UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.	)	Docket No. ER15-623-000
	)	
PJM Interconnection, L.L.C.	)	
v.	)	Docket No. EL15-29-000
PJM Interconnection, L.L.C.	)	
	)	(Not Consolidated)

ANSWER AND MOTION FOR LEAVE TO ANSWER OF THE INDEPENDENT MARKET MONITOR FOR PJM

Pursuant to Rules 212 and 213 of the Commission's Rules and Regulations,[1] Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM ("Market Monitor"), submits this answer to, and moves for leave to answer, the answers filed in this proceeding by certain parties on March 3–6, 2015,[2] to the answer submitted by the Market Monitor on February 25, 2015, as corrected in an additional filing submitted on February 27, 2015 ("February 27th Answer").

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1 18 CFR § 385.212 & 213 (2014).

2 *See*, *e.g.*, Motion for Leave to Answer and Answer of the PJM Utilities Coalition, Docket No. ER15-623 (March 3, 2015) (The Coalition is comprised of American Electric Power Service Corporation, the Dayton Power and Light Company, and FirstEnergy Service Company, each on behalf of its affected affiliates, Buckeye Power, Inc. and East Kentucky Power Cooperative, Inc.) ("PJM Utilities Coalition"); Answer to Motion, Motion for Leave to Answer, and Limited Answer of the NRG Companies and the Dynegy Companies, Docket No. ER15-623 (March 4, 2015) (NRG/Dynegy); Motion To Answer And Answer Of Exelon Corporation, Docket No. ER15-623 ("Exelon") (March 4, 2015); Limited Answer of PJM Interconnection, L.L.C., Docket No. ER15-623 (March 6, 2015) ("PJM"); Motion for Leave to Answer and Answer of the PJM Power Providers Group, Docket No. ER15-623 (March 6, 2015) ("Power Providers").

The default offer caps as proposed in the Market Monitor's February 27th Answer are based on mathematics derived from the details of the capacity performance proposal as filed by PJM ("CP Proposal"), and are fully consistent with the pay for performance ("PFP") design in ISO New England ("ISO-NE") that was approved by the Commission. The net CONE offer cap proposed by PJM is not consistent with the ISO-NE PFP design. Neither PJM nor any intervenor has demonstrated that PJM's approach is consistent with the ISO-NE design. Appendix A to the February 27th Answer explains the math behind the default offer cap, including assumptions and definitions of the terms used.

I. BACKGROUND

A. ISO-NE's Dynamic De-List Bid Threshold

The dynamic de-list bid threshold in ISO-NE's PFP design for the ninth forward capacity auction is set at $3.94/kW-month.[3] This value is calculated using the optimal bid formula explained in the joint testimony of David LaPlante and Seyed Parviz Gheblealivand on behalf of ISO-NE.[4] They state the optimal bid formula as:[5]

$$b_i = PPR \times Br \times H + \max\{0, GFC_i - PPR \times A_i \times H\}$$

where:

PPR is the Capacity Performance Payment Rate specified in the Tariff.
Br is the expected Capacity Balancing Ratio.
H is the expected number of hours with Capacity Scarcity Conditions during the commitment period.
GFC is the resource's net going-forward cost.

3 *See* ISO-NE, Market Rule 1 Section "III.13.1.2.3.1.A Dynamic De-List Bid Threshold."

4 *See* ISO New England Inc. and New England Power Pool, Filings of Performance Incentives Market Rule Changes, Docket No. ER14-1050-000 (January 17, 2014), Attachment I-1e (Joint Testimony of David LaPlante and Seyed Parviz Gheblealivand) at 56–62.

5 *Id* at 55.

A is the expected average performance of the resource during Capacity Scarcity Conditions during the commitment period.

ISO-NE witnesses Dr. LaPlante and Dr. Gheblealivand explain that the Internal Market Monitor for ISO-NE ("ISO-NE IMM") used the proposed Performance Payment Rate (PPR) of $2,000/MWh for the ninth Forward Capacity Auction ("FCA"), 0.75 for the Balancing Ratio (Br), 20.4 hours for expected Capacity Scarcity Condition hours (H), $2.75/kW-month as the net going-forward costs (GFC), and 0.4 as the average performance during reserve deficiency hours (A) to arrive at the dynamic de-list bid threshold of $3.94/kW-month.

The value of balancing ratio used (0.75) is a historical value for the period from 2010–2012.[6]

The value of 20.4 hours for H was the 75th percentile of the distribution of reserve deficiency hours calculated using the ISO-NE's planning models used to develop the installed capacity requirement.[7]

The $2.75/kW-month for GFC is based on the weighted average net going forward cost of fossil steam units offered in ISO-NE in the eighth FCA and slightly adjusted up by the ISO-NE IMM.[8]

The value of 0.4 for A is based on the estimate for weighted average performance of economic and non-economic oil units under PFP.[9]

All the values used to determine the de-list bid threshold are based on either historical data or forward looking estimates developed based on ISO-NE's own planning models. The method and the determined values were approved by the Commission and were used in the ninth FCA by ISO-NE.

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6 *Id.* at 59.

7 *Id.* at 59–60.

8 *Id.* at 60.

9 *Id.* at 61.

The mathematics used by ISO-NE are exactly the same as included in the Market Monitor's February 27th Answer.

B. PJM Market Seller Offer Cap Calculated by the Market Monitor.

The Market Monitor's proposed Market Seller Offer Cap for use in the CP Proposal uses the ISO-NE method made consistent with PJM's CP Proposal.

For consistency with PJM's CP Proposal, the Market Monitor's offer cap incorporates: (i) PJM's non-performance charge rate (PPR) based on net CONE (in ICAP MW terms); (ii) PJM's expected number of Performance Assessment Hours (30); and (iii) a PJM historical balancing ratio calculated by the Market Monitor from data on the PJM market. The differences between the Market Monitor's proposed Market Seller Offer cap and ISO-NE's de-list bid threshold appropriately reflect specific, identified differences between PJM's CP Proposal and ISO-NE's PFP design.

II. ANSWER

A. The Market Monitor's Proposal Is Based on PJM's Proposed CP Design.

Exelon argues (at 10) that the Market Monitor proposal adds unnecessary complexity for little to no benefit and that it will require forward-looking computations based on numerous assumptions. PJM argues (at 4), "The IMM's Alternative Proposal For Sell Offer Mitigation Is Complex, Unnecessary, and Raises Implementation Challenges." NRG/Dynegy argue (at 7) that the Market Monitor proposal is "inappropriate because [its] balancing ratio could only accurately be calculated after the delivery year" and that "would introduce significant imprecision."

The Market Monitor disagrees that the proposal adds complexity. The proposal tracks ISO-NE's dynamic de-list bid threshold calculation methodology approved by the Commission and implemented in the ninth FCA. The alleged complexity apparently refers to adjustments that appropriately reflect differences between PJM's CP Proposal and ISO-NE's PFP design. These adjustments reflect the PJM approach to the non-performance charge rate (PPR), the criteria for declaring performance assessment hours, and the net CONE (in ICAP-MW terms). Different values apply to each control zone and net CONE area in PJM.

The forward-looking calculation of the balancing ratio is consistent with the calculation of other capacity market parameters. All the parameters used in RPM Base Residual Auctions are based on forward-looking inputs developed by PJM, including expected performance assessment hours, load forecasts, expected generator performance, demand resource availability and weather conditions. The PRISM model that PJM uses to determine how much installed capacity to procure in the RPM auctions employs forward looking calculations that are based on historical resource performance and forecasts of weather and economic conditions.

B. The February 27th Answer Explains the Logic Behind the Offer Cap.

PJM Utilities Coalition states (at 7): "Given the late nature of the IMM's pleading and the lack of clarity associated with the IMM's new proposal, the Coalition requests that the Commission adopt the upper and lower offer limits proposed by PJM in its filing and reply comments." Power Providers state (at 3), "this proposed, late-filed and un-vetted modification has not been shown to be just and reasonable."

PJM Utilities Coalition offer no good reason for the Commission to approve the unsupported and faulty approach included in PJM's CP Proposal when the February 27th Answer provides and supports an appropriate approach that is fully vetted, has a sound and clear theoretical basis and is based on clear Commission precedent.

Contrary to the PJM Utilities Coalition's argument that the Market Monitor's proposal lacks clarity, the approach is clearly explained and the math in the February 27th Answer derives step by step, the competitive offer for a resource in RPM under the CP Proposal.

Contrary to PJM Utilities Coalition and Power Providers, the Market Monitor's proposal is not a new approach filed late. The Market Monitor's proposal is instead fully consistent with the ISO-NE approach. The Market Monitor's proposal follows the same logic used in ISO-NE's PFP design and the same language approved by the Commission and implemented in the

FCAs.[10] The Market Monitor's proposal is needed to replace the approach included in the CP Proposal, which is untested and lacks analytical, theoretical or logical support.

Contrary to Power Providers and unlike the approach included in PJM's CP Proposal, the Market Monitor's approach is the only offer cap that has been thoroughly vetted. The Market Monitor's approach is the one found just and reasonable, as filed by ISO-NE.

PJM argues that its overall CP Proposal is just and reasonable in large part because PJM asserts that it tracks the ISO-NE model. While PJM's overall approach to CP does track the ISO-NE approach, PJM's approach to the offer cap is not consistent with the ISO-NE model. PJM has not and cannot provide any support for the claim that its proposed offer cap is consistent with the ISO-NE approach because it plainly is not. PJM provided no theoretical or analytical support for the use of net CONE as an offer cap. None of the intervenors provided any theoretical or analytical support for the use of net CONE as an offer cap.

The Market Monitor filed the February 27th Answer in order to correct PJM's unsupported approach and to provide an offer cap with a clear theoretical basis and with clear Commission precedent.

C. The Market Monitor's Offer Cap Proposal Is The Same as the Offer Cap in the ISO-NE PFP Design.

NRG/Dynegy argue (at 6), "ISO-NE does not use its analogous balancing ratio in the fashion proposed by the IMM." NRG/Dynegy's claim is incorrect. ISO-NE's de-list bid threshold is calculated using the balancing ratio in exactly the same way that the Monitor uses the balancing ratio. In addition, ISO-NE's de-list bid threshold is calculated using a balancing ratio of 0.75, which is an historical value computed by ISO-NE based on data from the period from 2010–2012.[11]

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10 *See ISO New England Inc. and New England Power Pool*, 147 FERC ¶ 61,172 at P 96 (2014).

11 *See* ISO New England Inc. and New England Power Pool, Filings of Performance Incentives Market Rule Changes, Docket No. ER14-1050-000 (January 17, 2014), Attachment I-1e (Joint Testimony of David LaPlante and Seyed Parviz Gheblealivand) at 59.

NRG/Dynegy also state (at 7) that "the IMM's calculations assume that the capacity performance bonus rate will equal the non-performance penalty rate."

NRG is incorrect. The capacity performance bonus rate ("CPBR") is defined to be less than or equal to the PPR. If the CPBR were changed to any rate lower than the PPR proposed by PJM, the competitive offer of a CP resource would decrease. Contrary to NRG's concern, the Market Monitor's proposed offer caps are the maximum offer caps consistent with the ISO-NE approach because they assume the maximum value of the CPBR (equal to the PPR). Using a lower value of CPBR would make the offer cap lower rather than higher. In ISO-NE, under and over performance by resources are valued at the same rate (equivalent to setting the CPBR equal to the PPR). In using CPBR equal to PPR, the Market Monitor's approach calculates the maximum value of the competitive offer.

III. MOTION FOR LEAVE TO ANSWER

The Commission's Rules of Practice and Procedure, 18 CFR § 385.213(a)(2), do not permit answers to answers or protests unless otherwise ordered by the decisional authority. The Commission has made exceptions, however, where an answer clarifies the issues or assists in creating a complete record.[12] In this answer, the Market Monitor provides the Commission with information useful to the Commission's decision-making process and which provides a more complete record. Accordingly, the Market Monitor respectfully requests that this answer be permitted.

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12 *See, e.g., PJM Interconnection, L.L.C., 119 FERC ¶61,318 at P 36 (2007) (accepted answer to answer that* "provided information that assisted … decision-making process*"); California Independent System Operator Corporation*, 110 FERC ¶ 61,007 (2005) (answer to answer permitted to assist Commission in decision-making process); *New Power Company v. PJM Interconnection, L.L.C.*, 98 FERC ¶ 61,208 (2002) (answer accepted to provide new factual and legal material to assist the Commission in decision-making process); *N.Y. Independent System Operator, Inc.*, 121 FERC ¶61,112 at P 4 (2007) (answer to protest accepted because it provided information that assisted the Commission in its decision-making process).

IV. CONCLUSION

The Market Monitor respectfully requests that the Commission afford due consideration to this answer as the Commission resolves the issues raised in this proceeding.

Respectfully submitted,

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Dated: March 26, 2015

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 Eagleville, Pennsylvania,
this 26th day of March, 2015.

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