

1.4.4 Generator Rating Requirements

Section 1.2 of this manual states that ICAP is the capability of a generating unit at the expected time of the PJM Summer Peak. It is intended that adjusting ICAP to summer conditions is a proxy for a generators ICAP during future PJM summer peaks. By definition, rating all generators at a plant based on conditions coincident with the last 15 years' PJM summer peaks, all generators should then be rated coincident with those conditions and hence, be rated for simultaneous operation. However, this is not specifically delineated in section 1.2 of this manual. Commencing Delivery Year 2022/2023 all generating units at a plant must be rated for simultaneous operation. This is to account for shared auxiliary loads and any interdependence therein.

1.5 Changes for ELCC Commencing Delivery Year 2023/2024

Requirements for the following resource types below, which are covered in this manual, will expire on June 1, 2023 as they are being transitioned to Manual 21A. Commencing Delivery Year 2023/2024, Manual 21A will become the official manual for the rules and procedures for determination of ELCC resource capability.

- 1. Capacity Storage Units
 - a. Pumped Storage Units
 - b. Battery Units
- 2. Run of River Hydroelectric Units (with pooling/storage/dispatch capability)
- 3. Intermittent Units
 - a. Wind Units
 - b. Solar Units
 - c. Landfill Gas Units (without backup or supplemental fuel)
 - d. Run of River Hydroelectric Units (without pooling/storage/dispatch capability)

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Section 2: Net Capability

2.1 General

- 1. Net Capability shall mean the number of megawatts of electric power which can be delivered by an electric generating unit without restriction by the owner under the conditions and criteria specified herein and shall be determined as the gross output of the unit less power used for unit auxiliaries and other station use required for electrical generation and any power required to serve host process load. In the case where auxiliary load, station use and/or process load is apportioned across multiple units at a plant, the apportioned auxiliary load, station use and/or process load during the test must be commensurate with the apportioned auxiliary load, station use and/or process load during summer conditions (summer conditions are delineated in section 2.2, item 2 of this document).
- 2. Without restriction means that Net Capability values so determined are available for utilization at the request of PJM for supply of operating capacity and energy before any operating procedures are placed in effect anticipatory to a voltage reduction on the PJM system except as such utilization may at times be limited in duration by water or fuel availability. If the Net Capability, at times, is limited by water or fuel availability, the Net Capability should be based on the expected streamflow or expected fuel availability at the time of the summer PJM peak.
- 3. After a unit is in operation, its Net Capability shall be based on current operating performance or test results. Specifically, once a generator has historical operating data, it is expected that the data be used to render more appropriate rated ICAP values by updating them no less than once every five years (refer to section 2.2, item 2 of this manual). It is preferred that the rated ICAP values be updated more often, when changes to rated ICAP are realized. Both Summer and Winter Net Capability values shall be confirmed annually. If adequate data is available from normal operation to confirm Net Capability during the summer or winter test period, no test is required to be performed, as long as actual operating data from the respective test period is used. Units for which the foregoing data is not available shall be tested to confirm Summer and Winter Net Capability. Winter Net Capability Tests may utilize the latest Summer Net Capability test data corrected for winter conditions. When a known change occurs in the Net Capability of a unit, or is indicated by operating data or test results, it shall become effective as soon as possible except as noted in items 4 and 7 below.
- 4. The Net Capability of a unit shall not be reduced to reflect unplanned deratings or temporary capacity restrictions provided it is the intention of the owner to restore the reduced capability. The time of this restoration may depend on availability of parts and scheduling of an outage required for repairs. If the owner does not intend to restore the reduced capability by the end of the next Delivery Year, a reduced Net Capability value (CAPMOD down) may become effective at the request of the owner. The owner shall make the required changes via the Capacity Modifications (CAPMOD) process of the PJM Capacity Market.



- 5. All or any part of a unit's capability that can be sustained for a number of hours of continuous operation commensurate with PJM load requirements, specified as 10 hours, shall be considered as unlimited energy capability. All or any part of a unit's capability that cannot be sustained for a number of hours of continuous operation commensurate with PJM load requirements, specified as 10 hours, shall be considered as limited energy capability. Such limited energy capability will be used to meet the energy requirements of PJM and depending on the extent to which it meets these requirements such capability may be reduced as provided in Schedule 9 of the Reliability Assurance Agreement (RAA).
- 6. Each generation owner shall be responsible for the determination and reporting of Summer and Winter Net Capability. The first notification is through completion of Attachment N of the Open Access Transmission Tariff (Form of Feasibility Study Agreement) and sending this application to the Interconnection Analysis Department of PJM. The second notification, if approval is received, is via the CAPMOD procedures of the PJM Capacity Market. The Resource Adequacy Planning Department of the PJM RTO shall be responsible for the establishment of test procedures required to confirm such values including any amount which could be treated as limited energy capability.
- 7. The Net Capability reported for a generating unit shall in no case exceed an amount determined by the owner in accordance with items 1, 2 and 5 above but for PJM accounting purposes may initially be less than that amount. The extent of any such reduction in reported capability may be determined by the company in such manner as will permit the most effective use of its own resources.