

Comprehensive Mitigation Review

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ICAPWG

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Agenda

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- Additional BSM Tariff Revisions
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 - Capacity Accreditation Tariff Revisions
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Previous Discussions

| Date | Working Group | Discussion Points and Links to Materials |
|----------------|---------------|---|
| April 20, 2021 | ICAPWG | Kick-off presentation discussing Preparing the Capacity Market for the Grid in Transition: https://www.nyiso.com/documents/20142/20839079/20210420%20NYIS0%20- %20Preparing%20the%20Capacity%20Market%20for%20the%20Grid%20in%20Transition.pdf |
| June 3, 2021 | ICAPWG | Buyer Side Mitigation Reforms Considerations: https://www.nyiso.com/documents/20142/21942500/20210603%20NYIS0%20- %20BSM%20Reforms%20Consideration%20vFinal.pdf |
| June 30, 2021 | ICAPWG | Working Group Schedule for Comprehensive Mitigation Review: https://www.nyiso.com/documents/20142/22643498/20210630%20NYIS0%20- %20BSM%20and%20Capacity%20Accreditation%20Working%20Group%20Schedule.pdf |
| July 13, 2021 | ICAPWG | Buyer Side Mitigation Reforms Proposal and Other Considerations: https://www.nyiso.com/documents/20142/22967297/20210713%20NYIS0%20-%20BSM%20Reforms%20Proposal.pdf |
| August 5, 2021 | ICAPWG | Buyer Side Mitigation Reforms Proposal: https://www.nyiso.com/documents/20142/23590734/20210805%20NYIS0%20-%20BSM%20Reforms%20Proposal.pdf Review of Existing Capacity Accreditation Rules: https://www.nyiso.com/documents/20142/23590734/20210805%20NYIS0%20- %20Capacity%20Accreditation%20Current%20Rules%20Final.pdf |



Previous Discussions (cont.)

| Date | Working Group | Discussion Points and Links to Materials |
|--------------------------------------|---------------|--|
| August 9, 2021 | ICAPWG | Buyer Side Mitigation Analysis Scope (Analysis Group): https://www.nyiso.com/documents/20142/23645207/Introductory%20Presentation%20Draft%2020210804.pdf Capacity Accreditation Design Principles (Potomac Economics): https://www.nyiso.com/documents/20142/23645207/20210730%20Potomac%20-%20Capacity%20Accreditation%20-%20Conceptual%20Framework-7-30-2021.pdf Capacity Accreditation Proposal: https://www.nyiso.com/documents/20142/23645207/20210809%20NYIS0%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20Capacity%20Accreditation%20-%20-%20Capacity%20Accreditation%20-%20-%20Capacity%20Accreditation%20-%20-%20Capacity%20Accreditation%20-%20-%20-%20-%20-%20-%20-%20-%20-%20- |
| August 30, 2021 & August 31, 2021 | ICAPWG | ELCC Concepts & Considerations for Implementation (E3): https://www.nyiso.com/documents/20142/24172725/NYISO%20ELCC 210820 August%2030%20Presentation.pdf Capacity Accreditation - Marginal vs. Average (Potomac Economics): https://www.nyiso.com/documents/20142/24172725/Capacity%20Accreditation%20-%20Marginal%20vs%20Average%20- %20for%20Aug%203008-25-2021.pdf Capacity Accreditation Proposal: https://www.nyiso.com/documents/20142/24172725/20210830%20NYISO%20-%20Capacity%20Accreditation_v10%20(002).pdf Overview of PJM MOPR Filing: https://www.nyiso.com/documents/20142/24172725/20210830%20NYISO%20-%20%20PJM%20M0PR.pdf |

Previous Discussions (cont.)

| Date | Working Group | Discussion Points and Links to Materials |
|--------------------|---------------|---|
| September 9, 2021 | ICAPWG | BSM Reform Proposal with Updates: https://www.nyiso.com/documents/20142/24415247/20210901%20NYIS0%20-%20Updated%20BSM%20Proposal.pdf |
| September 17, 2021 | ICAPWG | Complete Comprehensive Mitigation Review Proposal and BSM Tariff: https://www.nyiso.com/documents/20142/24717057/20210917%20NYIS0%20- %20Comprehensive%20Mitigation%20Review%20Tariff%20discussion.pdf |
| September 20, 2021 | ICAPWG | Evaluation of Changes in the BSM Rules on Financial Risk (Potomac Economics): https://www.nyiso.com/documents/20142/24717106/MMU%20Presentation%20re%20WACC%20Adjustment 9202021.pdf/cea 28c17-c373-8c1e-44ec-c5b95082a4b9 |
| September 27, 2021 | ICAPWG | ELCC Allocation Methodologies (E3): https://www.nyiso.com/documents/20142/24899187/NYISO ELCC_210922_September_27 Presentation.pdf/30147074-ed72-467c-512e-58a792cc6c25 |
| September 28, 2021 | ICAPWG | Comprehensive Mitigation Review Proposal and Tariff: https://www.nyiso.com/documents/20142/24925244/20210928 NYISO - CMR Final.pdf/769828a1-f224-0140-240b-0762ec18efec |
| | | Market Impacts of Comprehensive Mitigation Review (Analysis Group): https://www.nyiso.com/documents/20142/24925244/2021.09.28 Stakeholder Presentation Draft 2021.09.27.pdf/39150426- 8b99-695a-7f1d-4c839b4993f6 |



Previous Discussions (cont.)

| Date | Working Group | Discussion Points and Links to Materials |
|------------------|---------------|---|
| October 18, 2021 | ICAPWG | Comprehensive Mitigation Review Proposal and Tariff Updates: https://www.nyiso.com/documents/20142/25440628/20211018%20NYISO%20-%20CMR%20v9.pdf/4475e775-159c-75c7-9cf8- 7050dad9a363 NYISO CMR Consumer Impact Analysis Methodology: https://www.nyiso.com/documents/20142/25440628/20211018%20CMR%20CIA%20Methodology%20v3.pdf/3658b7df-52dc- d3b7-fb52-0f1fb08dfb73 |
| | | Potomac Economics CMR Consumer Impact Analysis Methodology: https://www.nyiso.com/documents/20142/25440628/MMU%20ICAP%20Accreditation%20Consumer%20Impact%20Overview10- 18-2021.pdf/eaaf2875-e428-9cad-2fcc-a08111c1460c |
| October 22, 2021 | ICAPWG | Market Impacts of Comprehensive Mitigation Review (Analysis Group): https://www.nyiso.com/documents/20142/25594796/03%20AG%20CMR%20Market%20Impacts.pdf/f99028d7-687f-9722-3348- 5f4c58e129ec |



Background



Background

- The current Buyer Side Mitigation (BSM) rules when applied to state supported resources are increasingly viewed by both state and federal regulators as costly to consumers, resulting in inefficient outcomes that are ultimately counterproductive
- The NYISO believes that any modification of BSM rules must support just and reasonable Installed Capacity (ICAP) Market rates, continue to allow the ICAP Market to attract and retain resources to maintain resource adequacy, be supported by stakeholders and the FERC, and be legally durable
 - Therefore, the role of accurately valuing installed capacity resources' contribution to resource adequacy is extremely important when considering BSM reforms
 - The NYISO has adjusted the schedule for Improving Capacity Accreditation accordingly

• The premise of the new approach aims to:

- Eliminate BSM risk for CLCPA resources
- Simplify currently complex and administratively burdensome BSM process



Proposal



Proposal

• The NYISO's Comprehensive Mitigation Review proposal includes the following:

- BSM Reforms
 - New resources that are required to satisfy the goals specified in the CLCPA will not be subject to review by the NYISO under the BSM rules or otherwise subject to an offer floor as discussed at the <u>September 9 ICAPWG</u>
- Capacity Accreditation
 - The NYISO is currently working with stakeholders to establish a framework proposal to reexamine the capacity accreditation of all
 resource types in the NYISO's ICAP Market
 - For details on the current proposal, please see the materials posted to the <u>September 28 ICAPWG</u>
- ICAP/UCAP Reference Price Translation
 - The NYISO is proposing to adopt Potomac Economics' recommendation to translate the ICAP Reference Price to a UCAP Reference Price using the derating factor of the peaking unit underlying the relevant ICAP Demand Curve
 - For details on this part of the proposal, please see the materials posted to the August 31 ICAPWG
- Analysis on Comprehensive Mitigation Review proposal has been completed by Analysis Group, Potomac Economics, and the NYISO
 - Analysis Group's supporting analysis examined the impact of a large influx of state-supported resources into the NYISO's ICAP Market
 - NYISO and Potomac Economics' Consumer Impact Analyses are to be presented at the November 2 ICAPWG
- The NYISO believes that all aspects of this proposal and supporting analysis is necessary to ensure that ICAP Market remains competitive and effective, and continues to provide just and reasonable outcomes



Proposal Update

- After careful consideration, the NYISO views that the current tariff allows the Demand Curve Reset (DCR) Independent Consultant to assess and value the risk of changes in future revenues when developing the peaking plant gross costs
- Therefore, the Section 5.14.1.2.2 tariff revision requiring the assessment of risks in future revenues has since been removed
- The NYISO continues to believe it is important for the DCR Independent Consultant to assess the future revenue risks for developing a peaking plant, which are changing due to this proposal, in future DCR efforts



Additional Capacity Accreditation Tariff Revisions



Capacity Accreditation Tariff Revisions

- Based on stakeholder feedback received at the previous working group meeting, the NYISO has made additional revisions to MST 2.3 and MST 5.12
- The Appendix section of this slide deck contains the detailed changes to MST 2.3 and MST 5.12 as previously presented on September 28, 2021 and October 18, 2021



Capacity Accreditation Tariff Revisions

Section 2.3: Definitions

- Clarifying revisions have been made to the "Capacity Accreditation Factor" and "Capacity Accreditation Resource Class" definitions
- Section 5.12.14: Energy Duration Limitations, Duration Adjustment Factors, and Capacity Accreditation Factors for Installed Capacity Suppliers
 - Revisions have been made to the title of this section

Section 5.12.14.2: Adjusted Installed Capacity

• Clarifying revisions have been made to the process of calculating a Resource's Adjusted ICAP using the Capacity Accreditation Factors

Section 5.12.14.3: Periodic Review of Capacity

• Clarifying revisions have been made to the annual re-evaluation of the Capacity Accreditation Factors for ICAP Suppliers



Additional BSM Tariff Revisions



Additional BSM Tariff Revisions

Section 23.2.1: Definitions

• Clarifying revisions were made to the definition of Excluded Facilities in respect to the certification process

Section 23.4.5.7.7

• Ministerial edits were made

Section 23.4.5.7.X

• Excluded Facilities self certification form will be assigned a section in Attachment H



Schedule



Schedule Overview

- The NYISO is pursuing BSM Reforms in time for the Class Year 2021 BSM evaluations
- The NYISO intends to address capacity accreditation in different phases
 - Phase 1 will discuss tariff changes for the new framework through Q4 2021
 - Phase 2 will discuss the procedures and details of capacity accreditation and is expected to start after the completion of Phase 1 and continue throughout 2022 as part of the Improving Capacity Accreditation Project
 - Phase 3 will focus on the implementation of the capacity accreditation review as part of the Capacity Value Study project
 - The NYISO intends to implement the updated capacity accreditation rules for the Capability Year that begins May 2024
- The NYISO intends to implement the ICAP/UCAP Reference Price Translation changes with the capacity accreditation rule changes for the Capability Year that begins May 2024
- Assessment of financial risk of changes in future revenues will be incorporated into the next Demand Curve Reset process beginning in 2023



Next Steps



Next Steps

November 2nd ICAPWG

- Potomac Economics and the NYISO will present the consumer impact analysis of the Capacity Accreditation Proposal
- November 9th BIC
- November 17th MC



Questions?



Appendix



BSM Tariff Revisions



BSM Tariff Revisions

- As a part of the BSM Reforms, the NYISO has identified sections in Attachment H that will need to be revised as a part of this proposal
 - Substantial edits were made to define new terms and incorporate edits to include the resource types that are exempt from the BSM rules or otherwise subject to an offer floor, as well as delete previous Tariff language related to Renewable Exemptions



23.2.1 Definitions

- "Excluded Facility" is a new defined term that reflects the Resource types that are not subject to review by the NYISO under the BSM rules or otherwise subject to an offer floor
- Language for the definition of "Examined Facility" has been modified to delete language related to Co-located Storage Resources and add to include any Generator or UDR that meets the definition of "Excluded Facility"
- The following terms have been deleted from Section 23.2.1
 - Exempt Renewable Technology
 - Incremental Regulatory Retirement
 - Minimum Renewable Exemption Limit
 - Qualified Renewable Exemption Applicant
 - Renewable Exemption Applicant
 - Renewable Exemption Bank
 - Renewable Exemption Limit



Attachment H

23.4.5.7

• Revisions have been made to include language with respect to an Excluded Facility and delete language related to Special Case Resources that will not be subject to the Offer Floor

23.4.5.7.2

• Language has been deleted that pertains to Examined Facilities seeking to participate as a Colocated Storage Resource as well as language pertaining to the Renewable Exemption

23.4.5.7.3.3

• Replaced 'Project' with 'Examined Facility' to avoid confusion

23.4.5.7.3.4

• Language has been deleted that pertains to Examined Facilities seeking to participate as a Colocated Storage Resource



Attachment H

23.4.5.7.5

This section addressing SCR mitigation has been deleted

23.4.5.7.6

• Revisions have been made to delete language pertaining to the Renewable Exemption and Examined Facilities that are Limited Control RoR Hydro

23.4.5.7.7

• Revisions have been made to include language with respect to an Excluded Facility and delete language related to Special Case Resources that will not be subject to the Offer Floor

23.4.5.7.3.8

• Added language clarifying that the section is applicable only to a Generator or UDR project that is an Examined Facility

23.4.5.7.9.3.2

 Revisions delete reference to Renewable Exemption with respect to the concept of requests for Competitive Entry Exemptions



Attachment H

23.4.5.7.10

• Replaced 'Project' with 'Examined Facility' for clarity

23.4.5.7.13

• This section addressing the Renewable Exemption has been deleted

23.4.5.7.14.1

- Added to clarifying language "that is an Examined Facility"
- Removed language that pertains to Co-located Storage Resources requesting a Self-Supply Exemption

23.4.5.7.15

• Replaced term "Excluded Units" with "Omitted Units" to avoid confusion



Updates to BSM Tariff

- Section 23.2.1: Definitions
 - In response to feedback received at the previous ICAPWG on September 17, 2021, language has been added to section 23.2.1 to clarify that the CLCPA may be amended from time to time



Capacity Accreditation Tariff Revisions



Capacity Accreditation

- The NYISO has identified sections of MST 2 and 5.12 that will need to be revised as part of this proposal
 - MST 5.12.14 currently contains language for the recurring 4-year study, and will be updated with the proposed new framework to address the capacity accreditation changes



Capacity Accreditation Tariff Revisions

Section 2.3: Definitions

• Revisions have been made to incorporate the terms "Capacity Accreditation Factor" and "Capacity Accreditation Resource Class"

Section 5.12.6.2: UCAP Calculations

• Revisions have been made to clarify that the current construct for calculating UCAP for Intermittent Power Resources and Limited Control RoR Hydro will be utilized until the Capability Year 2024



Tariff Revisions

- Section 5.12.14: Energy Duration Limitations and Duration Adjustment Factors for Installed Capacity Suppliers, and Rules for Resources Subject to Capacity Accreditation Studies
 - Section 5.12.14 and its subsections were revised to add in new language outlining the initial proposal for Capacity Accreditation
 - Revisions have been made to clarify that beginning Capability Year 2024, the Adjusted ICAP for ICAP Suppliers will use the applicable Capacity Accreditation Factor, developed in the annual Capacity Accreditation Study
 - Section 5.12.14.2: Adjusted Installed Capacity
 - Additional language has been added in relation to the timeline and process of calculating a Resource's Adjusted ICAP using the Capacity Accreditation Factors
 - Section 5.12.14.3: Periodic Review of Capacity Accreditation Factors
 - All previous language of the 4-year recurring study of capacity values has been replaced with new language related to elements of the annual re-evaluation of the Capacity Accreditation Factors for ICAP Suppliers
 - Additional language has been added to reflect the periodic review of the Peak Load Window associated with the bidding requirements for Resources with Energy Duration Limitations



Other Tariff Revisions



Tariff Revisions

Section 5.14.1.2: Demand Curve and Adjustments

 Revision made to describe the NYISO's proposed methodology for utilizing the derating factor of the peaking plant used to establish each ICAP Demand Curve when translating the ICAP Reference Point to a UCAP Reference Point



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



