

# ELCC Manual Language Plan

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- New Manual 21a—“Determination of Accredited UCAP Using Effective Load Carrying Capability Analysis”
  - Describes the business processes in gathering and dissemination ELCC-related information
  - Describes the process for turning ELCC Class Rating into Accredited UCAP
  - Describes the transition mechanism
- Significant addition to Manual 20—“PJM Resource Adequacy Analysis”
  - Describes the process for making ELCC Class Ratings
- Changes to Manual 18—“PJM Capacity Market”



# General RAA-Specified Manual Provisions

- “ELCC Class” shall mean a defined group of ELCC Resources that share a common set of operational characteristics and for which effective load carrying capability analysis, as set forth in RAA, Schedule 9.1, will establish a unique ELCC Class UCAP and corresponding ELCC Class Rating. ELCC Classes shall be defined in the PJM Manuals.
- The Office of the Interconnection shall determine the capability of ELCC Resources to meet a Load Serving Entity’s obligations under the Agreement using an effective load carrying capability analysis, as set forth in RAA, Schedule 9.1, with additional implementation details provided in the PJM Manuals.
- The ELCC Portfolio UCAP shall be allocated to each ELCC Class UCAP, in accordance with the applicable effective load carrying capability analysis methodology specified in the PJM Manuals, as subject to adjustment in accordance with RAA, Schedule 9.1, section J, such that the aggregate of all ELCC Class UCAP values is equal to the ELCC Portfolio UCAP.
- The ELCC Resource Performance Adjustment shall be calculated according to the following methods, as further detailed in the PJM Manuals:
- Rules and procedures for technically determining and demonstrating the installed capacity of ELCC Resources shall be developed by the Office of the Interconnection and maintained in the PJM Manuals.
- The installed capacity of a Limited Duration Resource is based on the sustained level of output that the unit can provide and maintain over a continuous period, whereby the duration of that period matches the characteristic duration of the corresponding ELCC Class, with consideration given to ambient conditions expected to exist at the time of PJM system peak load, as described in the PJM Manuals.
- This putative output estimate is developed based on historical weather data consistent with the particular site conditions for each such resource in accordance with the PJM Manuals.
- The Office of the Interconnection shall post this report and shall communicate ELCC Resource Performance Adjustment values to applicable Generation Capacity Resource Providers no later than five months prior to the start of the target Delivery Year, as described in the PJM Manuals.
- In order to facilitate the effective load carrying capability analysis, the Generation Capacity Resource Provider of each ELCC Resource must submit to the Office of the Interconnection the required information as specified in the PJM Manuals by no later than six months prior to an RPM Auction in which the ELCC Resource intends to submit a Sell Offer or otherwise commit to provide capacity, except for Delivery Years prior to the 2026/2027 Delivery Year such required information must be provided to the Office of the Interconnection in accordance with the PJM Manuals.
- The Office of the Interconnection shall evaluate, validate, and approve the foregoing information in accordance with the process set forth in the PJM Manuals. Generation Capacity Resource Providers of ELCC Resources that are hydropower plants with water storage must provide documentation to support the physical parameters provided for expected load carry capability analysis modeling, as specified in the PJM Manuals.
- (d) For Combination Resources with a Variable Resource component (except for Hydropower With Non-Pumped Storage): (1) based on the direct metered or estimated output of the Variable Resource component, which is then assessed according to the methodology described in subsection (a) above for Variable Resources and in accordance with the PJM Manuals; and (2) based on the EFORD that is applicable to the Limited Duration Resource component.

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# RAA-Specified Manual Provisions Related to the Transition Mechanism

- Tables of floor values will apply for the Delivery Years as specified below. For new ELCC Resources, the ELCC Class Rating floor values contemplated by this RAA, Schedule 9.1, section J shall apply upon: ... (b) receipt by the Office of the Interconnection of a written attestation, in a form specified in the PJM Manuals, by the Generation Capacity Resource Provider of the ELCC Resource affirming the Generation Capacity Resource Provider's intent to proceed to provide capacity in the PJM Region. Such attestation shall be provided to the Office of the Interconnection after reaching one of the milestones identified in subsection (a) above
- For Combination Resources, the applicable floor values will be determined in accordance with a procedure set forth in the PJM Manuals that appropriately reflects and merges the floor values determined for the distinct components of the Combination Resource in a manner consistent with the methodology above.
- (ii) for ELCC Resources with a final or preliminary ELCC Class Rating above the applicable floor value, the Accredited UCAP shall be determined using the ELCC Resource's ELCC Resource Performance Adjustment, in accordance with the methods set forth in RAA, Schedule 9.1, section E, and the ELCC Class Rating, which is determined in accordance with the methodology set forth in RAA, Schedule 9.1, section D, except that (1) the value used in place of ELCC Class UCAP is equal to [the sum of the ELCC Class UCAP for each ELCC Class of the subject group minus the sum of the Accredited UCAP of the ELCC Resources that are accredited based on floor values], which in turn is allocated to each ELCC Class in accordance with the methodology specified in the PJM Manuals that is consistent with the allocation methodology of RAA, Schedule 9.1, section C for allocating the ELCC Portfolio UCAP among the ELCC Classes, then further adjusted by a factor based on ELCC Resource Performance Adjustment values such that the total Accredited UCAP of all resources of each class does not exceed the ELCC Class UCAP and (2) the relevant aggregate Effective Nameplate Capacity shall be the sum of the Effective Nameplate Capacity of the members of the ELCC Class that are accredited based on a final or preliminary ELCC Class Rating above the applicable floor value.
- Provided, however, if the aggregate ELCC Class UCAP of the entire group is less than the aggregate Accredited UCAP of the ELCC Resources of the group that are accredited based on floor values, then the ELCC Class Rating for ELCC Resources with a final or preliminary ELCC Class Rating above the applicable floor value shall be determined in accordance with the methodology set forth in RAA, Schedule 9.1, section D, except that (3) the value used in place of ELCC Class UCAP is equal to [the ELCC Portfolio UCAP minus the aggregate Accredited UCAP of the resources of the group that are accredited based on floor values] which in turn is allocated to each ELCC Class in accordance with the methodology specified in the PJM Manuals that is consistent with the allocation methodology of RAA, Schedule 9.1, section C for allocating the ELCC Portfolio UCAP among the ELCC Classes, then further adjusted by a factor based on ELCC Resource Performance Adjustment values such that the total Accredited UCAP of all resources of each class does not exceed the ELCC Class UCAP, and (4) the relevant aggregate Effective Nameplate Capacity shall be the sum of the Effective Nameplate Capacity of the members of the ELCC Class that are accredited based on a final or preliminary ELCC Class Rating above the applicable floor value.
- ELCC Class groups shall be defined in the PJM Manuals. The groups shall be defined in accordance with the following principles: (1) each group shall be composed of ELCC Classes that shall share relevant physical characteristics; and (2) each group is broad enough to include a significant fraction of the ELCC Portfolio UCAP, with consideration given to ELCC Classes that are expected to increase in deployment over the ten-year term of the effective load carrying capability analysis.

<https://www.pjm.com/directory/etariff/FercDockets/5832/20201030-er21-278-000.pdf>

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## **ELCC Manual Language Plan**



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