**UNITED STATES OF AMERICA**

**BEFORE THE**

**FEDERAL ENERGY REGULATORY COMMISSION**

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| Technical Conference on Winter 2013-2014 Operations and Market Performance in Regional Transmission Organizations and Independent System Operators. | :  :  :  : | Docket No. AD14-8-000 |

**COMMENTS  
SUBMITTED ON BEHALF OF**

**THE PUBLIC UTILITIES COMMISSION OF OHIO**

**May 15, 2014**

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# I. INTRODUCTION

The Public Utilities Commission of Ohio (Ohio Commission) respectfully submits the following Comments in accordance with Federal Energy Regulatory Commission’s (Commission) Supplemental Notice of Technical Conference issued March 19, 2014.

The PJM Interconnection, L.L.C.’s (PJM) footprint was particularly hard hit this past winter, with an unprece­dented amount of forced outages and scarcity pricing being called in January. With the State of Ohio consisting of over one fifth of PJM’s entire load, every decision PJM makes directly impacts Ohio’s retail electric consumers. Con­sequently, the majority of our com­ments and recommendations pertain to PJM’s winter weather operations.

# II. COMMENTS

The Ohio Commission is concerned about the excessive amount of forced outages that occurred this past winter. Long-term grid reliability is extremely important to the Ohio Commission, however, we are mindful that an appropriate balance needs to be struck between cost and reliability objectives. The Ohio Commission is confident that the Commission can achieve these objectives by ensuring generation units are available during peak usage times before entering into scarcity pricing. As discussed herein, the implementation of a claimed capability audit in RTO/ISOs that do not currently have such protocols in place will go a long way in safeguarding the grid in times of extreme weather. In addition, with upcoming retirements that will take effect next spring, fuel diversity is of great importance to the Ohio Commission and should remain a top objec­tive for the Commission as it considers the events from this past winter. Further, measures need to be taken to ensure that energy prices are predictable, including the con­tinued dialogue between the gas and electric industries to assure that electric gen­erators have as much information as possible when considering fuel purchases.

## A. FORCED OUTAGES

The recent cold weather incidents expose a troubling trend of an increasing amount of forced outages that have permeated through PJM. While the forced outage rates hit unprecedented highs this past winter, reliability has been under pressure since last summer. Notably, due in part to forced outages, PJM recently endured a load shed event in September of 2013.[[1]](#footnote-1) Accordingly, the Ohio Commission proposes that the

Commission can address the excessive forced outage rates within PJM by ordering the implementation of a claimed capability auditing program.

### 1. Winter Testing and Claimed Capability Audits

This past winter alone, as indicated by PJM representative Michael Kormos, the forced outage rate reached approximately 22 percent of all installed generation capacity in PJM.[[2]](#footnote-2) This is over three times higher than the average forced outage rate of 7 per­cent.[[3]](#footnote-3) Looking at this another way, over 40,000 megawatts of generation that cleared in RPM was unavailable as peak demand soared to new record highs. While some of these outages were related to gas curtailments, the vast majority of PJM’s outages were caused by equipment issues.[[4]](#footnote-4) The forced outages from this past winter, coupled with other recent forced outages, depict a trend in which resources that clear in the RPM auction are not responding when the grid is under dire conditions.[[5]](#footnote-5)

The Ohio Commission understands there will be forced outages from unforesee­able issues. However, the excessive outage rates from this past winter demonstrate that too many generating units are not being properly maintained or updated as necessary in order to provide service at times of peak demand. As Mr. Kormos pointed out at the technical conference, PJM was only 700 MW from implementing voltage reductions this past winter.[[6]](#footnote-6) The fact that PJM and other RTO/ISOs skated so close to having insuffi­cient reserves highlights the importance of having additional measures in place to ensure sufficient resources are available when called upon. Taking this into account with upcoming retirements in PJM that exceed 10,000 MW, the Ohio Commission urges the Commission to consider means to address these excessive forced outages.[[7]](#footnote-7) The Ohio Commission provides the following recommendations that, if implemented, will aid in mitigating problems associated with forced outages.

During the technical conference, Mr. Kormos indicated that PJM would be pro­posing winter testing requirements for generating units in the coming months. The Ohio Commission strongly supports PJM’s proposal. This will not only allow PJM to deter­mine whether a generating unit is able to run under winter conditions, but also provides time to correct any issues that may prevent a unit from performing during winter months. The Ohio Commission applauds PJM for considering the re-implementation of its winter testing requirements after a several-year absence. However, because forced generation outages have not been limited to just the winter months in PJM, additional measures need to be taken beyond a winter testing process.[[8]](#footnote-8)

The Ohio Commission proposes that PJM establish a claimed capability auditing process to ensure generating units are able to respond to dispatch instructions and main­tain performance levels over an extended period of time. The Ohio Commission notes that ISO New England (ISO-NE) currently has a similar auditing program in place that PJM can use for guid­ance in implementing this process.[[9]](#footnote-9) Capability audits will allow PJM to monitor its gen­erating units’ ability to perform and ensure routine maintenance is being conducted as necessary to allow the units to respond during times of peak demand.

The Ohio Commission echoes Commissioner Moeller’s statements that there needs to be a plan for winterization and a summer equivalent. We believe these plans can be implemented through a claimed capability auditing process,[[10]](#footnote-10) and, with such a pro­cess, a North American Electric Reliability Corporation (NERC) standard is unnecessary at this time.[[11]](#footnote-11) Nonetheless, while we do not believe a NERC standard is the remedy that should be adopted at this time, this option should not be foreclosed entirely and may need to be revisited in the future. Similarly, while significant revisions to current deficiency penalties should not be foreclosed, an evaluation of existing penalties and their impact on forced outages would be useful. The Ohio Commission notes that the establishment of winter testing and general auditing pro­tocols would allow PJM and other RTO/ISOs to confidently know they can count on gen­erating units during times of heavy demand.

### 2. RPM Price Suppression

Taking a further step back, while the forced outages could be addressed through enhanced auditing procedures, a key component in the lack of unit maintenance and upkeep stems from continued price suppression in PJM’s RPM construct. We agree with concerns raised by FirstEnergy Solutions representative Donald Schneider that price sup­pression may lead to premature and uneconomic retirements. The Ohio Commission believes this is an important issue that should continue to be addressed by PJM.[[12]](#footnote-12) How­ever, turning back to the short-term, these generating resources are still being paid to run, and the expectation remains that these units are taking appropriate measures to make sure units are able to respond during times of peak demand. As discussed below, not only could on-site fuel storage promote reliability, but, incentives for on-site fuel storage could also remedy the effects of RPM price suppression.

### 3. The Role of Demand Response

Further, the Ohio Commission is concerned that in light of the extreme number of forced outages, PJM is placing itself in the precarious situation of hoping Demand Response (DR) resources respond during winter months despite their lack of obligation to do so. In considering the appropriate balance between price and reliability, the Ohio Commission understands the valuable role that DR plays in RPM and notes that, as a result of the forced outages this past winter, DR was able to help keep the lights on. Nonetheless, the events from this past winter underscore the ability for DR resources to be avail­able on a year-round basis. If nothing else, the DR resources that responded in January highlights that DR can indeed be packaged on an annualized basis and should be subject to higher obligations, similar to that of generating units. As Commissioner Clark pointed out, if products are going to be compensated annually, they should be available annually.[[13]](#footnote-13)

The Commission’s recent order approving some of PJM’s emergency response tar­iff provisions will greatly improve operational flexibility going forward.[[14]](#footnote-14) However, the Ohio Commission agrees with Mr. Kormos’ observation that DR resources need to be available year round. In order to provide PJM with utmost operational flexibility in the event that generation is unavailable, DR should be required to commit to RPM on an annualized basis. As noted at the technical conference, ISO-NE has DR as a year-round resource.[[15]](#footnote-15) Annual requirements will go a long way to maintain resource ade­quacy and diversity in PJM.

## B. RESOURCE ADEQUACY

The Ohio Commission shares Commissioner Moeller’s concerns that the upcom­ing generation retirements will adversely affect reliability. To take a proactive approach in addressing these plant retirements, fuel diversity is extremely important and should

remain a priority. Based on performance during the winter events, no one fuel resource can sufficiently meet demand on its own during extreme weather events.[[16]](#footnote-16)

Careful planning is necessary in order to ensure PJM and other RTOs and ISOs can handle winter weather events after generation retirements. With a significant portion of the retiring megawatts being replaced by natural gas resources, we cannot afford to forget about protecting our current resources that help in hedging against any unforeseen natural gas curtailments.[[17]](#footnote-17) In addition, it is important to encourage the development of new generation resources to ensure reliability.

## C. MARKET IMPACTS

During the technical conference, there appeared to be general consensus that sev­eral factors drove up PJM wholesale market prices in January of 2014. Unseasonably cold winter weather and high natural gas prices combined with sustained peak loads and generator outages due to fuel and operational issues had a direct effect on energy prices and operating reserve or “uplift” charges in PJM.

### 1. Uplift Costs

Commission Staff and PJM representative Kormos both noted that uplift costs for Janu­ary 2014 were more than PJM experienced for the entire year of 2013.[[18]](#footnote-18) LMP prices in eastern PJM also spiked above $1,000/MWh on certain days in January.[[19]](#footnote-19) According to Mr. Schneider, PJM’s overall gross billing for January 2014 was $8.2 billion more than the same period in 2013.[[20]](#footnote-20) Mr. Schneider stated that “customers paid $8.2 billion [more] in one month and will receive nothing in terms of future investment in reliable service.”[[21]](#footnote-21)

As noted by both Mr. Kormos and Commission Staff, the high prices in early Jan­uary were caused by higher-than-average loads and, in the case of PJM, high generator forced-outage rates. In the later January events, particularly during the Martin Luther King Jr. holiday weekend, high prices resulted from historically high natural gas prices.[[22]](#footnote-22) According to Mr. Kormos, PJM was forced to direct generators to burn expensive gas in high-cost peaking units for the entire weekend in order for those units to be available to serve anticipated loads on Tuesday, January 21, 2014. Mr. Kormos stated that this action resulted in the majority of PJM out-of-market payments that totaled over $500 million dollars, and “half a billion is a lot of money even in PJM” for uplift to generators for the month of January 2014. [[23]](#footnote-23)

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### 2. Gas and Electric Industry Alignment

The Ohio Commission has been an active proponent of the need to examine issues related to gas and electric coordination and applauds the Commission for prioritizing this ini­tiative. The Ohio Commission believes it is also important to highlight that the terms and conditions under which PJM and its generators must buy gas were significant con­trib­uting factors to the high energy prices and the extraordinary amount of uplift in Janu­ary. Specifically, as Mr. Kormos explained in his statement:

Notably it was not the gas transportation issues but rather some of the gas procurement issues that had a greater impact on system operations, dispatch and ultimately price…..The relative lack of transparency of these secondary markets which often bundle transportation or supply, left PJM in the untenable position of being asked to commit generators prior to the Day-Ahead Energy Market….the combination of high prices coupled with the absolute inflexibility to manage the units economically significantly increased the costs and com­plexity in scheduling and dispatching.[[24]](#footnote-24)

The Ohio Commission urges the Commission to consider requiring alignment between the two industries. For example, due to the lack of consistency between the markets, PJM directed its generators to buy more gas in anticipation of extreme weather, than was actually needed in real-time. The Ohio Commission looks forward to providing the Com­mission with comments regarding gas and electric scheduling and alignment in the Commis­sion’s notice of proposed rulemaking.[[25]](#footnote-25) The need for transparency in secondary gas markets should also be examined by the Commission in order for electric generators to have the best information available when considering purchases of natural gas from those markets.

The Ohio Commission notes that during the technical conference, NRG reported its success in buying gas in constrained areas through firm contracts or through purchases of firm gas from third parties.[[26]](#footnote-26) While the Ohio Commission takes no position on wheth­er firm gas contracts would be a more desirable option than depending upon the spot market during shortage periods, the Commission should fur­ther explore firming up winter fuel supply through forward arrangements, a winter pro­duct or other options.[[27]](#footnote-27) In addi­tion to considering the value that firm transmission may add in winter weather events, the Commission should also consider the role on-site fuel storage may play in improving reliability.[[28]](#footnote-28) As noted by acting-chairman LaFleur, including fuel security into the stand­ard capacity product would not only improve relia­bility, but could also aid resources that are contemplating premature retirements to con­tinue to operate.[[29]](#footnote-29) The Ohio Commission proposes that the Commission order PJM to conduct a study considering how on-site fuel storage can improve reliability and whether it should be considered as part of the RPM capacity product.[[30]](#footnote-30)

### 3. Price Impacts

The Ohio Commission shares Commissioner Clark’s concern regarding the partic­ipation of DR and its ability to set shortage pricing in PJM markets.[[31]](#footnote-31) As previously stated, DR should be available year round as a resource subject to the same requirements as existing generation. This would include the requirement to offer into the energy mar­ket as an economic resource rather than as an emergency resource subject to higher offer caps. The Ohio Commission applauds the voluntary response by demand response dur­ing the January 2014 events but believes that the recent extreme weather in both the summer and winter highlight the need to further refine its role in PJM markets, including its ability to set shortage prices.

The Ohio Commission highlights the comments made by state commissioners and Paula Carmody of the Maryland Office of People’s Counsel regarding the compelling real-world impact on customers of high prices in the wholesale markets on certain cus­tomers’ electricity bills. The Ohio Commission strongly agrees with comments by Vermont Chairman Voltz, and Maryland Commissioner Brenner regarding the impact of wholesale prices on retail customers and the need to find the best long-term, cost-effective solution to ensure reliability.[[32]](#footnote-32) Based on customer inquiries and informal com­plaints, the Ohio Commission recently initiated a docket[[33]](#footnote-33) to examine marketing practices in the competi­tive retail electric service market; including whether increased costs imposed by an RTO may be pass-through charges or otherwise billed to customers under competitive, fixed-rate contracts.

Finally, with regard to pricing impacts, the Ohio Commission notes that in the coming months PJM and its stakeholders will be reviewing contributing factors to the cold weather price spikes in PJM.[[34]](#footnote-34) The Ohio Commission supports PJM’s and the Inde­pendent Market Monitor’s initiatives in this area including examining the causes and actual costs of uplift, including interchange transactions, and whether those charges should be included in LMP rather than as separate charges; the effect of revising or elim­inating the cap from cost-based offers and allowing those offers to set LMP; and ensuring that recovery of uplift payments or cost-based offers above the cap is limited to the actu­al, legitimate natural gas acquisition costs. The Ohio Commission looks forward to providing comments on these matters to the Commission at the appropriate time.

# III. CONCLUSION AND RECOMMENDATIONS

The Ohio Commission respectfully requests that the Commission take further action to address forced outages issues that occurred this past winter. Specifically, the Ohio Commission recommends the establishment of a claimed capability auditing pro­cess in PJM, or, at a minimum, a winter weather testing requirement to ensure that gener­ating units are being properly maintained. Further, PJM should continue to explore the effects of price suppression in RPM and the role DR should play going forward. Fuel diversity and continued efforts to coordinate the gas and electric industries should remain Commission priorities over the next few months. Finally, in light of the extremely high uplift figures from the month of January, the Commission should order an examination of the causes and actual costs of uplift, and determine whether those charges would be better placed in LMP or should remain as separate charges.

Respectfully submitted,

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**Attorney for the**

**Public Utilities Commission of Ohio**

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# IV. CERTIFICATE OF SERVICE

I hereby certify that the foregoing has been served in accordance with 18 C.F.R. Section 385.2010 upon each person designated on the official service list compiled by the Secretary in this proceeding.

/s/ Thomas W. McNamee

**Thomas W. McNamee**

Dated at Columbus, Ohio this May 15, 2014.

1. PJM Interconnection, L.L.C., *Technical Analysis of Operational Events and Market Impacts during the September 2013 Heat Wave*, at 4, 26 (Dec. 23, 2013) (“PJM Hot Weather Report”). [↑](#footnote-ref-1)
2. *Technical Conference on Winter 2013-2014 Operations and Market Performance in RTOs and ISOs*, Docket No. AD14-8-000 (Transcript of Conference at 91) (Apr. 1, 2014) (“AD14-8-000 Conference Transcript”). [↑](#footnote-ref-2)
3. *Id.* [↑](#footnote-ref-3)
4. *Technical Conference on Winter 2013-2014 Operations and Market Performance in RTOs and ISOs*, Docket No. AD14-8-000 (Statement of Michael J. Kormos of PJM at 3-4) (Apr. 1, 2014) (“AD14-8-000 Kormos Statement”). [↑](#footnote-ref-4)
5. *See* PJM Hot Weather Report at 11-39. [↑](#footnote-ref-5)
6. AD14-8-000 Conference Transcript at 90. [↑](#footnote-ref-6)
7. *Id*. at 99. [↑](#footnote-ref-7)
8. *See* PJM Hot Weather Report at 4. [↑](#footnote-ref-8)
9. ISO New England, Section III, Market Rule I (Apr. 28, 2014). [↑](#footnote-ref-9)
10. *Id*. [↑](#footnote-ref-10)
11. *See* AD14-8-000 Conference Transcript at 128-29. [↑](#footnote-ref-11)
12. *See* AD14-8-000 Conference Transcript at 211. [↑](#footnote-ref-12)
13. AD14-8-000 Conference Transcript at 143-144. [↑](#footnote-ref-13)
14. *See* PJM Interconnection, L.L.C., Docket No. ER14-822-000 (FERC Order at 15-16) (May 9, 2014) (“ER14-822-000 FERC Order”). [↑](#footnote-ref-14)
15. AD14-8-000 Conference Transcript at 148. [↑](#footnote-ref-15)
16. *See* AD14-8-000 Kormos Statement at 12 (“All conventional forms of generation, including gas, coal and nuclear plants were challenged by extreme conditions.”). [↑](#footnote-ref-16)
17. *Id*. at 12–13. [↑](#footnote-ref-17)
18. AD14-8-000 Conference Transcript at 28, 96. [↑](#footnote-ref-18)
19. AD14-8-000 Conference Transcript at 24. [↑](#footnote-ref-19)
20. *Id*. at 211. [↑](#footnote-ref-20)
21. *Id*. [↑](#footnote-ref-21)
22. *Id*. at 97–98. [↑](#footnote-ref-22)
23. *Id*. at 113–14. [↑](#footnote-ref-23)
24. AD14-8-000 Kormos Statement at 11. [↑](#footnote-ref-24)
25. Federal Energy Regulatory Commission, Docket No. RM14-2-000 (Coordination of Scheduling Processes of Interstate Natural Gas Pipelines and Public Utilities) (Mar. 20, 2014). [↑](#footnote-ref-25)
26. AD14-8-000 Conference Transcript at 170-171. [↑](#footnote-ref-26)
27. *Id*. at 115–116, 119, 141-142, 269. [↑](#footnote-ref-27)
28. *Id*. at 209–210. [↑](#footnote-ref-28)
29. *Id*. at 295. [↑](#footnote-ref-29)
30. *Id*. at 209-210. [↑](#footnote-ref-30)
31. AD14-8-000 Conference Transcript at 146. [↑](#footnote-ref-31)
32. *Id*. at 256, 268-269. [↑](#footnote-ref-32)
33. *See* *In the Matter of the Commission Ordered Investigation of Marketing Practices in the Competitive Retail Electric Service Market*, Docket No. 14-568-EL-COI (Apr. 8, 2014). [↑](#footnote-ref-33)
34. AD14-8-000 Kormos Statement at 14. [↑](#footnote-ref-34)