



PJM Interconnection, L.L.C.  
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September 13, 2021

The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E. Room 1A  
Washington, D.C. 20426

Re: *PJM Interconnection L.L.C., Docket No. ER21-2043-000*  
*Informational Filing of PJM Interconnection, L.L.C.*

Dear Secretary Bose,

In compliance with the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) directive in its July 30, 2021 Order,<sup>1</sup> PJM Interconnection, L.L.C. (“PJM”) hereby submits this informational filing “summarizing its posted ELCC methodology documentation, model, and input data.”<sup>2</sup> This informational filing is being submitted within 30 days of August 13, 2021—the date PJM posted the applicable data<sup>3</sup>—in accordance with the Commission’s directive.<sup>4</sup>

In light of the Commission’s acceptance of PJM’s Effective Load Carrying Capability

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<sup>1</sup> *PJM Interconnection, L.L.C.*, 176 FERC ¶ 61,056 (2021) (the “July 30, 2021 Order”). *See* July 30, 2021 Order at P 65 (“We agree with SEIA/AEE that it is appropriate to direct PJM to submit an informational filing to ensure that the data and methodology PJM has committed to post will provide stakeholders with sufficient transparency. Specifically, we direct PJM to submit an informational filing summarizing its posted ELCC methodology documentation, model, and input data, and we will allow affected parties to comment on whether PJM has adhered to its commitment to provide adequate transparency regarding the ELCC methodology and data. PJM must submit this filing to the Commission in Docket No. ER21-2043 within 30 days of the date that PJM posts its first annual ELCC report.”).

<sup>2</sup> *Id.* As described in the July 30, 2021 order, “ELCC” stands for “Effective Load Carrying Capability.”

<sup>3</sup> The applicable data is publicly posted on PJM’s website, and is available here:  
<https://www.pjm.com/planning/resource-adequacy-planning/effective-load-carrying-capability>

<sup>4</sup> July 30, 2021 Order at P 65.

(“ELCC”)<sup>5</sup> filing, PJM has implemented stakeholder-approved changes to PJM Manual 20: PJM Resource Adequacy Analysis,<sup>6</sup> and to PJM Manual 21A: Determination of Accredited UCAP Using Effective Load Carrying Capability Analysis.<sup>7</sup> The changes to PJM Manual 20 are intended to provide a comprehensive description of the ELCC model, and the calculation of ELCC Class Ratings, while the changes to PJM Manual 21A are intended to provide a description of the business rules surrounding the overall ELCC process and the calculation of Accredited UCAP values for each ELCC resource.

In addition, to further provide transparency regarding the ELCC methodology and data, PJM has posted a report<sup>8</sup> providing ELCC ratings for each ELCC Class for each Delivery Year in the period 2023/24-2031/32. Alongside the report, a number of files and links have been posted showing 2023/24 output data from the ELCC model, as well as the hours included in the calculation of the 2023/24 Performance Adjustment for Variable Resources. The posted files and links are available in a central location on the PJM website,<sup>9</sup> and their contents may be summarized as follows:

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<sup>5</sup> Terms not otherwise defined herein shall have the same meaning as set forth in the PJM Open Access Transmission Tariff (“Tariff”), the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (“Operating Agreement”), and the Reliability Assurance Agreement Among Load-Serving Entities in the PJM Region (“RAA”). The Tariff, the Operating Agreement, and the RAA are currently located under PJM’s “Intra-PJM Tariffs” eTariff title, available here: <https://etariff.ferc.gov/TariffBrowser.aspx?tid=1731>.

<sup>6</sup> <https://www.pjm.com/~media/documents/manuals/m20.ashx>

<sup>7</sup> <https://pjm.com/~media/documents/manuals/m21a.ashx>

<sup>8</sup> <https://www.pjm.com/~media/planning/res-adeq/elcc/elcc-report-for-july-2021-results.ashx>

<sup>9</sup> <https://www.pjm.com/planning/resource-adequacy-planning/effective-load-carrying-capability>

## **Replications LOLE**

This collection of zip files contains multiple CSV files, one for each of the scenarios with LOLE in each of the eight historical weather years included in the ELCC model. The data provided in the files correspond to the ELCC run that results in the 2023/24 ELCC Class Ratings. Details about each column in the CSV files are provided in the aforementioned report.

## **Load Scenarios**

This collection of zip files contains eight CSV files, one for each of the eight historical weather years included in the ELCC model. Each CSV file has either 8,760 or 8,784 rows (one for each hour of the year) and 1,000 columns (one for each of the 1,000 replications; the columns are named from 0 to 999). All values in the files are in megawatt units and represent hourly loads in each scenario.

## **Available Unlimited Thermal Scenarios.zip**

This zip file contains eight CSV files, one for each of the eight historical weather years included in the ELCC model. Each CSV file has either 8,760 or 8,784 rows (one for each hour of the year) and 1,000 columns (one for each of the 1,000 replications; the columns are named from 0 to 999). All values in the files are in megawatt units and represent available hourly unlimited thermal capacity available in each scenario.

## **200CPX2 hours for the July 2021 ELCC Results**

This file contains the hours included in the “200CPX2” metric used to calculate the Performance Adjustment for Variable Resources. The file has two sheets: the sheet “Gross” has the top 200 gross load hours; the sheet “Net” has the top 200 net load hours where net load is defined as gross load minus the hourly output of the expected portfolio of Variable Resources for delivery year 2023.

## **Weather Variables**

This link points to the weather variables used in the production of the PJM Load Forecast. The previously-described load scenarios are based on the PJM load forecast, in particular the gross demand and behind-the-meter solar penetration expectations contained in it. Weather is an important intermediate step in the determination of such expectations. PJM discusses how to model the relationship of weather to load with the stakeholder

community, primarily through the Load Analysis Subcommittee.<sup>10</sup>

Respectfully submitted,

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*On behalf of*  
*PJM Interconnection, L.L.C.*

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<sup>10</sup> <https://www.pjm.com/committees-and-groups/subcommittees/las.aspx>

## **CERTIFICATE OF SERVICE**

I hereby certify that I have this day caused the foregoing document to be served upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Audubon, PA this 13<sup>th</sup> day of September, 2021.

/s/ Tearay Holmes

Tearay Holmes

Paralegal

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