

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

**Price Formation in Energy and Ancillary) Docket No. AD14-14-000
Services Markets Operated by Regional)
Transmission Organizations and)
Independent System Operators)**

**COMMENTS OF THE ELECTRIC POWER SUPPLY ASSOCIATION AND
THE PJM POWER PROVIDERS
ON REPORT OF THE PJM INTERCONNECTION, L.L.C.**

The Electric Power Supply Association (“EPSA”)¹ and the PJM Power Providers (“P3”)² respectfully submit the following comments on the PJM Interconnection, L.L.C. (“PJM”) Report on Price Formation Issues³ responding to the Commission’s Order Directing Reports issued in the above-captioned proceeding⁴ on November 20, 2015 (“the Order”) on five price formation issues: (1) pricing of fast-start resources; (2)

¹ EPSA is the national trade association representing leading competitive power suppliers, including generators and marketers. Competitive suppliers which collectively account for 40 percent of the installed generation capacity in the United States provide reliable and competitively priced electricity from environmentally responsible facilities. EPSA seeks to bring the benefits of competition to all power customers. The comments contained in this filing represent the position of EPSA as an organization, but not necessarily the views of any particular member with respect to any issue.

² P3 is a non-profit organization dedicated to advancing federal, state and regional policies that promote properly designed and well-functioning electricity markets in the PJM Interconnection, L.L.C. (“PJM”) region. Combined, P3 members own over 84,000 MWs of generation assets, produce enough power to supply over 20 million homes and employ over 40,000 people in the PJM region covering 13 states and the District of Columbia. For more information on P3, visit www.p3powergroup.com. The comments contained in this filing represent the position of P3 as an organization, but not necessarily the views of any particular member with respect to any issue.

³ *PJM Interconnection, L.L.C. Report On Price Formation Issues*, Docket No. AD14-14-000 (filed February 17, 2016)(“PJM Report”)

⁴ *Price Formation in Energy and Ancillary Services Markets Operated by Regional Transmission Organizations and Independent System Operators* 153 FERC ¶ 61,221 (“Order Directing Reports”) (2015).

commitments to manage multiple contingencies, (3) look-ahead modeling, (4) uplift allocation, and (5) transparency.

As EPSA and P3 have reiterated in numerous proceedings and forums over the past several years, reforming flawed ISO/RTO energy and operating reserve price formation policies and practices in both Day Ahead and Real Time markets is critical to price signals that reflect actual system conditions and support investment which maintains system reliability. In order to again highlight the urgency, priority and scope of energy price formation issues that require action and direction from FERC to every ISO/RTO on a specifically delineated, expedited basis, EPSA is filing separate concurrent comments in this proceeding in addition to responses to each ISO/RTO report joined by regional competitive supplier organizations as appropriate.⁵

EPSA and P3 appreciate the efforts PJM has undertaken to improve its market design and enhance price formation, and generally support the stakeholder processes discussed in the PJM Report (either proposed or underway) to consider other necessary changes. Importantly, EPSA and P3 encourage PJM to move expeditiously to refine its market design to implement the reforms and best practices that EPSA and P3 urge the Commission to act on herein. Ensuring consistency across ISO/RTO price formation reforms is critical to allow useful comparisons of each system operator's progress under a common baseline for reforms and a common timeline for completion. This approach is particularly useful to ensure that price formation reforms stay on track across all markets, even if individual system operators assert that unique attributes of their market

⁵ Cf., Comments of the Electric Supply Association, Price Formation Proceeding, Docket No. AD14-14-000 (Filed April 6, 2016) (extensively discussing the views of the Electric Supply Association on the urgent need for market design and pricing reforms across all ISOs/RTOs) ("EPSA Price Formation Proceeding Comments").

structure merit a delay in implementing certain critical reforms. Overall, the price formation reports indicate that there is a strong need to create and maintain nationwide accountability through the Commission's leadership of the often disparate price formation and market design enhancement activities taking place at different paces among the individual ISOs and RTOs.

Finally, EPSA and P3 note that the ISO/RTO reports do not explicitly discuss the array of specific market design and pricing solutions needed to address price signal distortions, reduce uplift, and thereby temper concerns about uplift allocation and transparency around out-of-market operator actions. While the five issues discussed in these reports are pathways toward a price formation solution, improvements in any of these areas will not be effective in isolation of nationwide market design and pricing reforms. Therefore, the Commission must simultaneously address the marketplace fundamentals that inhibit proper price formation -- topics on which the Commission has already received extensive feedback from EPSA, P3 and other stakeholders during its price formation workshops and in subsequent public comment periods. This includes the pending proceeding in which the Commission proposes generic reform to the outdated and arbitrary energy offer cap.⁶ EPSA and P3 comments in that proceeding reiterate that the default offer cap of \$1000/MWh (and the default offer cap is set at \$2000/MWh for PJM) must be eliminated or substantially raised and revised across the ISOs/RTOs before winter 2016/17.⁷ Such reforms are critical to the ISO market, and

⁶ *Offer Caps in Markets Operated by Regional Transmission Operators and Independent System Operators*, Notice of Proposed Rulemaking, Docket No. RM16-5-000 (January 21, 2016) (“NOPR”), 81 FR 5951, <https://federalregister.gov/a/2016-01813> (Feb 4, 2016), 154 FERC ¶ 61,038.

⁷ EPSA, et al. Comments, *Offer Caps in Markets Operated by RTOs and ISOs*, Docket No. RM16-5 (filed April 4, 2016). Also see P3 Comments, *Offer Caps in Markets Operated by RTOs and ISOs*, Docket No. RM16-5 (filed April 4, 2016).

therefore the Commission should direct improvements as discussed below on a clear timeline supported by a detailed work plan so that such initiatives are approved within 2016 and can be implemented expeditiously.

Additionally, it is incumbent upon the Commission to take final action on PJM's Hourly Offers proposal to modify its tariff to allow Market Sellers to submit day-ahead offers that vary by hour and update their offers in real-time on an hourly basis under certain important circumstances.⁸ PJM is the only ISO/RTO which does not allow this hourly flexibility; doing so is critical to improving energy price formation, interaction with the natural gas markets, and the ability of generators to switch fuels during the delivery day to meet system demand. This is a fundamental and necessary market reform that requires expeditious FERC approval so that the RTO will have this market mechanism in place *before* Winter 2016/2017.

In this regard, EPSA and P3 implore the Commission to require PJM (and the other ISOs/RTOs) to submit a detailed work plan to the Commission which identifies the reforms to be undertaken and establishes milestones to be met at specific times in 2016. All reforms should be developed and submitted to the Commission for final approval by the close of 2016, or be subject to FERC-initiated FPA Section 206 proceedings to ensure that necessary market revisions are made.⁹

⁸ *PJM Interconnection, L.L.C., Compliance Filing to Implement Hourly Offers*, Docket No. ER16-372-000 (filed November 20, 2015) ("PJM Hourly Offers proposal").

⁹ See concurrently filed EPSA Price Formation Proceeding Comments at 1-11 for a more detailed discussion.

I. COMMENTS

A. Pricing Fast Start Resources

PJM states that currently the RTO and its stakeholders are not engaged in initiatives or planning activities related to fast-start pricing logic, including considerations of costs and benefits and impacts on uplift. As discussed in the PJM Report, the PJM fast start pricing approach allows relaxation of up to 10% by block loaded resources to allow the resource to set day-ahead locational marginal price (“LMP”). According to PJM, this is necessary (rather than relaxing the minimum operating limit of eligible block loaded fast start resources to zero) in order to minimize over-generation that can cause imbalances. Further, the PJM approach does not allow start-up or no-load costs in the LMP calculation.

EPSA and P3 believe this is a critical area that requires Commission direction for PJM to undertake further review of its pricing approach, noting that it is a priority market design improvement that all ISOs/RTOs take proactive steps to appropriately price block loaded and fast start resources into LMP, and all out of market dispatches into the LMP. For instance, all ISOs/RTOs should employ a dynamic approach to fast-start resource pricing based on convex hull pricing, which accommodates start-up and shut-down costs and no-load costs, and respects the principle that offers from fast-start units committed to meet incremental load should be able to set prices at all times they are committed to meet demand – not just during the short intervals upon their initial dispatch or when operators choose to log their commitment in a particular way.

While these core design elements are required in every market, PJM in particular does not appear poised or amenable to addressing these elements in its pricing

mechanism. If block-loaded fast-start resources are treated as fixed resources, their actual cost-based offers will almost never be reflected in market prices, and LMPs will be set by the offers from lower cost flexible units that are dispatched down on the margin (“backed down”) to accommodate the full output of the fast-start resource that is being treated as a fixed resource. Treating fast-start units as a fixed resource cost leads to administrative pricing; the relaxation of the fast-start resource’s economic minimum operating limit to a default, administered level does not give full consideration to the unit’s actual costs and most likely will lead to prices that are less than the marginal fast-start unit’s offer costs.

Of note, both the NYISO and MISO have implemented or are in the process of implementing pricing logic approaches that conform to varying degrees with the principle of dispatch-based pricing advocated by EPSA, which works when all resources run by the system operator are reflected in the market-clearing price.¹⁰ This minimizes uplift and provides efficient locational price signals. Under dispatch-based pricing, the prices are suppressed whenever they are less than the offer costs of a fixed-block fast-start unit that is needed to serve load. In sum, while there may be some reasonable differences, PJM (and all the ISOs/RTOs) should be incorporating out of market dispatches into their pricing algorithm to allow them to set market prices, including ensuring that start up and no load costs are included in the LMP.

¹⁰ See EPSA Price Formation Proceeding Comments at 11-15.

B. Commitments to Manage Multiple Contingencies: LMP's Need to Reflect Market Conditions Particularly during "Conservative Operations"

Managing the interstate grid in a manner that ensures ample supplies of power for consumers is job one for PJM and all RTOs. Events that can disrupt PJM's ability to meet that mission can range from the unpredictable (terrorist events), to the unlikely (forest fires) to the unanticipated (poor vegetation management). Indeed the threats to the grid are vast and varied and PJM must be prepared to not only respond in order to keep the grid functioning, but also to make sure that PJM markets are providing proper price signals during these emergency conditions.

As stated in its response, PJM currently dispatches the system to control for N-1 contingencies. In other words, PJM is generally operating the system with the assumption that only one thing will go wrong. Under most circumstances, the means of operating the system has served PJM well and PJM has weathered many threats to the system with minimal impacts on the reliability of the bulk power grid.

That said, EPSA and P3 members have at times struggled with market signals and price formation when PJM enters conservative operations. During conservative operations, PJM is operating the system as if things may go wrong beyond the one event in N-1 dispatch, such as consideration in commitment of a large number of generators failing to start in extreme temperatures. This can severely depress LMPs. To be clear, EPSA and P3 are not questioning whether conservative operations are appropriate under circumstances (they are), or whether PJM should have the ability to enter conservative operations (it should). However, even during conservative operations, proper energy price formation must be maintained and clearing prices

should be reflective of actual market conditions. Unfortunately, that is not always the case in PJM.

For example, if PJM decides to issue a voltage reduction in order to balance the system it will likely result in a 2-3% decrease in the load on the system at the time.¹¹ While reducing load during times when the system is under pressure is an appropriate tool for PJM operators to use, the corresponding decrease in Locational Marginal Prices (“LMPs”) caused by the load drop does not send the appropriate signal to consumers regarding systems conditions. Implementation of a voltage reduction literally lowers LMPs at the same exact time that there is a resource shortage. Although scarcity adders are engaged during a voltage reduction, these adders are meant to be supplemental to a properly formed underlying price.¹² Currently, PJM does not have a mechanism in place to price energy at levels reflective of market conditions during these situations.

EPSA and P3 recognize that PJM has taken steps after the Polar Vortex to better price the market when PJM enters conservative operations. Specifically, in Docket No. ER15-643, PJM has implemented changes to better price reserves. We have not yet faced a combination of extreme weather and challenging operations to see these new rules in action, but the change should help alleviate situations where appropriate price signals were not sent during contingency events.

Further, while EPSA and P3 are generally comfortable with PJM’s current practice to dispatch based on N-1 contingencies, a greater focus on price formation

¹¹ See, <https://www.pjm.com/~media/training/new-pjm-cert-exams/foto-lesson10-capacity-emergencies-pjm-operational-requests.ashx> at Slide 19 and 20.

¹² Note that Scarcity Pricing in PJM is an “adder” on top of LMP that begins following the issuance of a voltage reduction. Scarcity Pricing does not in and of itself change the underlying LMP.

during conservative operations would likely lead to improvements to current operating practices and may allow for the development of better multiple contingency approaches as well. Indeed, when the grid is stressed, proper price signals to both consumers and suppliers are *critically* important; any mechanisms which dampen or obscure those signals must be improved. The Commission should ensure that policies for managing multiple contingencies across all ISOs/RTOs each recognize that, in lieu of administratively committing online resources to hold reserves, it is more economically efficient, cost-effective, and beneficial to reliability and proper price formation if the operator takes the necessary steps to provide market signals that will incent new build of fast-start units to meet reserve requirements at lower costs.

A fundamental principle of commitment management approach is that an operator should be required to resolve constraints through energy and ancillary services markets clearing processes rather than through out-of-market operator actions to the maximum extent possible. To the extent additional flexibility is desirable to manage “what-if” scenarios beyond N-1 contingencies, EPSA and P3 urge PJM to implement a 30-minute ramp product market in real-time. The typical constraints that can be addressed within the market mechanism include the need to meet online capacity requirements, perform contingency reserve planning, regulating and ramping functions, ensure voltage and stability, address thermal or interface transmission limits, activate emergency demand response, and other system conditions or constraints that lead to out-of-market operator actions. Even where it is not possible to represent one or more of these constraints in unit commitment and dispatch models, EPSA and P3 believe FERC should require that potential constraints be modeled for price formation to inform day-ahead commitment optimization. In PJM particularly, such market design principles

must be addressed as they apply during conservation operations as well as during normal periods.

C. Look-ahead Modeling

PJM states that it currently has no stakeholder initiatives or planning activities related to look-ahead modeling, but discusses that it continually works to improve the quality of the input data for look ahead models to improve the RTO's unit commitment processes and operational awareness. As an example of such improvements, in 2015, PJM had a corporate initiative to benchmark and improve the accuracy of the interchange and load forecasts that are used as inputs to the look-ahead models.¹³ However, PJM notes the challenges of forecast accuracy and granularity for look-ahead modeling, specifically regarding load and interchange forecasts. EPSA and P3 support PJM's ongoing efforts in this area, but emphasize that an advisory tool should not *create* the need for out-of-market ("OOM") actions, and generally agree with PJM that refinements in look-ahead modeling should improve intra-day unit commitments and lead to more efficient market solutions and reduce OOM uplift payments.¹⁴ However, all generators committed (especially generators dispatched to "min load") to allow PJM to carry excess reserves beyond the reserve requirement will depress LMPs and these out-of-market operator actions need to be reflected in LMPs.

D. Uplift Allocation

EPSA and P3 continue to maintain that uplift is a symptom of larger market-design and pricing problems. If the pricing signals are correct and the pricing issues addressed, then uplift is minimized and the allocation of uplift charges is therefore

¹³ PJM Report at 21.

¹⁴ PJM Report at 27.

minimized extensively. The allocation and uplift methodology is less important if the focus is on minimizing overall cost. EPSA and P3 advocate that the best way to address uplift and its allocation is to comprehensively reform the range of price formation and market design issues that have been explored in the price formation workshops and as outlined by EPSA, P3 and others.

Of note, EPSA and P3 commend PJM for having a low percentage of its total billing representing uplift in 2015. Specifically, uplift was only 0.9% of PJM's total billing, the third lowest in the period 2001 through 2015 (with 2001 and 2002 as the lowest and second lowest total uplift amounts, respectively).¹⁵ According to the 2015 SOM Report:

The decrease in total energy uplift charges was mainly a result of PJM not committing units for conservative operations in advance of the Day-Ahead Energy Market in the 2015 winter, compared to the 2014 winter. The PJM still relied on some units committed for congestion in advance of the Day-Ahead Energy Market and during the reliability analysis after the Day-Ahead Energy Market closed, but the impact of these commitments on energy uplift in 2015 was significantly lower than in 2014.¹⁶

EPSA and P3 note that while it is encouraging that PJM (and other ISO/RTO) uplift costs are down, this does not support the conclusion that there are *no* concerns that require resolution, or *no* market rules that require reform. In the time since the extreme weather of early 2014, PJM has experienced mild winter and summer weather, in relative terms. Additionally, the experiences of January 2014 drew extensive attention to the issue and causes of uplift, thereby likely affecting near-term operational decisions by PJM and asset owners, as well as other market operators. The impact of these

¹⁵ 2015 State of the Market Report for PJM, Monitoring Analytics, Volume II, Section 4, Energy Uplift Results at 153, Table 4-3, (issued March 10, 2016) (2015 SOM Report), *available at* www.monitoringanalytics.com.

¹⁶ *Id.* at 153.

factors cannot be diminished, as they very likely represent important and pervasive forces driving down reliance on and the occurrence of uplift in numerous regions.

PJM does indicate that an area of its existing uplift methodology that needs improvement relates to Virtual Transactions, specifically with respect to Up-to-Congestion transactions (“UTCs”). PJM believes that uplift costs should be allocated to UTCs (currently, uplift costs are allocated to Increment Offers and Decrement Bids, but not to UTCs). PJM has a stakeholder process to consider possible changes to the Virtual Transaction rules,¹⁷ subject to the outcome of a Commission decision in the pending proceeding in Docket No. EL14-37-000. EPSA and P3 members are active participants in this process, and agree with PJM that such virtual transactions are an integral part of the market, but review of rules governing the use of these transactions and allocation issues is appropriate in light of UTCs contributing to changes in unit commitment and uplift, as well as other issues highlighted in the recent PJM report “Virtual Transactions in the PJM Energy Markets.”¹⁸

Additionally, the PJM Report states that PJM’s current netting rules allow for a supply or demand deviation from a Virtual Transaction in the Day-Ahead Energy Market to be netted with an Internal Bilateral Transaction (“IBT”) occurring at the same location.¹⁹ PJM believes this netting should be removed because it allows an IBT that does not affect the scheduling, dispatch and uplift, on the system to offset an actual

¹⁷ At its January 28, 2016 meeting, the Markets and Reliability Committee (“MRC”) approved a problem statement/issue charge related to the nodes at which virtual transactions may be made. The issue will be addressed at the Energy Market Uplift Senior Task Force (“EMUSTF”). A March 24, 2016 meeting of the EMUSTF was held to begin the process.

¹⁸ PJM Interconnection, L.L.C., “*Virtual Transactions in the PJM Energy Markets*,” issued October 12, 2015, available at <http://www.pjm.com/documents/reports.aspx>.

¹⁹ PJM Report at 33.

deviation created by a cleared Virtual Transaction that does.²⁰ PJM believes this netting is inappropriate because of the different impacts each transaction type has on the system. At this juncture, EPSA and P3 are unclear exactly what PJM is proposing, but we do not believe it to be a proposed improvement to PJM's existing rules for uplift allocation. To the extent EPSA and P3 understand what PJM is proposing, the proposed rule would be a disincentive to beneficial hedging activity, and would promote divergence between day ahead and real time prices. EPSA and P3 believe this proposal requires further consideration in the stakeholder process, and reserves its right to not support the Commission's approval of such a change.

PJM has also asserted that existing uplift allocation rules likely mute investment signals due to lack of clarity regarding where uplift payments are being received, and asks the Commission to provide guidance on principles for uplift allocation. When resources are frequently committed to resolve certain transmission constraints, market participants cannot be certain if those commitments are being priced into uplift, but regardless of the specific source the operator action should remain the focus and PJM should take efforts to reflect the action in LMP. PJM has in the past taken steps to price operator actions into the market once it recognizes the issue. Specifically, PJM has taken such action for units providing reactive power and closed loop interfaces. These are two examples of successful actions PJM has taken to get operator action out of uplift and into LMP, and EPSA and P3 urge the Commission to have PJM build upon that success. When PJM recognizes operator actions that are continuously reflected in uplift, EPSA and P3 would expect PJM, and any RTO, to take active steps to reflect the

²⁰ *Id.*

action in LMP so the costs are not hidden to the market in uplift. EPSA and P3 do not advocate a best practice uplift allocation methodology across ISOs/RTOs, but generally agrees that ISO/RTO allocation rules should focus on a wider and simpler allocation of charges to the types of transactions that have the potential to cause uplift; or, when that is not possible to those benefiting from the scheduling of the resources that incur uplift.²¹

Another issue that may warrant examination in every region as well as PJM is the allocation of uplift to external transactions. The NYISO Report outlines that its uplift allocation method is designed to allocate the cost of uplift to the customers that are benefitting from the action that caused the uplift. In this regard, the ISO indicates that the allocation of uplift to external transactions could be improved. The NYISO supports the reciprocal elimination of uplift and other fees allocated to external transactions. Further, the ISO asserts the allocation of uplift and other fees reduces trade between regions and adversely impacts total production costs. To the extent that uplift charges on external transactions (i.e., related to Coordinated Transaction Scheduling or “CTS”) is impeding price convergence between the regions or driving up uplift costs in one region, EPSA would support further examination of the underlying causes and consideration of solutions. EPSA has previously urged the Commission to minimize seams issues between the regions as it considers price formation reforms. The intent of such broader regional market efforts, such as CTS, is to encourage market efficiencies and improved price signals.

²¹ PJM Report at 35.

E. Transparency

EPSA and P3 believe transparency with respect to reporting of uplift and operator actions is an area where further consistency and uniformity across the ISOs/RTOs is needed, and by doing so, would enhance overall price formation. EPSA and P3 support the efforts to date by ISOs/RTOs to provide more granular data, and requests that the Commission establish and require best practices in this area.

Transparency around the frequency and source of out of market actions should provide necessary incentives for system operators to minimize actions that may result in significant uplift. To the extent that FERC requires regular reporting of the cause, duration, and amount of uplift from specific assets or units on a regular basis (e.g., monthly as a baseline reporting requirement, or such reporting as may be required more frequently), this requirement should be implemented by each ISO and RTO on a comparable basis so that the reports can serve as an effective accountability tool to measure system operators' performance against each other. As such, FERC should direct the ISOs/RTOs to use common benchmarks, metrics, and protocols for uplift reporting.

Although the ISOs/RTOs have raised concerns around commercially sensitive information being disclosed through any broad requirement for granular reporting of uplift results, EPSA and P3 believe that additional information on the drivers of uplift and out of market dispatch can be made public by each ISO/RTO, similar to the NYISO monthly reports,²² without compromising such sensitive information. Such information should be provided on a megawatt (MW) basis, rather than on a unit basis, and should

²² New York Independent System Operator, Monthly Report, August 2014. NYISO Monthly Reports are available publicly on the NYISO website at http://www.nyiso.com/public/markets_operations/documents/studies_reports/index.jsp.

include the reason the MWs were committed on an out-of-market basis so that all market participants will have an opportunity to consider investments that respond to these signals.

With specific regard to PJM, EPSA and P3 support the PJM and stakeholder efforts to achieve consensus on changes to address confidentiality provisions²³ and allow more granular posting of uplift data, and to allow monthly posting of (aggregated) zonal uplift dollar totals by Operating Day, category and Transmission Zone.²⁴ EPSA and P3 encourage expeditious resolution and agrees with PJM that this additional transparency would benefit the market.

II. CONCLUSION

WHEREFORE, EPSA and P3 respectfully request that the Commission should direct improvements as discussed in these comments on a clear timeline supported by a detailed work plan so that such initiatives are approved within 2016 and can be implemented expeditiously.

EPSA and P3 also urge that the Commission continue to take additional steps to address market design and pricing concerns that are fundamental changes which must complement ISOs' and RTOs' individual efforts to improve fast-start resource pricing and dispatch policies, multiple commitment contingency management, look-ahead modeling, uplift allocation, and uplift reporting. As noted previously, a fundamental and necessary market reform that requires final action from the Commission as soon as possible is PJM's Hourly Offers proposal to modify its tariff to allow Market Sellers to

²³ At the March 31, 2016 PJM MRC Meeting, the MRC approved changes to Manual 33: Administrative Services for PJM Interconnection Agreement that allow PJM to release market data under six circumstances.

²⁴ PJM Report at 52.

submit day-ahead offers that vary by hour and update their offers in real-time on an hourly basis under certain important circumstances.²⁵ The PJM Hourly Offers proposal should be approved expeditiously so that changes are in place for the Winter 2016/2017. Additionally, the Commission should rapidly finalize its pending proposal in Docket No. RM16-5-000 to reform the default \$1000/MWh offer cap (and the default offer cap is currently set at \$2000/MWh for PJM) in advance of Winter 2016/2017 for all ISOs/RTOs.

Respectfully submitted,
/s/

Nancy Bagot, Senior Vice President
Sharon Theodore, Director, Regulatory Affairs
Electric Power Supply Association
1401 New York Avenue, NW, 12th Floor
Washington, DC 20005
(202) 628-8200
NancyB@epsa.org

On Behalf of the PJM Power Providers Group:

/s/

Glen Thomas
Diane Slifer
GT Power Group
1060 First Avenue, Suite 400
King of Prussia, PA 19406
gthomas@gtpowergroup.com
610-768-8080

Dated: April 6, 2016

²⁵ *PJM Interconnection, L.L.C., Compliance Filing to Implement Hourly Offers*, Docket No. ER16-372-000 (filed November 20, 2015) (“PJM Hourly Offers proposal”).