

Installed Capacity Manual Revisions

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Capacity Market Design

ICAPWG Meeting

December 17, 2020

Agenda

- Background
- Incremental Proposed Revisions to ICAP Manual
- Incremental Proposed Revisions to ICAP Manual Attachments
- Next Steps
- Appendix

Background

Background

- **The Expanding Capacity Eligibility rules value resources in the Capacity market based on the reliability benefit that the resource provides to the system**
 - The rules will allow resources with short durations that currently cannot participate in the Capacity market to be eligible for Capacity market participation
 - The Expanding Capacity Eligibility rules will become effective March 1, 2021 for implementation beginning with the Day-Ahead Market run for the operating day May 1, 2021
- **The Tailored Availability Metric rules enhance the methodology used to calculate the derating factors to better align with reliability of the system**
 - The Tailored Availability Metric rules were accepted by FERC on September 3, 2020, and will become effective March 1, 2021 for implementation beginning with the Day-Ahead Market run for the operating day May 1, 2021

Purpose of Today's meeting

- **Review incremental changes to the ICAP Manual and appropriate Attachments that are necessary to administer the proposed tariff revisions for Expanding Capacity Eligibility (ECE) and Tailored Availability Metric (TAM) rulesets**
 - The rule changes proposed in this presentation will be implemented coincident with the ECE and TAM tariff revisions
- **A redlined version of the proposed changes to the ICAP Manual and appropriate Attachments are posted with today's meeting materials**
 - Incremental revisions since the previous ICAPWG are highlighted in yellow for ease of review

Previous Presentations

- **October 16, 2020 – Installed Capacity Manual Revisions**
 - <https://www.nyiso.com/documents/20142/16124862/3%20Proposed%20ICAP%20Manual%20Revisions%20101620.pdf/>
- **November 16, 2020 – Installed Capacity Manual Revisions**
 - <https://www.nyiso.com/documents/20142/16896725/Proposed%20ICAP%20Manual%20Revisions%20pres.pdf/>

Incremental Proposed Revisions to ICAP Manual

Proposed Revisions to ICAP Manual

- **The following sections of the ICAP Manual include incremental revisions to accommodate the Expanding Capacity Eligibility ruleset:**
 - Sections 2.5, 4.1.1, 4.2, 4.5, 4.12
- **The following sections of the ICAP Manual include incremental revisions to accommodate the Tailored Availability Metric ruleset:**
 - Sections 4.4.10, 4.5

Proposed Revisions to ICAP Manual

- **Section 2.5 – The NYCA Minimum Unforced Capacity Requirement**
 - Added reference to section 4.12.2 of the ICAP Manual

Proposed Revisions to ICAP Manual

- **Section 4.1.1 – Energy Duration Limitations and Duration Adjustment Factors for Installed Capacity Suppliers**
 - Clarifying language has been added to describe the notification process of shifting the Peak Load Window for a given day
 - Added SCR MW to incremental penetration of resources with Energy Duration Limitations
 - Changed “adjust” to “shift” for additional clarity
 - Added examples of factors that the NYISO will consider in its determination of whether or not to shift the Peak Load Window

Proposed Revisions to ICAP Manual

■ Section 4.2 – DMNC and DMGC Procedures

- Section 4.2.1 includes the following revisions:
 - Clarifying language has been added to describe the hours for the Peak Load Window
- Section 4.2.2 includes the following revisions:
 - Changed “test” to “tests” in Intermittent Power Resources and Limited Control Run-of-River Hydro Resources subsections
 - Changed “group” to “PTID” and removed bullet (d) in Energy Storage Resource subsection for clarity of DMNC testing rules for these resources
 - Revisions have been made to section 4.2.2.2 to clarify the DMNC testing procedures for Installed Capacity Suppliers with an Energy Duration Limitation
 - Added reference to section 4.2.1 of the ICAP Manual
 - Minor formatting changes have been made

Proposed Revisions to ICAP Manual

- **Section 4.4.10 – Resources not in Operation for the Entirety of the Past Two Like-Capability Periods**
 - Revisions have been made to clarify the different scenarios of when a Resource is missing data

Proposed Revisions to ICAP Manual

- **Section 4.5 – Calculation of the Amount of Unforced Capacity each Resource may Supply to the NYCA**
 - Added “qualifies to” in the sentence describing a resource’s Unforced Capacity and Adjusted Installed Capacity values
 - Language was added to reflect when Intermittent Power Resources are in Inactive Reserves, a Mothball Outage, or an ICAP Ineligible Forced Outage, the data will be replaced with either the most recent like-month data, or use the class average
 - The previously presented separation of landfill gas Resources from wind and solar Resources has been removed and merged back into Intermittent Power Resources
 - Clarifying language has been added to describe the hours for the Peak Load Window

Proposed Revisions to ICAP Manual

■ Section 4.12 – Special Case Resources

- Revisions have been made to sections 4.12.2.1.6 and 4.12.2.1.8 to account for the resource's corresponding Duration Adjustment Factor

Incremental Proposed Revisions to ICAP Manual Attachments

Proposed Revisions to ICAP Manual Attachments

- **ICAP Manual Attachment J includes incremental revisions to accommodate the Expanding Capacity Eligibility and Tailored Availability Metric rulesets**
- **ICAP Manual Attachment M includes incremental revisions to accommodate the Expanding Capacity Eligibility ruleset**

Proposed Revisions to ICAP Manual

Attachment J

- **Attachment J – Unforced Capacity for Installed Capacity Suppliers**
 - Sections 3.1, 3.2, and 3.7 include the following revisions:
 - Revised subsection titles for consistency with other sections in Attachment J
 - Replaced “ISO Procedures” in the definition of Duration Adjustment Factor_{gm} in subsections (a) and (b) with appropriate reference to ICAP Manual
 - Added “Average” in the definition of AEFORd_{gm} subsection (b)
 - Section 3.4 (b) and (c) have been modified to include language for all Intermittent Power Resources

Proposed Revisions to ICAP Manual

Attachment J

- **Attachment J – Unforced Capacity for Installed Capacity Suppliers**
 - Section 3.4 (b) includes the following revisions:
 - Added the subscript to *Duration Adjustment Factor* $_{gm}$
 - Added reference to section 4.1.1 of the ICAP Manual
 - Added the word “average” to the definition E_{gh}
 - Moved the definition of WF_h to follow the production factor calculation

Proposed Revisions to ICAP Manual

Attachment J

- **Attachment J – Unforced Capacity for Installed Capacity Suppliers**
 - Section 3.7.1 includes the following revision:
 - The duration requirement in the Storage Availability_{gi} equation has been changed to “24 hours” to reflect the requirement for resources without an Energy Duration Limitation

Proposed Revisions to ICAP Manual

Attachment M

- **Attachment M – Procedure to Apply for a Capacity Limited Resource (CLR), Energy Limited Resource (ELR) or Ambient Condition-Dependent Classification**
 - Ministerial edits have been made to the Registration section for consistency with the ICAP Manual and Attachments

Next Steps

Next Steps

- **The NYISO is seeking stakeholder feedback on the proposed ICAP Manual and Attachment revisions discussed today**
- **The NYISO will return to an upcoming ICAPWG as needed to continue discussions on the topics discussed today**
- **The NYISO is aiming to bring the proposed revisions to the ICAP Manual and Attachments to the BIC in early 2021**

Feedback/Questions?

Email additional feedback to: deckels@nyiso.com

Questions?

Appendix

Proposed Revisions for Initial Wind UCAP %

Yvonne Huang – ICAP Market Operations

Proposed Revision to ICAP Manual

- **Revisions to the ICAP Manual Section 4.5 (b) are required to reflect the update to the initial wind UCAP percentages**
 - The description of how the initial wind UCAP percentages are calculated is updated
 - The revision includes the description for the land-based wind initial UCAP %, as well as the description for the off-shore wind initial UCAP %
 - The initial UCAP percentages for the land-based wind are updated
 - The initial UCAP percentages for the off-shore wind are pending updated wind profiles from the NREL and are expected to be updated early 2021

Updated Tables for Wind Initial UCAP %

Unforced Capacity Percentage – Land-Based Wind		
	6-Hour Peak Load Window	8-Hour Peak Load Window
Summer	16%	16%
Winter	34%	34%

Unforced Capacity Percentage – Off-shore Wind (Zone J and K)*		
	6-Hour Peak Load Window	8-Hour Peak Load Window
Summer	TBD	TBD
Winter	TBD	TBD

*The specific Unforced Capacity Percentages are pending the National Renewable Energy Laboratory release of updated wind profiles, which is expected to be available early 2021.

Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policymakers, stakeholders and investors in the power system

