

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

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<b>Calpine Corporation, et al.</b>	)	<b>Docket No. EL16-49-000</b>
	)	
<b>PJM Interconnection, L.L.C.</b>	)	<b>Docket Nos. ER18-1314-000</b>
	)	<b>ER18-1314-001</b>
	)	
<b>PJM Interconnection, L.L.C.</b>	)	<b>Docket No. EL18-178-000</b>
	)	<b>(Consolidated)</b>

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**COMMENTS OF THE ILLINOIS COMMERCE COMMISSION**

Pursuant to the Commission’s Order Rejecting Proposed Tariff Revisions, Granting in Part and Denying in Part Complaint and Instituting Proceeding Under Section 206 of the FPA issued on June 29, 2018 (“June 29 Order”)<sup>1</sup> in the above-captioned dockets, the Illinois Commerce Commission (“ICC”) respectfully submits the following comments. On January 24, 2017, the ICC filed a notice of intervention in Docket No. EL16-49-000. On April 12, 2018, the ICC filed a notice of intervention in Docket No. ER18-1314-000. On July 9, 2018, the ICC filed a notice of intervention in Docket No. EL18-178-000. The ICC is, therefore, a party to this consolidated proceeding.

The ICC objects to the capacity market design proposed by the Commission in its June 29 Order because the minimum offer price rule (“MOPR”) element systematically and unduly discriminates against states having public policies that compensate generators of electricity with beneficial resource attributes not otherwise compensated in PJM markets.<sup>2</sup> In its June 29 Order, the Commission found, without any evidence, that such state policies result in offer price

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<sup>1</sup> *Calpine Corporation, et al.*, 163 FERC ¶ 61,236 (2018).

<sup>2</sup> The ICC objects to the use of the term “subsidy” to describe out of PJM market payments which reflect legitimate state policy choices to compensate beneficial resource attributes the PJM market fails to value.

suppression and clearing price suppression in PJM’s capacity auction. The ICC maintains its position from earlier comments, protests, and the request for rehearing, filed in these matters. However, because the Commission indicates that it intends to proceed down the path outlined in the June 29 Order and has now set the replacement rate issue for a paper hearing, the ICC offers these comments for consideration. In submitting these comments, the ICC does not waive any arguments or rights on rehearing or on review.

## **I. SUMMARY OF THE JUNE 29 ORDER**

The June 29 Order addressed two related proceedings: (1) A complaint by Calpine, *et al.* in Docket No. EL16-49, wherein complainants asserted that PJM Interconnection, L.L.C.’s (“PJM”) then current MOPR is unjust and unreasonable because it does not address the purported impacts of out-of-market payments; and (2) Docket No. ER18-1314 in which PJM proposed tariff revisions to establish either: (1) a two-stage Repricing Proposal that would bifurcate price setting and quantity commitment; or (2) a MOPR-Ex proposal that would expand PJM’s existing MOPR to mitigate capacity offers from both new and existing resources, subject to certain proposed exemptions.

The Commission consolidated these dockets, rejected both of PJM’s proposals, finding each of them to be unjust and unreasonable, and unduly discriminatory, and found PJM’s existing tariff to be unjust and unreasonable.<sup>3</sup> The Commission also granted in part, and denied in part, Calpine’s complaint.<sup>4</sup> The Commission initiated a paper hearing process under FPA Section 206<sup>5</sup> in Docket No. EL18-178-000 to address a proposed alternative approach in which PJM would modify two existing aspects of the Tariff: (1) expand PJM’s existing MOPR to

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<sup>3</sup> June 29 Order, at PP 7-8.

<sup>4</sup> June 29 Order, Ordering Paragraph PP 6-7.

<sup>5</sup> June 29 Order, at P 6.

apply to new and existing resources that receive out-of-market payments, regardless of resource type (“Expanded MOPR”); and (2) establish a resource-specific fixed resource requirement option (“FRR-Alternative”) that would allow resources receiving out-of-market revenue to remain on the system, outside of PJM’s capacity market.<sup>6</sup> The Commission acknowledged that a number of details would need to be addressed to implement the resource-specific FRR-Alternative, and urged those topics be addressed in the paper hearing.<sup>7</sup>

## II. COMMENTS

### A. Implementation of Any Expanded MOPR Requires the Development of Usable Accommodating Measures to Mitigate the Harm Caused by the MOPR.

The ICC previously demonstrated that application of a MOPR in any circumstance outside of intentional efforts to manipulate auction-clearing prices lower is unwarranted and inappropriate.<sup>8</sup> PJM’s efforts to expand the application of the MOPR to resources compensated pursuant to legitimate state policy initiatives that support goals such as clean energy, is particularly egregious.<sup>9</sup> The Commission’s decision in its June 29 Order to expand the MOPR in these circumstances unlawfully intrudes into states’ authority over electricity generation resources.<sup>10</sup> Such overreach will likely hasten litigation.

Absent reversal by the Commission, PJM must make efforts to prepare to implement the Expanded MOPR while mitigating the resulting damage by enabling targeted units receiving out-

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<sup>6</sup> June 29 Order, at P 157.

<sup>7</sup> June 29 Order, at P 164.

<sup>8</sup> *See, e.g.*, Motion to Dismiss and Protest of the Illinois Commerce Commission, filed May 7, 2018, *PJM Interconnection, L.L.C.*, Docket Nos. ER18-1314-000, ER18-1314-001, at 35-38.

<sup>9</sup> *Id.* at 22.

<sup>10</sup> *See Hughes v. Talen Energy Mktg., LLC*, 136 S. Ct. 1288, 1292 (2016) (“The States’ reserved authority includes control over in-state ‘facilities used for the generation of electric energy.’” (quoting § 824(b)(1)). *See also, Pacific Gas & Elec. Co. v. State Energy Resources Conservation and Development Comm’n*, 103 S. Ct. 1713, 1722 (1983) (“Need for new power facilities, their economic feasibility, and rates and services, are areas that have been characteristically governed by the States.”).

of-PJM market revenues to remain on the system outside of PJM’s capacity market. Given the damaging impact of the Commission’s MOPR decision, the Commission was correct to also require development of an accompanying design element to “accommodate state policy decisions and allow resources that receive out-of-market support to remain online.”<sup>11</sup> Because the resources targeted by the expanded MOPR are mostly renewable, zero emission or demand response resources receiving state-authorized compensation for their associated clean energy characteristics and other beneficial attributes, the FRR-Alternative proposed by the Commission or similar damage-mitigating measure(s) is critically necessary. As the Commission noted, effective measure(s) to accommodate state policy choices must be in place prior to any application of an Expanded MOPR.<sup>12</sup>

In order to make any FRR-Alternative or other accommodative measures meaningful for owners of resources targeted for MOPR to choose, many PJM states will need to pass legislation effecting this approach. New state legislation is likely necessary because owners of targeted resources are unlikely to choose a FRR-Alternative or other measure meant to accommodate them in the absence of a new revenue stream to replace the PJM capacity market revenue that may be lost by application of the Expanded MOPR.

For example, in Illinois there is currently no law, regulation or rule that requires load serving entities to make capacity payments to owners of facilities that receive ZEC or REC compensation. The REC and ZEC revenue streams were not designed to compensate resources for capacity. Rather, those revenue streams were designed to compensate beneficial

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<sup>11</sup> June 29 Order, at P 8. While the FRR-Alternative was suggested, the Commission rightly also welcomed “any other proposal that may be presented” in the paper hearing process. June 29 Order, at P 172.

<sup>12</sup> June 29 Order, at P 8. Absent usable accommodative measures, MOPR would threaten the viability of many of these resources by starving them of capacity compensation. The ICC’s reference to the Commission’s admonition to PJM is not intended to and does not waive the ICC’s position that the Expanded MOPR with, or without, the contemplated accommodating measures unlawfully intrudes into the States’ authority to regulate energy generation.

environmental attributes, renewability and zero-carbon respectively. In order to address the legislative gap opened up by the Commission's June 29 Order, Illinois, and likely other states, will require time to consider and enact legislation to enable the FRR-Alternative or other accommodating measures to be meaningful and usable by the owners of resources targeted for MOPR. Such efforts may require revisiting some of the fundamental principles underlying decades-old industry restructuring legislation. If the Commission does not permit states sufficient time and opportunity to enact and implement the necessary provisions to address the gap created by the Commission's Order, the Commission's vision for accommodation of MOPR-targeted resources will not be realized and those units may not be able to remain online. In that case, application of MOPR most definitely would not be just and reasonable by the Commission's own terms in the June 29 Order.

The Commission is surely aware that states cannot draft or finalize the necessary legislation to give effect to the Commission's accommodative intent until the Commission approves the rules and requirements for the FRR-Alternative or other accommodative measure(s) and PJM tariff language to implement those rules and requirements is in place. Typically, the state legislative process is neither simple, nor fast and the legislation necessary to respond to an Expanded MOPR, and to make the FRR-Alternative or other accommodative measures meaningful, is likely to be particularly complex. Extensive time for consideration at the state level will likely be required.

Moreover, any state-designed system must coexist and complement PJM's capacity program mechanisms. For example, resources in the FRR-Alternative or other accommodative program will likely need to adhere to PJM's capacity performance requirements, local sourcing requirements, and import/export constraints. It is unclear how states can assure such compliance,

particularly for cases where PJM determines such constraints during its base residual auction or other auction processes, which presumably will occur after state FRR-Alternative resources have been identified. Also, because the Commission is entertaining the idea of imposing the Expanded MOPR on resources receiving revenue through federal programs, thus making the FRR-Alternative or other accommodative measure(s) available to those resource owners, additional entanglements at the state level are practically unavoidable. States will likely also find it necessary to establish market power mitigation provisions to address resources that, by virtue of their expulsion from PJM capacity markets, would no longer be subject to PJM's capacity market power mitigation mechanisms.

Accomplishing and implementing these legislative and regulatory measures in each of the states impacted by the Commission's June 29 MOPR decision, prior to the PJM's posting deadline for the 2019 auction parameters is daunting, if not impossible. To the extent that this state-level work is not done in that time frame, the Commission's vision for the FRR-Alternative or other accommodative measure(s) will not be realized, in which case, the Commission cannot permit the Expanded MOPR to be imposed in those instances. Commission failure to recognize these state-level challenges, and to undertake a reasoned approach to MOPR implementation which accounts for the time needed to resolve these issues, could result in severe shocks that could undermine state and investor confidence in PJM and PJM's oversight of the grid.

Accordingly, transition mechanisms to ease into full application of the MOPR will likely need to be included in PJM's tariff linked to a reasonable timeline for state adoption of provisions to give effect to the approved FRR-Alternative or other accommodative measures. The transition mechanism concept is simple—PJM should not apply the MOPR to a resource that does not have access to an effective and usable accommodative measure or measures. Inclusion

of an FRR-Alternative or other such measure in PJM’s tariff does not, in and of itself, make accommodation available to a resource targeted for MOPR. Accommodation, as envisioned by the Commission in the June 29 Order, can only be effective if accompanying state-specific measures are also in place, and that requires time.

**B. Capacity Markets Are Inherently Flawed. The Commission and PJM Should, Reduce Reliance on the Capacity Market and Instead, Focus on Improving Price Formation in the Energy and Ancillary Services Markets.**

Capacity markets are inherently flawed, in that they attempt to procure and allocate capacity for load-serving entities, even though capacity is a product not particularly well suited for allocation through a market process. While the ICC supports competitive electricity markets and system reliability, PJM’s current capacity construct (“RPM”) is not a competitive market in any meaningful sense.<sup>13</sup> Instead, it is a complex, administratively determined mechanism for pricing and procuring capacity that has been subject to almost constant rule changes. Since its inception in 2007, RPM has been the subject of nearly thirty significant revisions before the Commission. Moreover, the construct contains numerous administratively determined non-market features such as its Variable Resource Requirement (“VRR”) curve, price caps, a MOPR, cost of new entry (“CONE”) fluctuations, and significant performance requirements/penalties. Arguably, all of these administrative features serve a purpose, but they also underscore the reality that RPM is a market in name only and will continue to be subject to revision in the PJM stakeholder process and before the Commission.

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<sup>13</sup> Indeed, Monitoring Analytics, the independent market monitor for the PJM region found PJM’s local and aggregate capacity market structure, as well as market performance and participant behavior to be, “not competitive.” *2018 Quarterly State of the Market Report for PJM*, (August 9, 2018), at 10. [http://www.monitoringanalytics.com/reports/PJM\\_State\\_of\\_the\\_Market/2018/2018q2-som-pjm-sec5.pdf](http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2018/2018q2-som-pjm-sec5.pdf)

Another flaw in PJM’s capacity market construct is that it fails to account for environmental externalities. In an efficient market, polluting resources would bear the costs of their pollution by internalizing the cost of the externality. By not requiring emitting resources to bear the costs of their pollution, the current PJM construct advantages polluting resources, allowing them to submit offers that are lower than what their true competitive offers would be if the negative externality were accounted for and to remain in the market when they would otherwise exit. Such an outcome results in PJM’s markets relying too much on “dirty”, rather than “clean” generation resources – at the expense of society. All told, when resource production decisions are made absent consideration of such externalities, market outcomes based upon such production decisions are not economically efficient. The June 29 Order makes this situation worse by undermining or countermanding states’ efforts to address the problem.

Rather than continuing to spend valuable time and effort on ongoing and inevitable future adjustments to PJM’s flawed capacity construct, which, at best, serve as temporary Band-Aids to the structural flaws, the Commission and PJM would be better served by, instead, focusing on improving the price formation in PJM’s energy and ancillary services (“E&AS”) markets as a more efficient way to provide necessary revenues and incentives to needed resources while respecting consumer interests. The ICC notes PJM’s recent papers, particularly *Energy Price Formation and Valuing Flexibility*<sup>14</sup> where PJM discusses revising the demand curve used in shortage pricing, its reserve markets and the manner in which PJM co-optimizes reserve products with energy. Those initiatives suggest means to enhance market price formation and to make the system more resilient through efficient commitment and pricing. The ideas and initiatives in these PJM papers represent concepts that could be useful for achieving resource adequacy,

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<sup>14</sup> <http://www.pjm.com/~media/library/reports-notice/special-reports/20170615-energy-market-price-formation.ashx>

resilience and reliability within the PJM market and ease the reliance on a perpetually and inherently flawed capacity construct.

PJM's Energy Price Formation Senior Task Force is charged with exploring how energy and reserve prices are determined and to recommend any market rule changes to enhance PJM's energy and reserve price formation and/or shortage pricing mechanism.<sup>15</sup> The ICC supports the efforts of PJM and the Commission to improve the mechanics of price formation in wholesale E&AS markets. The Commission should consider encouraging or requiring PJM to expand and accelerate the development of ideas and initiatives regarding energy market price formation, reserve market improvements and shortage pricing revisions. Such initiatives, over time, could work to reduce the current reliance on capacity revenues, thus reducing the significance and impact of flaws in that market.

PJM's energy, ancillary services, and capacity markets, *working together*, should be designed to efficiently provide revenue necessary to induce or retain resources sufficient to maintain resource adequacy. Capacity markets were initially instituted to provide residual revenue necessary to achieve the resource adequacy goal but not available through E&AS markets because of price capping and other interventions in the price setting mechanisms for those products.<sup>16</sup> Yet, as Table 1 demonstrates, the percentage of total price per MWh that can be attributed to capacity has increased dramatically since 2006.<sup>17</sup> Improvements to the price formation mechanisms and product definitions currently used in energy and ancillary services

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<sup>15</sup> PJM Energy Price Formation Senior Task Force, *Issue Charge*, at 2. <http://pjm.com/-/media/committees-groups/task-forces/epfstf/postings/energy-price-formation-issue-charge.ashx?la=en>

<sup>16</sup> See *PJM Interconnection, L.L.C.*, 115 FERC ¶ 61.079, P 103 (2006) (“The Commission finds that there is not a single just and reasonable method for satisfying capacity obligations. For example, in other situations, an uncapped energy market might provide the necessary signals to create an incentive for investment on a long-term basis.”).

<sup>17</sup> See *2018 Quarterly State of the Market Report for PJM*, August 9, 2018, at Tables 1-10 and 1-12. [http://www.monitoringanalytics.com/reports/PJM\\_State\\_of\\_the\\_Market/2018.shtml](http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2018.shtml)

markets can be used to increase the proportion of the total resource revenue needs coming from these markets and reduce the proportion of resource revenues obtained through capacity markets. Through these means, reliance on the long-standing and proven energy market mechanisms could increase as reliance on the flawed capacity mechanism decreases.

**Table 1**

<b>Year</b>	<b>Total Price Per MWh<sup>18</sup></b>	<b>Average Capacity Price per MWh</b>	<b>Capacity Contribution to Total Price Per MWh</b>
2006	\$58.97	\$0.11	0.19%
2007	\$71.25	\$3.58	5.02%
2008	\$85.05	\$7.84	9.22%
2009	\$55.66	\$10.79	19.39%
2010	\$66.97	\$12.17	18.17%
2011	\$63.28	\$10.37	16.39%
2012	\$49.28	\$6.66	13.51%
2013	\$53.93	\$7.29	13.52%
2014	\$71.53	\$9.25	12.93%
2015	\$56.87	\$11.25	19.78%
2016	\$49.97	\$10.96	21.93%
2017	\$53.24	\$11.27	21.17%

PJM’s energy and ancillary price formation initiative must also address the impacts future changes may have on the capacity market. In particular, the expected revenues generated by the E&AS markets play a direct role in the determination of prices paid for capacity under PJM’s reliability pricing model, and the resulting revenue provided to resource owners.<sup>19</sup> Net E&AS

<sup>18</sup> The total price per MWh includes load weighted energy, capacity, transmission, ancillary services, administration, energy uplift/operating reserves, demand response and emergency energy.

<sup>19</sup> Under PJM’s current approach, the demand curve used in PJM’s capacity auctions are based on a variable resource requirement (“VRR”) curve. The cost of new entry (“CONE”) and net cost of new entry (“Net CONE”) are key values used to establish both the location and shape of the VRR curve. CONE represents the total annual net revenue (net of variable operating costs) that a new generation resource would need to recover its capital investment and fixed costs, given reasonable expectations about future cost recovery over its economic life. Net

revenues are currently calculated using historical prices and the peak-hour dispatch method, which uses the annual average of the revenues that the reference resource would have received from the PJM energy markets during a period of three consecutive calendar years and a predetermined amount for ancillary service revenues.<sup>20</sup>

If the prices in the E&AS markets increase and resources providing those services receive more revenues from those markets, it is critical that the Net CONE figure and the corresponding location of the VRR curve promptly reflect those increases. If that is not reflected, PJM's use of a historical three-year average would result in an underestimation of the revenues received by the reference resource. This underestimation would then result in an improper location of the VRR curve and an overestimation of the needed capacity revenue.

The ICC recognizes that PJM's Energy Price Formation Senior Task Force is currently investigating energy and reserve price formation enhancements, including how energy and reserve prices are calculated and how prices are formed during shortage conditions. However, the task force's issue charge specifically states that the determination of the E&AS offset used in the capacity market is an "out of scope item."<sup>21</sup> Given the direct impact that the E&AS offset has on capacity prices (and capacity market revenue) and the current Commission-ordered developments in the PJM capacity auction design which highlight and magnify its flaws, the Commission should direct PJM to account for these energy and ancillary services market issues in conjunction with the instant consolidated capacity market case.

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CONE represents the revenues that a new resource would need to earn in the capacity market after netting out energy and ancillary services margins from CONE.

<sup>20</sup> See PJM Tariff, Attachment DD.5.10(a)(v) (2017)

<sup>21</sup> PJM Energy Price Formation Senior Task Force, *Issue Charge*, at 3. <http://pjm.com/-/media/committees-groups/task-forces/epfstf/postings/energy-price-formation-issue-charge.ashx?la=en>

### **III. CONCLUSION**

WHEREFORE, for the reasons set forth above, the ICC requests that the Commission consider these comments in the deliberations in this proceeding. The ICC further requests any and all other appropriate relief.

Respectfully submitted,

*/s/Christine F. Ericson*

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ILLINOIS COMMERCE COMMISSION

Dated: October 2, 2018

CERTIFICATE OF SERVICE

I hereby certify that I caused copies of the foregoing document of the Illinois Commerce Commission to be served this day upon each person designated on the official service list compiled by the Secretary in this proceeding, a copy of which is attached, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure.

Dated at Chicago, Illinois, this 2<sup>nd</sup> day of October, 2018.

*/s/ Christine F. Ericson*

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