

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Calpine Corporation, Dynegy Inc., Eastern)	Docket No. EL16-49-000
Generation, LLC, Homer City Generation,)	
L.P., NRG Power Marketing LLC, GenOn)	
Energy Management, LLC, Carroll County)	
Energy LLC, C.P. Crane LLC, Essential Power,)	
LLC, Essential Power OPP, LLC, Essential)	
Power Rock Springs, LLC, Lakewood)	
Cogeneration, L.P., GDF SUEZ Energy)	
Marketing NA, Inc., Oregon Clean Energy,)	
LLC and Panda Power Generation)	
Infrastructure Fund, LLC)	
v.)	
PJM Interconnection, L.L.C.)	
)	

**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 PJM² (“Market Monitor”), submits this answer to the comments submitted on April 11, 2016, by certain parties, including: American Electric Power Service Corporation (“AEP Protest”); FirstEnergy Service Company (“FirstEnergy”) (AEP and FirstEnergy are referred to collectively as the “Companies”); the Public Utilities Commission of Ohio (“PUCO”);

¹ 18 CFR §§ 385.212 & 385.213 (2015).

² Capitalized terms used herein and not otherwise defined have the meaning used in the PJM Open Access Transmission Tariff (“OATT”) or the PJM Operating Agreement (“OA”).

Ohio Energy Group (“OEG Comments”) and Exelon Corporation (“Exelon Comments”). The Market Monitor also answers the answers submitted on April 20, 2016, by FirstEnergy Service Company (“FirstEnergy Answer”), including the Supplemental Affidavit of Dr. David Hunger (“Hunger Supplemental Affidavit”), on April 22, 2016, by American Electric Power Service Corporation (“AEP Answer”), on April 25, 2016, by Dominion Resources Services, Inc., American Municipal Power, Inc., American Public Power Association, Old Dominion Electric Cooperative, PJM Industrial Customer Coalition, and Public Power Association of New Jersey (“Dominion et al. Answer”) and by PJM (“PJM Answer”).

I. ANSWER TO ANSWERS TO COMPLAINT

A. Action Is Needed to Ensure that the Subsidized Units Offer at Competitive Levels.

The Companies provide various rationales for why their offers for the Subsidized Units can be relied upon to be competitive without receiving a MOPR review.³ The Companies argue that there is no need for review if they continue to offer the Subsidized Units at levels consistent with offers in prior auctions,⁴ that the Ohio Orders place performance risks on the companies changing their incentives,⁵ and that they have no

³ The “Subsidized Units” include: Cardinal Plant Unit 1; Conesville Plant Units 5 and 6, which are 100 percent owned by AEPGR; and the AEPGR share of Conesville Plant 4; Stuart Plant Units 1–4; and Zimmer Plant Unit 1; Davis-Besse Nuclear Power Station; the W.H. Sammis Plant; and FirstEnergy’s share of the output of the Kyger Creek Plant in Cheshire, Ohio, and the Clifty Creek Plant in Madison, Indiana, which are owned and operated by Ohio Valley Electric Corporation.

⁴ AEP Protest at 23–24; FirstEnergy Protest at 4.

⁵ AEP Protest at 23–24; FirstEnergy Protest at 11. The “Ohio Orders” include: *In the Matter of the Application Seeking Approval of Ohio Power Company’s Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider*, No. 14-1693-EL-RDR (March 31, 2016); *In re Application of Ohio Edison Co., Cleveland Elec. Illuminating Co., and Toledo Edison Co. for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Elec. Security Plan*, No. 14-1297-EL-SSO (March 31, 2016).

interest in price suppression.⁶ The Companies claim that state prudence reviews are adequate to protect competition in PJM markets and that Commission action would improperly interfere with state procurement decisions.⁷ The Companies claim that their units are being singled out for discriminatory treatment.⁸

None of the Companies' arguments are correct.

There is no basis to assume that offers in the 2019/2020 BRA are competitive simply because they are consistent with offers in prior auctions. The Companies have known their own regulatory strategy in Ohio, and their behavior in the 2018/2019 BRA can reasonably be assumed to have accounted for that strategy. The Capacity Performance design resulted in a change in the definition of a competitive offer in the 2018/2019 BRA compared to prior BRAs. Offers in auctions prior to the 2018/2019 BRA are not the standard for a competitive offer in the 2019/2020 BRA.

The Ohio Orders assign responsibility to the Companies to pay penalties and allow them to keep performance bonuses. The treatment of penalties and bonuses does not guarantee competitive behavior. The Companies continue to have incentives to offer lower than a competitive level if they believe that they may not otherwise clear. The definition of a competitive offer in the Capacity Performance design is clear and it is the appropriate standard against which to measure the offers of the Companies.

State prudence reviews cannot be relied upon to protect PJM wholesale markets.

The Companies' claim that a unit specific competitive offer cannot be calculated has no merit. The Market Monitor presented a method to calculate competitive offers based explicitly on the mathematics of the definition of a competitive offer under the Capacity Performance construct. An offer calculated under the proposed method avoids an offer that

⁶ AEP Protest at 22–23; FirstEnergy Protest at 27.

⁷ AEP Protest at 23–24, 37–38; FirstEnergy Protest at 10–11, 14–15; see also OEG Comments at 15–17.

⁸ AEP Protest at 34–37; FirstEnergy Protest at 19–20.

is lower than a competitive level and an offer higher than a competitive level. The review process allows ample opportunity for the Companies to explain how their particular circumstances affect the appropriate values of the key parameters used in this calculation.

The Companies claim that their units are being singled out. Discrimination means treating similarly situated entities differently. The Companies are in a unique position that warrants a targeted solution. But the definition of a competitive offer presented by the Market Monitor is the same for the Companies' units as for all other units under the Capacity Performance design.

B. AEP and FirstEnergy Should Immediately Disclose Their Offers for a Competitiveness Review.

The Market Monitor has asked that the Commission order a unit specific review process for use in the Base Residual Auction for the 2019/2020 delivery year. The Companies should have already determined their offers and submitted them to the Market Monitor for review on a voluntary basis. The opportunity to review would allow the Market Monitor to raise market power or manipulation issues with the Commission immediately.

The Market Monitor agrees that there is not sufficient time to put in place a revised MOPR or MOPR-Ex before the Base Residual Auction that commences May 11, 2016.⁹ There is, however, adequate time to confirm whether specific offers that the Companies contemplate submitting are competitive under the Capacity Performance definition of a competitive offer as described by the Market Monitor.¹⁰

AEP states in its protest (at 17):

Given that fact, there is no reason to conclude that AEP Ohio will adopt a bidding strategy that is any different than any other

⁹ See FirstEnergy Protest at 29–32.

¹⁰ See Comments of the Independent Market Monitor for PJM, Docket No. EL16-49-000 (April 11, 2016) at 5–8.

bidder attempting to maximize revenue for an existing resource yet accounting for CP risk.

If AEP Ohio (and the other market sellers of Subsidized Units) offers the units at competitive levels, the Market Monitor's ex-ante review of their offers is an efficient way to determine whether there are any issues before the auction is run. The effort in this proceeding is to ensure that subsidized units bid competitively, no "different than any other bidder attempting to maximize revenue for an existing resource yet accounting for CP risk" in the auction, and if that is not the case, having a process in place to ensure that the auction is not affected by noncompetitive offers from the Subsidized Units and the effort required to resolve the related issues.

C. Use of Co-Owners Offers for Subsidized Units Is Not an Appropriate Proxy to Determine Competitive Offers from the Companies.

Certain of the Subsidized Units include one or more partial owners other than the Companies. AEP asserts that "the offers of AEP's co-owners would represent a better proxy for assessing the competitiveness of AEP Ohio's offers."¹¹ PJM agrees that AEP's idea for a proxy "could provide the basis for interim mitigation of at least some of the Ohio PPA resources, if the Commission finds mitigation necessary."¹²

AEP's proposal to use co-owners' offers has no merit. The suggestion that a market participant should use the offers of its competitors is nonsensical. Allowing co-owners to share information about their prospective offers would facilitate collusion not competition. The unworkable proposal to use co-owners' offers should be rejected.

¹¹ AEP Answer at 4-5.

¹² PJM Answer at 4.

D. The Market Monitor's Proposed MOPR-Ex Addresses the Concerns Raised About the Complainants' Proposed Revised MOPR.

A number of parties direct their criticism at the MOPR proposal offered by complainants.

The Companies complain that the Complainants' proposed revised MOPR unfairly targets their units.¹³ Whatever the merits of Complainants' proposal, the scope of the Market Monitor's proposed MOPR-Ex mirrors the scope of the existing MOPR and does not single out any entities.

The Companies argue that Complainants' proposed revised MOPR improperly employs a method to establish a bid cap as a bid floor and fails to adapt to CP market principles.¹⁴ A key aspect of the Market Monitor's proposal is to determine a competitive offer defined by the Capacity Performance rules and recognizing that there is a reasonable range for the key parameters of competitive CP offers. Use of an offer based on the Capacity Performance definition also avoids the Companies' concerns about a cap referencing particular unit types.¹⁵ The Market Monitor's cap based on the Capacity Performance definition of a competitive offer applies equally to all unit types.

The Companies cite precedent arguing that the Commission has foreclosed expansion of the current MOPR to cover existing units.¹⁶ The cases show that the

¹³ AEP Protest at 27–29, 31–34; FirstEnergy at 19–20; PUCO Comments at 4; OEG Comments at 14–15.

¹⁴ AEP Protest at 4–5; FirstEnergy at 12–15, 21–22.

¹⁵ AEP Protest at 29–30.

¹⁶ AEP Protest at 24–26, citing *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022 at P 159, *order on reh'g*, 137 FERC ¶ 61,145 (2011); *PJM Interconnection, L.L.C.*, 137 FERC ¶ 61,145 (2011); *N.J. Bd. of Pub. Utils. v. FERC*, 744 F.3d 74 (3rd Cir. 2014); *Indep. Power Producers of N.Y., Inc. v. N.Y. Indep. Sys. Operator, Inc.*, 150 FERC ¶ 61,214 (2015); FirstEnergy at 16–18, citing *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022 at P 159, *order on reh'g*, 137 FERC ¶ 61,145 (2011); *PJM Interconnection, L.L.C.*, 137 FERC ¶ 61,145 (2011); *ISO New England Inc.*, 135 FERC ¶ 61,029 (2011); *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022, at P 159 (2011), *order on reh'g*, 137 FERC ¶ 61,145 (2011), *aff'd sub nom. N.J. Board of Pub. Utils. v. FERC*, 744 F.3d 74 (3rd Cir. 2014).

Commission did not apply the MOPR to units that could be relied upon to offer competitively. None of the orders addressed the present situation.¹⁷

Some complain that the Complainants' proposed rule is over inclusive and implicates participants engaged in self supply.¹⁸ Some complain that the Complainants' MOPR proposal does not accommodate subsidies motivated by public policy reasons such as renewables.¹⁹

The Market Monitor's proposed MOPR-Ex avoids these issues by maintaining the existing MOPR provisions which allow for exclusions, exemptions or exceptions that address the issues raised. There is no reason not to appropriately extend the MOPR for new units to existing ones and allow the exclusions, exemptions and exceptions to sort units that raise competitive concerns from those that do not.

II. ANSWER TO COMMENTS ON MARKET MONITOR'S REVIEW PROPOSALS

A. Claims of Complexity in the Market Monitor's Competitive Offer Equations Demonstrate Lack of Knowledge of Capacity Performance Design.

A number of parties raise concerns about the Market Monitor's allegedly complicated equations that simply repeat the definition of a competitive offer for CP resources.²⁰ None of these concerns are valid. The equations are a set of simple linear equations that reflect the revenues, costs and performance related payments (non-performance charges and bonus performance payments) that are the fundamental elements

¹⁷ AEP claims (Protest at 17) that "there is no basis for any suggestion that, absent the MOPR revisions, the PPA units would be retired on or before the 2019/2020 Delivery Year." On the contrary, the basis is representations at the core of the Companies filing at the state level seeking subsidies for their units from Ohio ratepayers because PJM market revenues could not be relied upon to sustain them.

¹⁸ AEP Protest at 16; FirstEnergy at 22-26.

¹⁹ OEG Comments at 5-8; Exelon Comments at 4.

²⁰ PJM Answer at 4-5, AEP Answer at 13-14.

of the Capacity Performance market design. These equations are not new. The Market Monitor submitted these equations for the Commission's review as part of the Capacity Performance proceeding in February 2015.²¹ The fundamental design of the revenue streams and costs and non-performance charges and bonuses are not subjective, as FE claims.²² In fact, the Commission has reviewed the mathematics behind the competitive offers of CP resources and approved offer cap calculations using exactly the same logic and equations.²³ Claims of complexity about a set of equations that are fundamental to the definition of the CP model indicate a surprising reluctance to recognize the CP design and have no merit.

PJM's claims that the Market Monitor's approach is too complicated are surprising given that PJM itself submitted the same equations in its response to the Commission's deficiency letter in the Capacity Performance proceeding more than a year ago.²⁴

B. Objections to the Market Monitor's Proposed Standard of Review for CP MOPR Offers Have No Merit.

FirstEnergy argues that the proposed process "provides for an unacceptable level of discretion to the IMM" and that the Market Monitor "offers no guidance as to what would . . . constitute a competitive offer in the IMM's view." AEP raises similar concerns.²⁵

On the contrary, the Market Monitor explains in detail the definition of a CP competitive offer and the analytical standard the Market Monitor will use to evaluate offers

²¹ See Attachment A to Answer and Motion for Leave to Answer of The Independent Market Monitor For PJM, Docket No.s ER15-623-000 and EL15-29-000 (February 25, 2015, corrected on February 27, 2015).

²² FE Answer at 6 – 7.

²³ 151 FERC ¶ 61,208 at P. 335 – 343.

²⁴ See Overview of Capacity Performance Offer Cap Logic, Appendix 1 of PJM Interconnection Response to Deficiency Letter, Docket No. ER15-623 (April 10, 2015).

²⁵ AEP Answer at 13–15.

in the Base Residual Auction for the 2019/2020 Delivery Year. The Market Monitor has no discretion in the process. In fact, the Companies have flexibility with respect to the appropriate values of key parameters of competitive offers. The analysis provided by the Companies' witness Dr. Hunger does not refute the Market Monitor's competitive offer equations. Dr. Hunger does not provide any arguments against the economic principles that are the basis for the competitive offer equations. Dr. Hunger's analysis does not support the Companies' assertions about the Market Monitor's proposal.

Dr. Hunger only seeks guidance as to what the Market Monitor's view of reasonable assumptions is:

Without some guidance regarding what would be considered reasonable expectations regarding these parameters, sellers facing the IMM's proposed review process would need to offer in an overly cautious manner.²⁶

However, the IMM offers little guidance as to what would be an acceptable range for these parameters, what types of supporting data and analysis would be required, and thus what would constitute a "competitive" offer, in the IMM's view.²⁷

Dr. Hunger merely repeats the points made in the Market Monitor's comments.²⁸ The Market Monitor described and calculated hypothetical offers for units with a range of assumptions. The Market Monitor illustrated how market sellers with resources at different locations, with varying levels of historical performance, and risk appetite can support different levels of the inputs to the competitive offer equations. Dr. Hunger adds to the set of examples provided by the Market Monitor using the same set of competitive offer

²⁶ Hunger Supplemental Affidavit at 5.

²⁷ Hunger Supplemental Affidavit at 7.

²⁸ See Comments of the Independent Market Monitor for PJM, Docket No. EL16-49-000 (April 11, 2016) at 6-8.

equations with a different set of inputs. Dr. Hunger merely asks that the Market Monitor be more specific about what would be a reasonable range of assumptions by a market seller behaving competitively in the capacity auction. It is unclear how Dr. Hunger jumps to the conclusion that the Market Monitor's proposal "suffers from economic distortions."

Dr. Hunger ignores the request of the Market Monitor that the Companies propose their own offers and parameters and the offer of the Market Monitor to discuss the details with the Companies in advance of any offers. It is the responsibility of the Companies to submit competitive offers in the Capacity Performance market design.

This is exactly the process that is already in place for market sellers to submit and support unit specific offer caps under the Capacity Performance rules. Market sellers currently submit analyses that support the seller's views on parameters and unit specific offer caps. The Market Monitor currently reviews the analyses and participates in discussions with market sellers to come to an agreement on unit specific offer caps including risk premiums. The Market Monitor is proposing the same process to review the competitiveness of offers from the Subsidized Units.

Market Sellers use a range of methodologies to justify expected values and variances to the inputs to the competitive offer equations. Dr. Hunger claims incorrectly:

Further, the IMM's position assumes point estimates of such values, and fails to recognize the stochastic nature of such estimates.²⁹

Contrary to Dr. Hunger's claims, the Market Monitor made clear that the Market Monitor expects supporting analyses by market sellers to justify expected values and variances to the competitive offer calculations. The Market Monitor recognizes that competitive offers are unit specific based on the resource's ACR and expected performance. The stochastic nature of forward looking variables and historical analyses is omnipresent

²⁹ Hunger Supplemental Affidavit at 3.

and unsurprising. Market Sellers are in the best position to account for these risks and uncertainty in the face of competition to offer in the capacity markets. Capacity Performance offers include a risk premium component to account for the uncertainty in the assumptions used to arrive at CP offers.

PJM argues that the standards that Market Monitor proposes are too complicated and are guaranteed to delay the 2016 auction.³⁰ That assertion is unsupported and incorrect.

C. Objections to the Market Monitor’s Proposed Review Process for the Base Residual Auction for the 2019/2020 Delivery Year Have No Merit.

FirstEnergy raises a number of objections to the review process, none of which have any merit.

FirstEnergy argues that the Market Monitor’s concern that that the Companies “may have the incentive to submit high offers in an effort to avoid clearing the market undermines the IMM’s assertion that there is a need for a “special review process.” On the contrary the need is greater than ever. The problem presented by the Ohio Orders is the incentives for noncompetitive behavior in PJM capacity markets. PJM markets rely on competition to produce just and reasonable rates. The Ohio Orders create incentives for the Companies to offer at noncompetitive levels.

The offer review process proposed by the Market Monitor is necessary for an orderly auction process. The Market Monitor needs to know the Companies’ intended offers so that it can begin to review them. There is no question, however, whether a review will eventually occur. The Companies will submit offers, the Market Monitor will review those offers for competitiveness under its existing tariff authority, and, if those offers raise market power or manipulation concerns, the Market Monitor will evaluate their market impact. If the Market Monitor identifies any issues, it will file a complaint with the Commission requesting fast track treatment to address them. The need for a review process is to provide

³⁰ PJM Answer at 4–5.

notice to the market of what is coming, to provide an orderly mechanism to resolve issues if they arise, and, perhaps most importantly, to start the process without delay. In particular, the Market Monitor asks that the Commission reserve for itself time to review any issues raised prior to the public posting of the auction results.

FirstEnergy has complained that, “The proposal, if adopted, would effectively suspend the outcome of the RPM auctions until the IMM alone is satisfied with the auction results.” AEP argues that the Market Monitor should not have “discretion to reject capacity offers.” The Companies concerns are a misplaced effort to deflect attention from their offer behavior. The Market Monitor does not have discretion and does not assert that it has discretion. The Market Monitor does not assert that it can prevent the Companies from making offers at levels that the Market Monitor disputes if PJM determines that such offers comply with the tariff.³¹ The Commission alone has the authority to make decisions in this matter. Whether delay of the auction occurs depends upon whether the Commission decides to review disputed offers before or after market results are posted. The Market Monitor recommends delayed posting of auction results in order to avoid confusion in the markets and to avoid potential inadvertent disclosure of market sensitive information if the Commission decides to take actions that change market outcomes.

D. MOPR-EX Is Needed for Existing Units.

Dominion et al. raise objections to the proposed MOPR-Ex for existing units similar to those that were raised for the MOPR for new units. Those arguments were rejected for MOPR and should be rejected for the MOPR-Ex.

³¹ The Market Monitor does not agree that the scope of PJM’s compliance review should be expanded, even temporarily, to include rejection of offers that would result in “an uneconomic auction price.” See PJM Comments at 12–13. PJM is not positioned to make such determinations on market power and offer levels, which is why the tariff specifically prohibits PJM from making such determinations. See OATT § 12A.

Dominion et al. note that the Commission recognized when it approved the existing MOPR that “the purpose and function of the MOPR is not to unreasonably impede the efforts of resources choosing to procure or build capacity under long-standing business models.”³² The approved MOPR meets that standard by including certain exclusions, exemptions and exceptions. The proposed MOPR-Ex would include exactly the same exclusion, exemptions and exceptions. Dominion et al. provide no reason why the MOPR-Ex could not be implemented without unreasonably impeding their business model.

It is not reasonable to permit noncompetitive offers to undermine the efficiency and success of the PJM capacity market.

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.³³ 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.

³² Dominion et al. Answer at 6, citing *PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,090 (2013).

³³ 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: April 30, 2016

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 30th day of April, 2016.



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