



1200 G Street, N.W.
Suite 600
Washington, D.C. 20005-3802
Phone: 202-393-1200
Fax: 202-393-1240
www.wrightlaw.com

November 8, 2013

The Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: *PJM Interconnection, L.L.C.*, Docket No. ER13-2108-000

Dear Secretary Bose:

PJM Interconnection, L.L.C. (“PJM”), in accordance with the October 11, 2013 “Notice of Technical Conference” in this proceeding, hereby submits a statement of Andrew L. Ott containing written responses to the questions posed in the notice. The technical conference concerns PJM’s August 2, 2013 filing (“August 2 Filing”) of revisions to PJM’s Open Access Transmission Tariff and Reliability Assurance Agreement Among Load Serving Entities in the PJM Region, pursuant to section 205 of the Federal Power Act, to clarify the information required prior to submission of a demand resource offer into PJM’s forward capacity auctions to assure that the resource will be able to provide the offered demand reduction capability.

PJM looks forward to addressing any further questions on the August 2 Filing at the November 13, 2013 technical conference.

Respectfully submitted,

/s/ Paul M. Flynn

Paul M. Flynn

Counsel for
PJM Interconnection, L.L.C.

Enclosure

needs to modify its Incremental Auction rules to remove or mitigate the incentives that may be contributing to the increasing replacement rates observed for all resource types. To that end, PJM is working with its stakeholders and anticipates filing tariff changes to its incremental auction rules before the end of the year.

PJM has been working with its stakeholders for over a year to correct the current serious gap in its BRA offer qualification requirements for demand resources. PJM therefore urges the Commission to accept promptly the changes to the Tariff and Reliability Assurance Agreement Among Load Serving Entities in the PJM Region (“RAA”)¹ in the August 2 Filing so that they can be implemented for the next Base Residual Auction, scheduled for May 2014, and help ensure that demand resources offered into that auction will indeed honor RPM’s fundamental requirement for physical generation and load reduction resources.

PJM also urges the Commission to recognize that the issues associated with ensuring the proper incentives for development and submission of physical deliverable capacity resources require reforms both to the BRA (this docket) and the Incremental Auction rules (the upcoming PJM filing). Each filing stands on its own merits, but both are needed to effect a comprehensive and timely solution to the underlying problem.

PJM’s Responses to the Commission’s Information Requests

Commission Request #1

According to PJM, RPM markets are physical markets, and any resource bid into an RPM auction should intend to physically provide any offered capacity that clears in the relevant delivery year.

- Can PJM distinguish between companies purchasing capacity resources in the incremental auctions to make up shortfalls due to difficulties meeting their obligation and companies that arbitrage between the base residual and incremental auctions?
- How will the informational requirements for DR resources under this proposal help guarantee that DR resources are using the Incremental Auctions as intended?

PJM Response

PJM does not require capacity market sellers to provide a reason for their Incremental Auction buy bids as a condition of submitting those bids, so the rationale for any individual offer is not evident at the time of the offer. Therefore, PJM usually cannot directly distinguish between companies purchasing capacity resources in the Incremental Auctions to make up shortfalls, and companies that take advantage of pricing differences

¹ For convenience, the changed documents will generally be referred to with the lower-case term “tariff” or as “market rules.”

between the Base Residual and Incremental Auctions to profit by swapping out their positions.

The Tariff and RAA changes PJM has filed in this docket can, however, help ensure that demand resources are using both the BRA and the Incremental Auctions as originally intended, by filling the current gap in rules on an upfront demonstration that the demand resource offered into the Base Residual Auction represents actual or reasonably expected physical load reduction capabilities. The available data on Incremental Auction participation shows a strong correlation between the level of delivery uncertainty associated with a particular resource category and the frequency with which that resource category is replaced in the Incremental Auctions.² Therefore, ensuring effective rules on support for Demand Resource offers in the BRA, so that they are more comparable to the rules on support for Generation Capacity Resource offers in the BRA, should lessen DR's extremely heavy reliance on the Incremental Auctions observed in recent years.

Still more can be done on Incremental Auction design, however, and PJM is actively engaged with stakeholders in developing market design changes that lessen the current incentives to offer "phantom" or unsupported resources (of various types) in the BRA and then buy out the position at a profit in the Incremental Auctions. PJM therefore anticipates filing tariff revisions before the end of the year on the frequency of Incremental Auctions, the pricing rules for PJM releases of capacity, the rules on the cost to Capacity Market Sellers of procuring replacement capacity in the Incremental Auctions, and the penalties resource owners may face if they do not honor their RPM auction commitments.

Commission Request #2, question 1

- Do generating resources face comparable informational requirements?

PJM Response

As shown in these responses, the PJM Tariff and RAA currently require far more detailed information to support Generation Capacity Resource offers than to support Demand Resource offers. PJM's tariff change filing in this proceeding will lessen that mismatch, but PJM will still require a greater volume and detail of supporting information from generation resource offers. Despite that difference, acceptance of PJM's filing in this proceeding will establish needed comparability of the tariff rules in a fundamental respect: because RPM is a market for physical resources necessary to maintain system reliability, each seller, whether offering generation or demand resources, must show before it submits an offer to supply RPM capacity that it has the physical resources in place needed to fulfill its capacity offer or that it has a reasonable and

² See Monitoring Analytics, *Analysis of Replacement Capacity for RPM Commitments: June 1, 2007 to June 1, 2013*, Table 8 & 9 (Sept. 12, 2013) ("IMM Replacement Capacity Report"), http://www.monitoringanalytics.com/reports/Reports/2013/IMM_Report_on_Capacity_Replacement_Activity_2_20130913.pdf.

credible plan in place to deliver such physical resources by the time of the Delivery Year. Given differences between the nature of generation and demand resources and in the customary business plans of sellers of those different types of resources, there will necessarily be differences in how sellers of generation and demand resources provide reasonable assurance that their resources will provide generation or load reductions at the offered levels. But what must be the same for all resources that offer into PJM is that they only offer resources that *will provide* such physical generation and physical load reduction.³ Establishing a physical model for one type of capacity resource and a quasi-financial model for another type of capacity resource would not only violate the current RAA and tariff provisions establishing physical resource qualification criteria (as discussed in the August 2 Filing), it also would be facially *non-comparable* and unduly discriminatory.

Specifically, for all Generation Capacity Resources, PJM employs an extensive Tariff-required capacity resource accounting system to ensure that resources do not offer more capacity than can be delivered and by confirming which market participant may offer that capacity into an RPM auction.⁴ Capacity Market Sellers continuously update PJM, using the eRPM tool, on the capacity and status of their Generation Capacity Resources, and the information in eRPM at the time they submit their capacity offer dictates the amount of capacity they can include in the offer.

Capacity Market Sellers with existing Generation Capacity Resources also must adopt an approved value of EFORD, i.e, the demand-equivalent forced outage rate, for converting the installed capacity of their resource into the unforced capacity that is offered and committed through the RPM auctions. Specifically, Capacity Market Sellers “must timely provide” to PJM “all data and documentation required . . . to establish the maximum EFORD applicable to each resource.”⁵ The Tariff sets maximum levels for acceptable EFORD values,⁶ and it allows a seller to use a higher value only “if it has a documented, known reason that would result in an increase in its EFORD,” and only then if it submits a written request to PJM, with supporting data and documentation, 120 days before the auction, and PJM accepts the alternate EFORD value.⁷

In addition, a Capacity Market Seller with a *planned* generation resource may only offer that resource into the Base Residual Auction if it: (1) will be in service by the start of the relevant Delivery Year; (2) will meet deliverability tests to qualify as a

³ Of course, PJM is not only concerned about speculative offers submitted by DR Providers; speculative offers from ostensibly physical resources, like planned generation, existing generators likely to retire, or external resources without firm transmission rights, are just as harmful.

⁴ Tariff, Attachment DD, section 5.6.6(a).

⁵ *Id.*, section 6.6(b) (emphasis added).

⁶ *Id.*

⁷ *Id.*

capacity resource; (3) is participating in PJM’s generation interconnection process; and (4) has executed a System Impact Study Agreement before the BRA.⁸ To be eligible to execute a System Impact Study Agreement, a generation project developer must: (1) provide PJM detailed information about the proposed plant; (2) submit significant financial deposits with PJM; and (3) complete the Generation Interconnection Feasibility Study process, in which PJM makes a preliminary determination of the transmission facilities needed to accommodate interconnection of the plant, including the estimated time and cost to construct those facilities.⁹ PJM’s Manual 14A details the information a project sponsor is required to submit in the feasibility study process (for non-wind projects) as follows:¹⁰

<u>General and identifying information</u>	<u>Main Transformer Data</u>
<ul style="list-style-type: none"> • Interconnection Customer name • Name of Individual Completing Form • Email Address (Individual Completing the Form) • Phone # (Individual Completing the Form) • Queue Letter & Position / Unit ID • Primary Fuel Type • Interconnection Customer’s proposed location (if known) for Point of Interconnection (POI) to PJM System • Maximum Gross MW Output • Maximum Net MW Output • Station Service Load (MW/MVAR) • Load connected to High Side of GSU (Yes/No) • Load connected to Low Side of GSU (Yes/No) 	<ul style="list-style-type: none"> • Number of machines per GSU • Generator Step-up Transformer MVA Base • Generator Step-up Transformer Impedance (R+jX, or %, on transformer MVA Base) • Generator Step-up Transformer Reactance-to-Resistance Ration (X/R) • Generator Step-up Transformer FOA Rating (MVA) • Generator Step-up Transformer Low-side Voltage (kV) • Generator Step-up Transformer High-side Voltage (kV) • Generator Step-up Transformer Off-nominal Turns Ratio • Generator Step-up Transformer Number of Taps and Step Size

⁸ See RAA, section 1.70.

⁹ See, e.g., Tariff, sections 36.1.01 (describing general requirements of a Generation Interconnection Request) and 36.2 (describing the PJM Interconnection Feasibility Study that must precede the execution of a System Impact Study Agreement).

¹⁰ See PJM Manual 14A–Generation and Transmission Interconnection Process, Attachment F: Generation Interconnection Feasibility Study Data, (effective Feb. 1, 2013), <http://www.pjm.com/~media/documents/manuals/m14a.ashx>.

<u>Transmission Line Data</u>	<u>Plant Data- Non-Wind Generators</u>
<ul style="list-style-type: none"> • Line Length from Main Transformer High-Side to Interconnection Point • Voltage Level (kV) • Conductor Type • Transmission Line MVA Base • Positive Sequence Impedance (R+jX %, per mile on line MVA base) • Zero Sequence Impedance (R+jX %, per mile on line MVA base) • Zero Sequence Reactance-to-Resistance Ratio (X/R) • Positive Sequence Charging Admittance (in % per mile on line MVA base) 	<ul style="list-style-type: none"> • Generator MVA Base (upon which all reactances, resistance and inertia are calculated) • Generator Nominal Power Factor • Generator Terminal Voltage (kV) • Generator Saturated Sub-transient Reactance, X"d(v) (on MVA Base) • Provide Site Plan (on tax map, USGS topo map, etc.) for Interconnection Customer's Facilities (electronic file if available) and a one-line diagram of the Facility electrical arrangement via email attachment to the email address(es) specified at the link on the PJM website listed above when the data on the data form at the link location listed above is submitted.

In sum, before a generation resource offers into the RPM auctions, it is required to provide PJM with considerable evidence on the specific location, characteristics, nature and status of the resource. Moreover, if the resource is planned, rather than existing, PJM requires that the proposed plant must have achieved the significant milestone of executing a System Impact Study Agreement, incorporating numerous detailed information requirements before it can offer into the BRA.

Commission Request #2, question 2

- If there are differences, what are the reasons for those differences?

PJM Response

The proposed Demand Resource information requirements in the August 2 Filing are not identical to the existing tariff requirements for support of Generation Capacity Resource offers, but they need not be identical. The Commission has clarified that comparable treatment does not mean “identical” treatment, and that various rules may provide comparable treatment while still recognizing “the inherent characteristics of demand response resources.”¹¹

¹¹ *Cal. Indep. Sys. Operator Corp.*, 129 FERC ¶ 61,157, at P 37 (2009), *order on reh’g*, 131 FERC ¶ 61,110 (2010); *E.On U.S. LLC*, 127 FERC ¶ 61,276, at P 24 n.18 (2009), *order on clarification*, 130 FERC ¶ 61,178 (2010).

The most notable difference between the proposed information requirements for Demand Resource offers and the current information requirements for Generation Capacity Resources is that the latter are *always* site-specific, whereas PJM proposes to require site-specific data for Planned Demand Resources only in certain narrowly defined circumstances where there is the greatest concern that part of a Planned Demand Resource offer may be duplicative or more speculative. This basic approach is reasonable, however, given the inherent differences between the nature and scope of the physical resources that underlie the capacity offer. Generation Capacity Resources rely on readily identifiable industrial-scale facilities with a fixed location, or plans to construct such facilities, whereas demand resources can pursue an aggregation business plan which relies on numerous underlying end-use customers that each can choose independently whether to enter into, or exit, arrangements with the Capacity Market Seller. Under that typical approach, the CSP bids in its aggregate demand response bid and then is charged with managing (or substituting) individual sites in order to ensure performance with its cleared bid. These differences, however, do not absolve curtailment service providers of the need to show that they have or reasonably expect to deliver physical resources that match the capacity level they plan to offer in the BRA. Rather, on behalf of loads that would be required to compensate the Demand Resource as PJM capacity, PJM proposes that Capacity Market Sellers detail their demand reduction programs, to help provide assurance that the seller is making reasonable estimates of the load reductions it will be able to provide in the Delivery Year, and require an officer certification as a flexible means to support that same assurance. Similarly, the limited requirement for site-specific information properly seeks more detail from a seller to the extent it is offering unprecedented levels of Demand Resource offers in a zone that also has in the aggregate unprecedented levels of Demand Resource offers which cleared in the last Base Residual Auction.¹²

Commission Request #2, question 3

- Do the existing information requirements for generators reduce the rate with which these resources buy out their obligations in the Incremental Auctions?

PJM Response

The information requirements for Generation Capacity Resources described above have been in effect for a number of years.¹³ Concurrent with the time these information

¹² As explained in the August 2 Filing (at 18-22), additional, customer-specific information for Planned Demand Resources will be required only in the limited circumstance in which recent cleared Demand Resource offer quantities in a particular area exceed the Demand Resource capability for that area as indicated by both available, objective evidence and historical registered capability *and* exceed that DR Provider's highest previous levels of registered or cleared demand response for that area. *See* RAA, Schedule 6, proposed section A-1.1(c)(iv).

¹³ These generator information requirements generally have been in effect in much of their current form since RPM was initiated in 2007.

requirements have been in effect, Generation Capacity Resources have bought out of their RPM commitments at a far lower rate than demand resources. The Independent Market Monitor for the PJM Region (“IMM”) detailed these differences in its September 12, 2013 IMM Replacement Capacity Report. As shown in that report, “net replacement” of the generation resource category (i.e., the percentage of generation commitments *that were replaced* by other resource types, net of generation *that replaced* other resource types) ranged from 0.6% to 6.1% from June 1, 2008 through June 1, 2013, compared to net replacement of demand resources that ranged from a low of 7.2% to a high of 57.6% over that same period.¹⁴ Moreover, as can be seen from the same Table 8 of the IMM Replacement Capacity Report, the types of Generation Capacity Resources that usually are less certain than existing resources located inside the PJM Region, i.e., “external generation,” which often does not have firm transmission arrangements in place at the time of the BRA and “internal generation not in service” (essentially, planned generation), have significantly higher net replacement than the generation category average (although still markedly lower than demand resources). In short, resources that can provide greater certainty about their physical resource delivery plans—and demonstrate as much at the time of their BRA offers—are less likely to fail to deliver those commitments and instead seek replacement capacity.

Commission Request #3, Question 1

PJM states that its proposed changes will allow it to make a “more reasoned assessment” of a DR Provider’s reliance on expected commitments.

- How will PJM determine whether submitted milestones are reasonable?

PJM Response

As it does in similar circumstances where its tariff allows PJM to request supporting information from market participants on various topics, PJM will review DR Sell Offer Plans to confirm they facially support the intended DR offer levels and that there are no apparent errors or inconsistencies. PJM is not a curtailment service provider and does not intend to second-guess the business strategies of market participants that are developing load reduction resources in the PJM Region. But the level of supporting details required by the DR Sell Offer Plan template should allow an independent reviewer like PJM a meaningful opportunity to confirm that the provider’s estimates of demand resources for the Delivery Year are credible and plausible. Moreover, the documentation exercise itself as well as the Officer Certification should work to establish an internal discipline on CSPs simply putting in speculative bids into the BRA.

PJM also plans to implement standardized cross-check procedures that will compare DR Sell Offer Plan estimates against DR registration and other data to ensure that the submitted DR Sell Offer Plan template data (e.g., MWs of existing demand resources, MWs of planned demand resources, historical maximum MW registered,

¹⁴ IMM Replacement Capacity Report at Table 8.

maximum MWs cleared for future Delivery Years) are in agreement with the data reported in the eRPM system. Among other things, these standardized checks will review whether:

- the MW of Existing Demand Resources entered in the template exceeds the MW of Existing Demand Resources from pre-registration in eRPM;
- the MW of Planned Demand Resources entered in the template matches the MW of Planned Demand Resources entered by the CSP in the eRPM system;
- the MW accounted for in the timeline provided in the template is less than the DR Provider’s committed MW plus its expected MW amount to offer in the auction;
- the historical data entered in the Excel template matches the historical data in eRPM;
- the DR Provider entered any applicable required amount of site-specific data on Planned Demand Resources in any zones of concern; and whether
- the same end-use customer site was submitted by multiple CSPs.

Specifically regarding milestones, PJM proposes to require Demand Resource Providers to specify “the cumulative number of customers and the cumulative Nominated DR Value” by customer segment and Zone/sub-zone that the provider “expects (at the time of plan submission) to have under contract as of June 1 of each year between the time of the auction and the subject Delivery Year.”¹⁵ Requiring estimates of expected yearly progress in securing end-user contracts should work to impose self-discipline on the DR provider’s estimate (at the time of the BRA) of its expected total load reductions under contract by the Delivery Year. Moreover, as PJM gains experience reviewing DR Sell Offer Plans from multiple DR Providers, PJM should be better able to spot overly optimistic or questionable estimates.

Requiring Demand Resource projections on both a zonal and end-use customer segment basis also should have a self-disciplining effect. Under the proposed rules, the DR provider must specify the number of customers in an end-use customer segment (e.g., residential, commercial, etc.) that are expected to be registered for the BRA, the average peak load contribution (“PLC”) per customer for such segment, and the average Nominated DR Value per customer for such segment. While these projections are aggregated and not end-use site specific, they are reasonably detailed and concrete, and will be readily compared against actual experience to help inform PJM’s review of the credibility of future DR Sell Offer Plans.

¹⁵ RAA, Schedule 6, proposed section 6.A-1.1(d).

Moreover, beginning with the 2013-2014 Delivery Year, PJM is requiring DR registrations to indicate the site's relevant business segment.¹⁶ In the future, PJM will be able to use historical registration data to gather statistics on the number of sites registered in a customer segment, the average and maximum PLC reported for a customer segment, and the average and maximum Nominated DR registered in a customer segment. This more detailed historical registration data should improve PJM's ability over time to identify errors or inconsistencies in a DR Provider's estimate of its expected market penetration and market share estimates for various business segments and zones.

Finally, PJM expects to place significant reliance on the DR officer certification forms that will also be required under the proposed rules. That form is intended to complement the template's information requirements (including the milestones), since the DR Provider's officer must attest that the information provided is accurate at that time, as well as provide the overall certification that the DR Provider reasonably expects to obtain physical load reduction commitments for the full amount of its BRA offer level. The Commission has approved similar reliance on officer certifications for RPM and elsewhere in PJM's Tariff as a tool which carries with it its own self-disciplining impact in connection with backbone transmission upgrades,¹⁷ Minimum Offer Price Rule exemptions and exceptions,¹⁸ avoidable cost rate elections,¹⁹ generation resource in-service delays,²⁰ and risk management capabilities.²¹

Commission Request #3, Question 2

PJM states that its proposed changes will allow it to make a "more reasoned assessment" of a DR Provider's reliance on expected commitments.

- How much discretion will PJM staff exercise in accepting Sell Offer Plans?

PJM Response

As should be evident from the foregoing discussion, PJM does not seek, and does not plan to exercise, substantial discretion in this area. Moreover, the limited discretion PJM might exercise is well within that already allowed PJM in similar areas.

¹⁶ See PJM Manual 11, Section 10.2.2.

¹⁷ Tariff, Attachment DD, section 5.11A(b); see also *PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,275, at PP 99-102 (accepting, over protests, officer certification as part of requirements to model backbone transmission upgrades in RPM).

¹⁸ Tariff, Attachment DD, section 5.14(h)(6)(vi), (7)(iv), (8)(ii).

¹⁹ *Id.*, section 6.6(g)(4).

²⁰ *Id.*, section 6.7(e).

²¹ *Id.*, Attachment Q, section Ia.A and Appendix 1. See also *PJM Interconnection, L.L.C.*, 136 FERC ¶ 61,190, at P 112 (2011).

The proposed DR Sell Offer Plan requirements (i.e., the template and officer certification) should limit PJM’s need to exercise discretion in evaluating and accepting or rejecting demand resource bids. PJM will not approve a plan that has an incomplete template or does not include a signed officer certification, as those circumstances would reflect a failure to demonstrate, as required by the Tariff, that the offered resource is capable of reducing demand or otherwise controlling load during the relevant Delivery Year.²² Moreover, the proposed changes provide, in detail, the type and amount of information to be included in the template. PJM anticipates that in the overwhelming majority of cases, the DR Provider’s provision of the information specified in the DR Sell Offer Plan template—further supported by the office certification—should be all that is needed to confirm that a DR Sell Offer is adequately supported.

In the few cases where PJM might be called upon to exercise some discretion in evaluating the support for DR Sell Offers, this would be no different from the discretion allowed PJM in similar circumstances. As discussed below, the Commission has repeatedly granted PJM discretion in similar circumstances.²³ Such discretion is critical to providing PJM flexibility to address issues as they arise, thereby ensuring system reliability and efficient functioning of the markets.

For example, the Commission recently ordered PJM to retain discretion in applying RPM’s Minimum Offer Price Rule (“MOPR”).²⁴ The Commission had previously approved granting PJM discretion in the determination of what information adequately supports such exception or exemption from MOPR,²⁵ finding that “some amount of discretion is unavoidable and perhaps even necessary when making these types of determinations.”²⁶

²² RAA, Schedule 6, section A.5.

²³ See, e.g., *PJM Interconnection, L.L.C.*, 142 FERC ¶ 61,214, at P 235 (2013) (finding that “giving PJM the discretion to designate an incumbent transmission owner as the entity responsible for constructing, financing, and owning a transmission project (i.e., the Designated Entity) in certain circumstances (i.e., ‘time-based’ exceptions) represents a reasonable exercise of judgment by PJM, as the entity in charge of ensuring that the system remains reliable.”); *Dominion Res. Servs. v. PJM Interconnection, L.L.C.*, 142 FERC ¶ 61,068, at P 32 (2013) (“making dispatch decisions for reliability reasons is within PJM’s discretion”);

²⁴ *PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,090, at PP 141-144 (2013) (directing PJM to maintain in place the unit-specific exception process for applying MOPR).

²⁵ Tariff, Attachment DD, section 5.14(h)(9) (“In addition to the documentation identified herein and in the PJM Manuals, the Capacity Market Seller shall provide any additional supporting information reasonably requested by [PJM] or the Market Monitoring Unit to evaluate the Sell Offer.”).

²⁶ *PJM Interconnection, L.L.C.*, 137 FERC ¶ 61,145, at P 245 (2011).

Similarly, while the Tariff sets maximum levels for acceptable EFORd values,²⁷ PJM has the discretion to accept a higher value if there is “a documented, known reason that would result in an increase in its EFORd” and the seller provides PJM with adequate supporting data and documentation.²⁸

The Tariff also provides PJM discretion in evaluating generation resource sell offers to be submitted at a non-zero price and the documentation supporting a calculation of such an offer.²⁹ With respect to RPM Auction Sell Offers, the current-effective Tariff specifically lays out the requirements and criteria for evaluating and accepting or rejecting sell offers and buy bids,³⁰ and PJM as tariff administrator is charged with making those determinations.

In short, PJM will not typically exercise substantial discretion in reviewing DR Sell Offer Plans, and any discretion PJM might exercise in this area is well within the discretion PJM has been allowed in other aspects of the administration of RPM. Moreover, the Commission will remain the forum for resolving complaints brought to it by any market participant. Nothing in PJM’s submittal will change that remedy available to aggrieved entities.

Commission Request #4, Questions 1, 2 and 5

- What is the impact on reliability of the observed increase in purchases of replacement capacity through the Incremental Auctions as compared to the Base Residual Auction?
- What are the effects on price for end-use customers?
- Are there other reliability issues that stem from high DR penetration in these zones?

PJM Response

The observed increases in purchases of replacement capacity by certain resource types in the Incremental Auctions is evidence that some Capacity Market Sellers are submitting capacity offers into the Base Residual Auction that have a heightened degree of uncertainty, i.e., such sellers in the BRA either made overly optimistic assessments about their own intended resources, or they consciously committed capacity in excess of their own intended resources because they assumed they could instead rely on resources of other sellers offered in the Incremental Auctions.

²⁷ Tariff, Attachment DD, section 6.6(b).

²⁸ *Id.*, section 6.6(b).

²⁹ *Id.*, section 6.7(b).

³⁰ *Id.*, section 5.8.

The “impact on reliability” of such behavior can be plainly described: it is inimical to the reliability objectives of the Reliability Pricing Model.

Offering capacity in the BRA that the seller unreasonably assumes will exist, or that the seller never even intends to develop because it assumes it will rely on the Incremental Auctions, adversely affects both short-term and long-term reliability by artificially inflating the supply of resources into the BRA. Creating for BRA offer purposes supply that does not presently exist and that is not reasonably expected to exist will add to the supply curve in the auction and, all else equal, will tend to reduce the clearing price *below* the level offered solely by resources that presently exist or that are on a clear path to implementation for the Delivery Year.

In the short run, this can directly displace marginal resources for which RPM capacity payments may make the difference between remaining in service or retiring. When a resource retires, that is a concrete reduction in the supply presently available to support reliable service to PJM loads. In short, such conduct can result in PJM loads unknowingly being subject to the trading away of a resource that does exist in exchange for one that does not.

Longer-term, market participants seeking to develop real resources will receive an inaccurate price signal and may cancel or defer their own development plans. Since resource adequacy ultimately depends on physical resources, exaggerated supply that reduces the price available to physical resources will degrade long-term reliability.

In addition, speculative commitments in the BRA expose loads to the risk of resource inadequacy if the Capacity Market Seller guesses wrong about Incremental Auction prices and chooses to pay a resource deficiency penalty rather than secure replacement capacity. Notably, in that case, the capacity market seller is the party that chooses to make a speculative commitment, but the adverse consequences of the seller’s choice will fall on the loads that are thereby left without the resources that were expected to be available to help meet peak needs. Moreover, when the seller makes that speculative choice and exposes loads to that resource inadequacy risk, it does so with absolutely no ability to control whether the subsequent Incremental Auctions will indeed provide it an economical means to escape the commitment that it never intended to fulfill.

RPM’s requirement for physical resources is fundamentally about reducing the risk of resource inadequacy, by requiring prospective capacity sellers to show that they have identified physical resources with known capabilities, or that they are proceeding along a reasonable path towards developing and producing such physical resources, including measures showing the seller is appropriately managing the factors that it can reasonably control and adequately mitigating the risks of factors it cannot control. By contrast, a seller that makes unreasonably optimistic assumptions about resource development, or that simply assumes it can rely on the Incremental Auctions, is ceding control to others on the basic question of whether it can fulfill its Capacity Resource commitment.³¹

³¹ The seller may be proved correct in its reliance on the Incremental Auctions, but
(continued...)

Permitting capacity sellers to transfer risk of resource inadequacy to PJM loads is antithetical to the purpose of RPM. Accordingly, the changes proposed in the August 2 Filing would require a BRA seller to have a demonstrable, concrete plan to develop and deliver the resources needed to fulfill its commitment. Developers of demand resources are in the business of securing commitments of end-use customers and effecting load reductions through such customers when required by the wholesale market operator. A successful curtailment service provider therefore, by definition, must manage the risks of securing customers and delivering load reductions through innovation, hard work, and the commitment of its own technological and staff resources, just as a successful generation developer will be focused on managing the risks of bringing a new generation project to completion on time and on budget. BRA sellers that have a reasonable plan to deliver their resources by the Delivery Year therefore will be pursuing that plan and progressively reducing the risk of non-performance, unlike BRA sellers that intend to rely on the Incremental Auctions and are in no position to affect whether other sellers in those auctions will indeed be able to satisfy the particular commitments the first seller made in the BRA, or whether other buyers will seek to compete with it to obtain replacement capacity. Because such BRA sellers cannot manage the risk that the Incremental Auctions will not fulfill their assumed reliance on those auctions, the inevitable effect is that they transfer that risk to PJM loads. Simply put, that knowing transfer of risk to loads is incompatible with a resource adequacy commitment.

Commission Request #4, Question 3

- What evidence is there that DR obligated to perform by the start of a Delivery Year, or replacement capacity purchased through the Incremental Auctions, is less capable of meeting performance obligations than generation or DR that cleared through the Base Residual Auction?

PJM Response

The issue is not—as posited by the question above—whether resources committed in the Incremental Auctions will be less likely to perform than resources committed in the Base Residual Auction. Instead, as shown in the previous response, knowingly submitting BRA capacity offers in excess of reasonably expected capacity deliveries inherently creates resource adequacy risk.

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after it submits its BRA offer, there is absolutely nothing it can do to make it more likely that its eventual reliance on the Incremental Auctions will indeed be vindicated, because there is nothing it can do to control the quantity or price of capacity that is offered for sale in those auctions. Nor can it control whether other BRA sellers will similarly commit more capacity than they reasonably expect to deliver, and consequently compete with the first over-exposed BRA seller to obtain replacement capacity in the Incremental Auctions.

Commission Request #4, Question 6

- Are there indications that the DR that cleared in the Base Residual Auction in zones with high DR penetration is less likely to show up, or perform in the delivery year, than in other zones?

PJM Response

PJM's reliability concern is not with zones "with high DR penetration," as termed by the above question. Rather, PJM's concern is with zones that have DR offers in the BRA that are far above both the levels of DR registered in those zones *and* the levels of DR cleared in previous BRAs in those zones. Because those offered DR levels, particularly in the 2012 BRA for the 2015-16 Delivery Year, implied aggressive DR growth not only above registered DR levels but even above the levels cleared in the 2011 BRA for the 2014-15 Delivery Year, that evidence does indeed indicate valid concerns over whether all of that offered DR will indeed "show up" as actual DR in the Delivery Year.

Commission Request #5

Do the recent series of Incremental Auctions with lower clearing prices than the Base Residual Auction result directly from RPM's market rules or some other factor?

PJM Response

Incremental Auction prices are determined most directly by the supply of, and demand for, Capacity Resources in those auctions. The RPM market rules significantly influence the quantity and price of supply offered by PJM, or the demand sought by PJM, but factors outside the RPM rules determine whether PJM is selling into or buying from the Incremental Auctions, and how much capacity PJM seeks to buy or sell. Moreover, RPM market rules do not directly determine the quantity or price of supply offered by sellers other than PJM, or sought by buyers other than PJM.

More specifically, the RPM market rules direct PJM to procure in the Incremental Auctions an appropriate share of the Short-Term Resource Procurement Target (i.e., the 2.5% "holdback" from the BRA target procurement), and to seek additional capacity commitments, or release prior capacity commitments, due to increases or decreases, respectively, in the Reliability Requirement estimated for the Delivery Year from the BRA to the IAs.³² The Tariff also directs PJM to price those buy bids and sell offers in Incremental Auctions using elements of the updated VRR Curve.³³ These rules have at times required PJM to offer substantial supplies into Incremental Auctions at a fairly low price determined by the updated VRR Curve.

³² See Tariff, Attachment DD, sections 2.65A and 2.65B.

³³ See Tariff, Attachment DD, section 2.69A; *id.*, section 5.12(b).

Although the Tariff specifies the “triggers” that will require PJM to make sales into the Incremental Auctions, whether those triggering conditions arise depends on factors outside the tariff. For example, macroeconomic forecasters in government (e.g., Congressional Budget Office, Federal Reserve System) and the private sector (such as Moody’s, which is used by PJM) have had to revise downward their initial estimates of future economic growth. In PJM’s case, this has at times resulted in reductions to the Reliability Requirement for a given forward Delivery Year, and in turn imposed a requirement on PJM to sell back in the Incremental Auctions some capacity previously committed for the Delivery Year.

Given that PJM market rules—particularly on the frequency, quantity, and pricing of PJM releases into the Incremental Auction of previously committed capacity—do seem to be playing some role in the lower prices seen in most Incremental Auctions, PJM and its stakeholders are actively reviewing possible changes to the Incremental Auction market design rules. These changes could include revisions to the frequency of Incremental Auctions, to the pricing rules for PJM releases of capacity, to the rules on the cost to Capacity Market Sellers of procuring replacement capacity in the Incremental Auctions, and to the penalties resource owners may face if they do not honor their RPM auction commitments. PJM notes that, regardless of the outcome of that pending stakeholder process, the Tariff and RAA changes filed in this proceeding are needed, to ensure validation of the physical nature of Capacity Resources, and to achieve more comparable treatment between generation and demand resources.

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C., this 8th day of November, 2013.

/s/ Ryan J. Collins
Ryan J. Collins