Manual 21- Revision 13
Rules and Procedures for Determination of Generating Capability Changes

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M-21 Changes Summary

• New Capacity Interconnection Rights section (Section 1.1)
  – Explains how CIRs are attained, retained and lost
  – Calculation examples

• Section 1.2, Installed Capacity
  – Emphasizes ICAP must be determined based on summer conditions
  – Defines summer conditions (also known as rated conditions)
    • Generator site conditions coincident with the last 15 years’ PJM summer peaks
  – Adds additional details for determining Installed Capacity (Rated ICAP)
• Section 1.3, Testing (new section)
  – Summer Test Period remains June 1\textsuperscript{st} through August 31\textsuperscript{st}
  – Delineates what units must correct for generator site conditions
  – Delineates for what generator site conditions a units test must be corrected
  – Units subject to generator site condition corrections must test when:
    • Actual Dry Bulb Air Temperature is within 10°F of Rated Dry Bulb Temperature
    • Actual Wet Bulb Air Temperature is within 5°F of Rated Wet Bulb Temperature
    • Actual Cooling Body Temperature is within 5°F of Rated Cooling Body Temperature
Section 1.3, Testing (continued)

- The correction parameters above are dependent on generating unit equipment
  - If a unit has only once through cooling (circulating water from ponds, rivers, lakes), tests must be corrected for cooling body temperature
  - If a unit has only evaporative cooling, tests must be corrected for wet bulb air temperature
  - If a unit has no inlet cooling and no dry cooling, tests need only be corrected for dry bulb temperature
  - If a unit has a combination of equipment, they must test within multiple parameter limits
- Simultaneous multiple unit testing for up to ten plants per summer per PJM directive
  - Notifications sent via email before the test period and a minimum 14 day window specified
M-21 Changes Summary

- Section 2, Net Capability, reconfigure, and split into Conventional Generators, Capacity Storage Units and Intermittent Units
  - Simultaneous testing at each plant for Capacity Storage and Intermittent Units
  - Capacity Storage and Intermittent Units are defined in Manual 18
  - Does not include wind or solar units

- Appendix B, Wind and Solar units, basing the capacity factor calculations on the median rather than the average starting DY22/23
  - All wind and solar units will begin using median capacity factors in DY22/23
  - For only wind and solar units that participated in the RPM capacity markets in any summer periods prior to DY22/23, CIR evaluation will be suspended from DY22/23 and DY23/24 until the 4th quarter 2024.
  - Notifications of lost CIRs will be communicated to generator owners prior to January 1, 2025
  - These units CIRs will then be adjusted effective June 1, 2025 using the median capacity factor from the DY22/23, DY23/24 and DY24/25 summer peak hours.
M-21 Changes Timeline

- PC First Read - 8/9/2018
- MRC First Read - 8/23/2018
- Request for PC Endorsement - 9/13/2018
- Request for MRC Endorsement – 9/27/2018
- Manual 21, Revision 13, effective date – 10/1/2018