Tariff:¹⁰

A New Generating Capacity Resource¹¹ may elect, during the qualification process, to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that clears in the Forward Capacity Auction continue to apply after the Capacity Commitment Period¹² associated with the Forward Capacity Auction in which the offer clears, **for up to four additional and consecutive Capacity Commitment Periods**, in whole Capacity Commitment Period increments only

[emphasis added].

Thus, through settlement negotiations, stakeholders in New England agreed to a Tariff provision providing up to five years of revenue for a new generation entrant, in contrast to the three years of possible revenue certainty under PJM's current Tariff.

B. Notice Requirements for Generation Deactivations

One aspect of the generation deactivations discussion at the June 17 hearing focused on whether the 90 days notice of generator deactivations is sufficient or whether the notice period should be extended. Commissioner Fox requested that PJM offer supplemental comments to further explain the parameters of the PJM requirement as well as to discuss the notice requirement in other regions.¹³ Below PJM describes the notice requirement in the PJM Tariff and notice requirements for other regions about which PJM

¹⁰ ISO New England Tariff § III.13.1.1.

¹¹ The definition of "New Generating Capacity Resource" provides as follows: "A resource . . . that is not a New Import Capacity Resource or Existing Import Capacity Resource . . . , or a New Demand Resource or Existing Demand Resource . . . shall be considered a New Generating Capacity Resource for participation in a Forward Capacity Auction if . . . the resource has never previously been counted as a capacity resource . . ." *Id.* § III.13.1.1.1.

¹² A "Capacity Commitment Period" is defined as "the one-year period from June 1 through May 31 for which obligations are assumed and payments are made in the Forward Capacity Market. *Id.* § I.2.2.

¹³ Tr. at 28, ln. 21-22.



generally is familiar. It is possible that other regional or state requirements exist; PJM does not represent this to be an exhaustive accounting of such rules.

1. PJM Footprint

a. PJM Generation Deactivation Notice Requirements

In 2004, PJM filed provisions with FERC to govern the deactivation of generating units. A generation owner must give PJM (i) at least 90 days notice prior to the date on which the generator owner wishes to deactivate a unit (Deactivation Date) and (ii) an estimate of any investment that would be needed to keep the unit operating. Thirty days from the date of such notice, PJM will inform the generator owner whether the unit is needed beyond the requested Deactivation Date to ensure the reliability of the system. Ninety days from the from the date of the notice, PJM will post on its website the transmission upgrades required to ensure reliability after the unit deactivates. FERC approved the notice provisions, finding that it is reasonable for PJM to require at least 90 days prior notice before a generator may retire, and that the compensation structure outlined in the PJM Tariff would apply to generators who “choose to remain an active member and connected to the system in order to maintain reliability.”¹⁴

However, the FERC rejected PJM’s proposal to be able to require generators to continue operating beyond the proposed Deactivation Date.¹⁵ FERC rejected PJM’s argument that the PJM Tariff required cooperation of its members to assure reliability and to conform to NERC standards, including operating beyond the proposed Deactivation Date. Thus, PJM may not require a generation resource to operate after

¹⁴ *PJM Interconnection, L.L.C.*, 110 FERC ¶ 61,053 at P (2005), order on reh’g, 112 FERC ¶ 61,031 at PP 136 (2005). See PJM Open Access Transmission Tariff § V.113.1.

¹⁵ *Id.* at P 137.



its proposed Deactivation Date. A generation owner, however, may *voluntarily* agree to operate beyond the proposed Deactivation Date and seek cost recovery pursuant to the PJM Tariff formula or a cost of service filing with the FERC.¹⁶

FERC also required PJM to coordinate the Black Start policy with the deactivation rules.¹⁷ Black Start Service is the capability of generating units to start without an outside electrical supply, or the demonstrated ability of a generating unit with a high operating factor to automatically remain operating at reduced levels when disconnected from the grid.¹⁸ Because of the rolling two-year commitment required to provide Black Start Service, the generation deactivation provisions require such resources to give PJM two year's notice of deactivation.¹⁹

b. Delaware Deactivation Notice Requirements

PJM is aware of at least one state within its footprint that requires generation owners to provide notice to the state public service commission. In 2006, the Delaware Public Service Commission promulgated final "Electric Service Reliability and Quality Standards" to measure and govern the reliability of services provided by electric distribution utilities as well as to acquire information from in-State generation facilities.²⁰ The Commission requires each generation owner to provide the Commission with at

¹⁶ *Exelon Generation Company, L.L.C.*, 132 FERC ¶ 61,219 at P 3 (2010).

¹⁷ 112 FERC ¶ 61,031 at P 158.

¹⁸ PJM Open Access Transmission Tariff § I.1.3BB.

¹⁹ PJM Open Access Transmission Tariff § V.122.

²⁰ *In the Matter of the Consideration of Rules, Standards, and Indices to Ensure Reliable Electrical Service by Electric Distribution Companies*, PSC Regulation Docket No. 50, Order No. 7002 at 1 (August 2006) [PSC Regulation Docket 50].



least one-year advanced notification of any planned unit retirements, planned re-powerings or planned long-term unit de-ratings.”²¹

2. Other RTOs/ISOs

a. ISO New England Generation Deactivation Notice Requirements

Since the implementation of the FCM, ISO New England uses the capacity market as the means to identify future generation retirements. While there was a transitional period where the prior generation deactivation rules still applied, the auction mechanism now is the sole way for a resource to indicate its plan to retire. Even if the resource had not cleared in the FCM auction for a particular future delivery year, called the “Capacity Commitment Period,” (and has no Capacity Supply Obligation), the current FCM rules do not permit the resource to retire. Rather, the resource must wait until the next FCM auction to submit a bid indicating that it wishes to retire in the delivery year applicable to that FCM auction.

Resources bid into the FCM 3.5 years in advance of the delivery year. A generator may submit a “Permanent De-List” bid to indicate the price at which they would be willing to be a capacity resource, otherwise it would retire.²² If such a bid clears in the auction, the unit would not retire. Such bids are submitted at a price, which may be mitigated by the market monitor.²³ In other words, the resource’s bid could be mitigated to be lower, and if the resource clears, it will have a Capacity Supply Obligation and cannot retire. To ensure that a generator that clearly needs to retire may do so without risk of clearing, the

²¹ PSC Regulation Docket 50, Exhibit A at §§10.9, 10.9.2.

²² ISO New England, Inc. Transmission, Markets and Services Tariff, Market Rule 1 § III.13.1.2.3.1.2 [Market Rule 1].

²³ Market Rule 1 § III.13.1.2.3.1.2. Permanent De-List Bids, if accepted, shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(b).



generator may submit a “Non-Price Retirement Request.”²⁴ Such a bid indicates that the unit wishes to retire and there is no price at which it would be willing to be a capacity resource. It is a binding request for permanent retirement of the unit and the interconnection rights.

ISO New England performs a reliability analysis to determine whether the generation retirements would result in reliability criteria violations.²⁵ If such violations are identified, ISO New England may request the unit to continue operating under a Reliability Must Run agreement.²⁶ ISO New England may not require the unit to enter into an RMR agreement. As in PJM, entering into an RMR agreement is a voluntary decision of the generator.

A resource that has a Capacity Supply Obligation having cleared in the FCM auction may be able to enter into a bilateral contract with another resource to transfer that obligation; however, ISO New England must evaluate that other resource to ensure that it adequately can replace the specific resource seeking to alleviate itself of the obligation.²⁷ The rules are silent, however, as to whether ISO New England could require the resource to continue to maintain the capacity obligation if that resource needed to make a capital investment to ensure its availability.

²⁴ Market Rule 1 § III.13.1.2.3.1.5.1.

²⁵ Market Rule 1 § III.13.2.3.1.5.3. *See also* ISO New England Planning Procedure No. 10, “Planning Procedure to Support the Forward Capacity Market.”

²⁶ Market Rule 1 § III.13.2.5.2.5.1(b)(1). The resource will be paid either (i) its de-list bid as accepted for the Forward Capacity Auction for the relevant Capacity Commitment Period (i.e., not the Forward Capacity Market Clearing Price), or (ii) under the terms of a cost-of-service agreement pursuant to Section III, Appendix I.

²⁷ Market Rule 1, § III.13.2.7.3(b).



b. Midwest ISO Deactivation Notice Requirements

A generation owner must submit notice to the Midwest ISO at least twenty-six (26) weeks in advance if it plans to either: (i) decommission and retire a generator; (ii) suspend operation of and place into extended reserve shutdown for a period of more than two (2) months; or (iii) disconnect from the Midwest ISO transmission System for a period of more than two (2) months.²⁸ The notice must (i) state that the owner's decision is definite; (ii) describe the type of shutdown (*i.e.*, permanent retirement, placing into extended reserve shutdown, seasonal shutdown, etc.); (iii) identify the expected duration of the shutdown; and (iv) describe the time period that would be required to return the generator to service if the Market Participant proceeds with the shutdown of the generator.

If necessary for system reliability, the Midwest ISO may enter into a System Support Resources (SSR) Agreement for an initial term of twelve (12) months, unless exigent circumstances require a longer-term agreement.²⁹ The agreement must be filed with FERC. Prior to the execution of the SSR Agreement, the Midwest ISO will negotiate with the generation owner to determine an appropriate level of compensation due to the owner's decision to defer the decommission, place into extended reserve shutdown, or retire the generation unit.

3. State Notice Requirements Outside of PJM Footprint

a. New York Generation Deactivation Notice Requirements

In 2005, the New York Public Service Commission initiated a proceeding to consider notice requirements for generation retirements in order to prevent or mitigate adverse impacts, such as

²⁸ *Module C Energy and Operating Reserve Markets* § 38.2.7(a).

²⁹ *Id.* at § 38.2.7(c).



degradation of electric system reliability.³⁰ The Commission determined that an appropriate notice requirement should “balance the interests of the parties” and “protect against a precipitous generator retirement that could harm the public interest.”³¹ In balancing those factors, the Commission established the following requirements for generators subject to Public Service Law jurisdiction:

- Generators sized equal to or greater than 80 MW shall provide written notice of a proposed retirement³² at least 180 days prior.³³
- Generators sized under 80 MW shall provide written notice of a proposed retirement at least 90 days prior.³⁴

Notice must be served on the Commission Secretary, the NY ISO, and any affected transmission and distribution utility.³⁵ The Commission limited the notice to those entities because those entities necessarily would be involved in devising a solution to any identified reliability concern. However, the Commission requested that the NY ISO notify its market participants of any retirement notices it receives.

³⁰ *Proceeding on Motion of the Commission to Establish Policies and Procedures Regarding Generation Unit Retirements*, Case 05-E-0889, 2005 N.Y. PUC LEXIS 502 (Dec. 20, 2005) at 1.

³¹ *Id.* at 21-22.

³² “Retirement” is defined to include shut-downs, abandonments, mothballing, and other circumstances where a generating unit is taken out of service for a substantial period of time

³³ According to the Commission, this approximately six-month period equates with the minimum period that NY ISO indicates as adequate to identify and resolve reliability concerns. *Id.* at 22.

³⁴ The Commission reasoned that the system impact of retiring a smaller unit is necessarily less than that of a large-sized unit, so the notice period could be shorter. *Id.* Additionally, the Commission determined that the 80 MW threshold was proper because other New York laws draw a distinction at 80 MW for other purposes. *Id.*

³⁵ *Id.* at 24.



Additionally, the Commission encouraged the New York Power Authority and the Long Island Power Authority to report retirements in the same fashion.³⁶

b. California Deactivation Notice Requirements

The California Public Utilities Commission in 2004 issued General Order No. 167 to implement and enforce standards for the maintenance and operation of electric generating facilities and power plants.³⁷ The Standards for Operations and Maintenance were adopted pursuant to the Public Utilities Code and include a requirement that a Generation Asset Owner must notify the Commission and the Control Area Operator (*i.e.*, California ISO) in writing at least 90 days prior to a change in the long-term status of the unit.³⁸ Changes in long-term status include shutdown, cold layup, mothballing, retirement, decommissioning, and similar changes, other than planned and forced outages, that make a unit unavailable for dispatch. The Generating Asset Owner is required to maintain a unit in readiness for service unless the Commission, after consultation with the California ISO, affirmatively determines the unit is not needed to maintain reliability.³⁹

³⁶ *Id.*

³⁷ *Enforcement of Maintenance and Operation Standards for Electric Generating Facilities*, General Order No. 167, (D.04-05-018 in R.02-11-039), adopted May 6, 2004 and effective May 10, 2004 [General Order No. 167].

³⁸ *Operations Standards and Recommended Guidelines for Generating Asset Owners* (adopted by the California Electric Generation Facilities Standards Committee on October 27, 2004), Standard 23: Notification of Changes in Long-Term Status of a Unit.

³⁹ *Id.*, *Standard 24: Approval of Changes in Long-Term Status of a Unit*. Note that this standard is “applicable only to the extent the regulatory body with relevant ratemaking authority has instituted a mechanism to compensate the GAO for readiness service.”



c. ERCOT Deactivation Notice Requirements

According to regulations adopted by the Texas Public Utilities Commission, ERCOT is required to publish a Statement of Opportunities that provides market participants with a projection of the capability of existing and planned electric generation resources, load resources, and transmission facilities to meet ERCOT's projected reliability needs.⁴⁰ The regulations instructed ERCOT to prescribe a reporting requirement for generation entities and transmission service providers to report such information.⁴¹ Pursuant to that regulation, ERCOT's established a provision within its Nodal Protocols requiring generation owners to notify ERCOT in writing no less than 90 days before the date on which the Generation Entity intends to cease or suspend operation of a Generation Resource for a period of greater than 180 days.⁴² Upon receiving the notice, ERCOT evaluates whether there are any reliability concerns and may enter into an RMR agreement, which must be for a term of 180 days to 1 year – unless the resource must make a significant capital expenditure to meet environmental regulations or to ensure availability to continue operating.⁴³

⁴⁰ *Chapter 25: Substantive Rules Applicable to Electric Service Providers*, Subchapter 5: Wholesale Markets, §25.505(c).

⁴¹ *Id.*

⁴² *ERCOT Nodal Protocols*, Section 3: Management Activities for the ERCOT System, §3.14.1.1.

⁴³ *Id.* at § 3.4.1(e). It is possible for a new contract to be entered into after the expiration of the 1 year term, if necessary.



III. CONCLUSION

PJM submits these Reply Comments to supplement the record with information requested by Commissioner Fox during the June 17 hearing. PJM appreciates the opportunity to participate in this proceeding and to offer this additional clarifying information.

Respectfully submitted,

A handwritten signature in blue ink that reads "Denise R Foster".

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Dated: July 12, 2011