

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

PJM Interconnection, L.L.C.

Docket No. ER21-278-000  
EL19-100-000  
(Consolidated)

**COMMENTS OF THE PJM POWER PROVIDERS GROUP**

In accordance with the October 30, 2020, notice by the Federal Energy Regulatory Commission (“FERC” or “Commission”) in this proceeding,<sup>1</sup> the PJM Power Providers Group (“P3”)<sup>2</sup> respectfully files these comments in response to the October 30, 2020, filing made by PJM Interconnection, L.L.C. (“PJM”), pursuant to section 205 of the Federal Power Act (“FPA”),<sup>3</sup> seeking proposed revisions to the Reliability Assurance Agreement Among Load-Serving Entities in the PJM Region (“RAA”) and PJM’s Open Access Transmission Tariff (“Tariff”) in order to create and implement an Effective Load Carrying Capability (“ELCC”) construct for determining the relative amount of capacity that variable, limited duration, and combination resources may offer in PJM’s capacity market (known as the “Reliability Pricing Model” or “RPM”) or provide

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<sup>1</sup> On October 30, 2020, the Commission issued a Combined Notice of Filings #1, setting the date of November 20, 2020, at 5 p.m. ET as the date for interventions or protests.

<sup>2</sup> P3 is a non-profit organization that supports the development of properly designed and well-functioning markets in the PJM region. Combined, P3 members own approximately 67,000 megawatts of generation assets, produce enough power to supply over 50 million homes in the PJM region covering 13 states and the District of Columbia. For more information on P3, visit [www.p3powergroup.com](http://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.

<sup>3</sup> 16 U.S.C. § 824d.

in a Fixed Resource Requirement (“FRR”) capacity plan (“ELCC construct filing”).<sup>4</sup> PJM requests an effective date of June 1, 2021, for the proposed RAA and Tariff revisions. However, PJM asks the Commission to issue an order imminently – by January 1, 2021, and has assigned an effective date of January 1, 2021, to a revised tariff record. PJM does not propose to implement the ELCC construct until the 2023/2024 Delivery Year.

On November 2, 2020, pursuant to Rule 214 of the Rules of Practice and Procedure of the Commission,<sup>5</sup> P3 filed a doc-less Motion to Intervene in this proceeding.

P3 respectfully submits these comments in response to PJM’s filing and for the reasons as further explained herein, urges the Commission to seek more information from PJM regarding its proposed ELCC construct. P3 fully supports the intent of ELCC - to appropriately recognize the capacity contributions of resources with limited availability. PJM’s filing is a step in the right direction; however, it was filed under the pressure of a Commission mandate with a truncated timeline. As a result, the filing leaves open many issues and fails to provide sufficient information in order to allow stakeholders and the Commission an opportunity to fully evaluate the proposal. Further, PJM’s proposed 10-year floor raises important legal, practical and fairness issues that should be further explored, explained, and perhaps modified before Commission approval of the ELCC construct as a whole. The Commission should direct PJM to supplement its filing with more information, as discussed in more detail below. In the event the Commission rejects this PJM 205 filing, the Commission should continue to hold the paper hearing (“Paper Hearing”)

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<sup>4</sup> *PJM Interconnection L.L.C., Effective Load Carrying Capability Construct*, Docket No. ER21-278-000 (“ELCC construct filing”).

<sup>5</sup> 18 C.F.R. § 385.214 (2019).

ordered in Docket No. EL19-100-000<sup>6</sup> in abeyance to allow sufficient time for PJM and its stakeholders to revise an ELCC proposal that addresses any concerns of the Commission.

## **I. BACKGROUND**

Admittedly, PJM had a short window in which to assemble a filing that had the support necessary to make a filing under section 205. PJM's filing is in response to the Commission's October 2019 Order, as well as the commensurate paper hearing, established in Docket No. EL19-100-000, which, in part, directed PJM to investigate whether PJM's "minimum run-time" rules and procedures are unjust, unreasonable, unduly discriminatory or preferential, as applied to Capacity Storage Resources.<sup>7</sup> PJM requested that the Commission hold the Paper Hearing in abeyance until January 29, 2021, while PJM explored the broader ELCC methodology. The Commission shaved three months off of PJM's proposed timeline and required that PJM submit a section 205 filing by October 30, 2020. In the end, the condensed timeframe proved insufficient to address a filing as nuanced as this one.<sup>8</sup>

While P3 supports the goals of the ELCC construct, PJM's proposal could benefit from additional information from PJM, as described in more detail herein. P3 and its members recognize ELCC as a preferred means of addressing questions surrounding capacity contributions of limited duration resources. Rather than simply picking numbers and hoping they work, ELCC focuses on the actual capacity contributions of these resources and recognizes a critical fact – the ability of these resources to support reliability likely degrades as penetration of these resources increase. While ELCC addresses this problem, unsurprisingly, the details associated with ELCC

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<sup>6</sup> *PJM Interconnection, L.L.C.*, 169 FERC §61,049 (2019) ("October 2019 Order").

<sup>7</sup> PJM ELCC construct filing, p. 5, citing October 2019 Order at PP 140-143.

<sup>8</sup> *Id.*, p. 6, citing October 2019 Order at P 141.

are incredibly important and, admittedly, difficult to understand absent complete modelling. P3 believes that PJM's filing can be better understood, and possibly improved, with additional information and, perhaps, additional time to allow for revisions.

## **II. COMMENTS**

### **A. Benefits of a Properly-Designed ELCC Construct.**

P3 agrees with PJM and other stakeholders that development of an effective ELCC construct will not only ensure that non-traditional resources are able to participate fully in meeting the region's capacity needs, but will also allow PJM to maintain reliability for the PJM region through a resource adequacy paradigm that recognizes the benefits and limitations of each resource.<sup>9</sup>

One of the many benefits of a properly-designed ELCC construct is the fact that it provides a consistent manner in which to assess the capacity value of the unique characteristics of diverse resource types. As PJM states, the ELCC construct "provides a single cohesive analytic framework for diverse resource types with distinct output profiles, including wind, solar, storage, hybrids, and hydropower resource types. While each class of ELCC Resources offers unique capabilities in various configurations, a comprehensive, uniform approach is necessary to ensure comparable capacity accreditations across diverse resource types."<sup>10</sup> P3 agrees that in all of the potential methodologies to properly assess Variable Resources (e.g., Intermittent Resources, such as wind and solar power); Limited Duration Resources (e.g., battery storage resources); and Combination Resources (e.g., resources with a wind or solar component and a storage component), the ELCC construct is by far the best.

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<sup>9</sup> *Id.*, p. 2.

<sup>10</sup> *Id.* p. 11.

However, as PJM acknowledges, a properly constructed ELCC construct is “complex and detailed,” and for this reason alone, PJM and its independent consultant, Energy+Environmental Economics, “are still in the process of reviewing, validating, and testing the ELCC model and inputs.”<sup>11</sup> Given that the analytical portion of this important construct is yet to be finalized, P3 respectfully requests that the Commission direct PJM to file further information on the proposed ELCC construct before rendering its approval.

**B. Approval of PJM’s ELCC Construct Is Premature and Requires Further Information from PJM before Commission Approval.**

As PJM’s expert witness, Dr. Patricio Rocha Garrido, explains in his affidavit, the ELCC model is “complex with numerous historical and forecasted inputs, and it must provide outcomes that are consistent with PJM’s longstanding reliability metric of a 1-in-10 year loss of load expectation (i.e., 0.1 Loss of Load Expectation (“LOLE”).<sup>12</sup> PJM states that “given the needed implementation time, PJM is proposing to employ the ELCC approach starting with the 2023/2024 Delivery Year. This will provide PJM and sellers sufficient time to perform the ELCC analysis and determine the maximum capacity that each affected resource may offer into the 2023/2024 Base Residual Auction.”<sup>13</sup> Yet this timeframe is needed for more than just determining each affected resource’s capacity value. As PJM notes, the methodology itself may prove to be inaccurate. Thus, PJM states that it “requires sufficient time (five to six months) from Commission approval to audit, validate, implement, *and check the accuracy of the model* for the accepted

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<sup>11</sup> *Id.* p. 62.

<sup>12</sup> *Id.*, p. 4, citing Affidavit of Dr. Patricio Rocha Garrido on Behalf of PJM Interconnection, L.L.C. ¶ 18 (“Roacha Garrido Aff.”).

<sup>13</sup> *Id.*, pp. 4-5.

approach before PJM can provide ELCC outputs assessing resources' reliability values in a timeframe consistent with the pre-auction activities for the 2023/2024 Base Residual Auction.”<sup>14</sup>

P3 questions PJM's timeline and what is driving an implementation date to accommodate the 2023/2024 Base Residual Action (“BRA”). Renewable penetration is in its infancy in PJM. There is no need to rush to implement the ELCC construct before it is properly understood by both PJM and stakeholders alike. There is no pressing need for PJM's hasty request of an effective date of January 1, 2021 for its proposed ELCC construct or for the implementation date to meet the 2023/2024 BRA.

It is clear from PJM's filing that, while PJM stakeholders approved the concept of ELCC and associated RAA and Tariff revisions, the technical details of the ELCC model remain a work in progress. Further, PJM's governing agreement revisions are extraordinarily detailed in the level of technical specification they provide regarding the calculation of ELCC. Thus, it is conceivable that during PJM's model development, issues will surface that require changes to PJM's proposed governing agreement revisions. Given these open issues and the lack of urgency to act, the Commission should be flexible and allow PJM the time to obtain additional information before it rules on the proposed RAA and Tariff revisions governing ELCC.

**C. The Commission Should Direct PJM to Provide Additional Information and Allow PJM an Opportunity to Amend its Filing if Merited.**

P3 fully supports both the Commission's and PJM's goals of further integrating intermittent and storage resources into the PJM capacity market. However, P3 believes that important information and analysis is needed in order for the Commission to sufficiently analyze PJM's proposal.

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<sup>14</sup> *Id.*, p. 4.

PJM should be directed to provide the following information (as well as other information the Commission determines is necessary) to provide the Commission and interested parties an opportunity to fully understand the proposal. This information includes the following:

- Justification for the effective date and implementation date;
- How PJM intends to address reliability issues in LDAs when intermittent saturation reaches the point that LDC reliability could be impacted;
- Compare and contrast PJM’s proposed adjusted class average approach with the IMM’s preferred marginal approach;
- How CIRs will be treated when a resource is no longer permitted to sell capacity beyond their accredited ELCC value, as well as how resources will be able to obtain CIRs up to their accredited ELCC value if and when it exceeds the current summer peak performance limitation that currently restricts CIRs requests.

**D. PJM’s Transition Mechanism Raises Important Legal, Practical and Fairness issues.**

While all of these questions point to a need for greater detail from PJM before the Commission approves its proposed ELCC construct, perhaps the most important, as well as concerning, provision is the “transition mechanism” proposed by PJM that provides accredited capacity value “floors” to ELCC resources.

P3 questions whether a 10-year (really a 13-year) guarantee is necessary to address the risk intermittent and energy storage resources face from the ELCC proposal. All new resources face risk and it is a hallmark of competitive markets that market participants bear the risk of their choices. P3 believes that PJM has provided limited record evidence to support a 10-year guarantee. We note that the new entrant price lock in PJM provides only three years of assured pricing, and then only in limited circumstances.

Further, per PJM’s proposal, the floors intentionally provide that certain ELCC resources (i.e. those that connect to the system earlier and at higher floor values) may be accredited with a capacity value that exceeds their actual individual accredited capacity value as determined by the ELCC model in certain circumstances. In the event where floor values bind in future years, PJM takes capacity value from resources with an actual capacity value above their (likely lower) floor, or resources for which a floor value has not been established, and transfers that capacity value to the resources with actual individual accredited capacity values below their floors. In so doing, the floors allow the capacity value of one set of resources to transfer to another set of resources.

P3 submits that under such a construct, the beneficiaries of the floors are not providing comparable value to traditional resources for their capacity payments because their participation has been subsidized by those ELCC resources from which the capacity value “uplift” (i.e. the difference between the actual calculated accredited ELCC value and the floor ELCC value) was extracted. Under this scenario, the beneficiaries are allowed to sell capacity *in excess of their individual expected future performance* to the detriment of better performing and/or future ELCC resources which, as technologies advance, are likely to be more efficient, more economical, and with superior operability. This 10-year locked in “floor” provides a more lenient standard for incumbent intermittent and storage resources, compared to new and better performing intermittent and storage resources, as the floors favor resources that connect to the system earlier and at higher floor values at the expense of resources that connect to the system later and at likely lower floor values. For all of these reasons, PJM’s 10-year floor aspect of the proposed ELCC construct raises important legal, practical and fairness issues that should be further explored, explained, and perhaps modified before Commission approval of the ELCC construct as a whole.



**E. The Commission Should Hold the Paper Hearing in Abeyance for As Long as Necessary for PJM to Develop a Complete and Fully Understood ELCC Construct.**

As stated earlier, P3 is committed to an ELCC construct and whole-heartedly believes that it represents the superior means of addressing the challenges of incorporating significant quantities of limited duration resources while maintaining reliability. The time constraints associated with this filing have resulted in the challenges described above. However, these challenges are not insurmountable. PJM and its stakeholders are marching to the goal line – they are just not quite in the end zone. In order to “stay on the field,” P3 respectfully requests that the Commission continue to hold the Paper Hearing in abeyance for as long as necessary and direct PJM to provide the Commission and its stakeholders more details and potential alternatives for some of the aspects of its ELCC construct, especially the 10-year locked in floor. PJM has time to get this important construct right.

Although some challenges still remain, PJM and its stakeholders have made extraordinary progress over the last year that should not be lost. Resuming the Paper Hearing would be an unfortunate step backward that would myopically reframe the issues and undo the tremendous work that has been done to date. The Commission should avoid such an outcome at all costs. P3 believes that the issues most associated with this filing can be resolved with additional information being provided to the Commission and perhaps an amended filing from PJM to address any deficiencies noted by the Commission and/or to modify or remove the transition mechanism. However, should the Commission decide to reject the filing, it is imperative that the Paper Hearing remain in abeyance and a process set forth that allows the ELCC discussions to continue.

### III. CONCLUSION

Wherefore, for the foregoing reasons, P3 urges the Commission to consider these comments, hold the Paper Hearing in abeyance, and direct PJM to provide further information to support their ELCC proposal.

Respectfully submitted,

On behalf of the PJM Power Providers Group

November 20, 2020

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**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 Washington, D.C. this 20<sup>th</sup> day of November, 2020.

On behalf of the PJM Power Providers Group

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