

Comprehensive Mitigation Review: Revisions to Part A Exemption Test

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ICAP/MIWG/PRLWG Meeting

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Agenda

- NYISO Proposal
- Example
- Future Discussions
- Stakeholder Engagement Plan



NYISO Proposal: Revisions to Part A



Revised Proposal

Integration with Mitigation Study Period ("MSP") Enhancements

- The Part A Revisions work well with elements of the MSP Enhancement project
- In order to maximize value to the members Class Year currently underway, the NYISO is proposing to incorporate specially tailored elements of the MSP Enhancements into its Part A Revisions
 - The scope of these revisions will be limited to the Part A test and targeting a CY2019 implementation
- This revised proposal is a ground-up, holistic redesign of the Part A test

MSP Enhancements for Part B

- The development of MSP Enhancements for the Part B test may merit a longer timeframe than is possible under the fast-track development process
- The NYISO will continue to develop MSP Enhancements for the Part B test (along with additional enhancements for the Part A test, if appropriate) and return to Stakeholders later this year with a separate revised proposal



Proposal: Overview

- Enhance the Part A Exemption Test by creating two Mitigation Study Periods (MSP) to reflect the variability of the expected In-Service dates for Examined Facilities
- Perform the Part A test for each year of the EF's MSP
- Grant Part A Exemptions beginning with the first year the EF passed
- Revise the order by which EFs are tested and granted exemptions under Part A.
- Perform the Part A exemption test before the Part B exemption test
- For each EF, perform the Part A test for each Locality it is contained in



Mitigation Study Period Enhancements for Part A

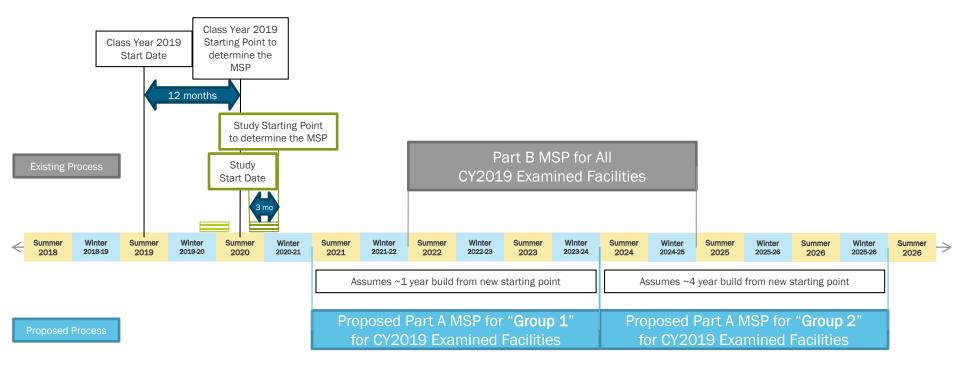


Proposal: 2x Study Periods for Part A

- NYISO is proposing to evaluate Examined Facilities under Part A in one of two separate Mitigation Study Periods – "Group 1" and "Group 2"
 - Group 1 will have a MSP starting the Summer Capability Period a year from the start of the Capability Year of the estimated Initial Decision Period of the study
 - Group 2 will have a MSP starting the Summer Capability Period four years from the start of the Capability Year of the estimated Initial Decision Period of the study
- For Class Year studies, the estimated Initial Decision Period will be a year from the Class Year start date
- For Expedited Deliverability Studies, the estimated Initial Decision Period will be three months from the study start date



Proposed Study Periods for Part A



The dates contained in this figure are for illustrative purposes only and do not necessarily reflect the timeframe of an ongoing study.

New York ISO

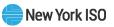
Grouping Examined Facilities

• An Examined Facility will be evaluated in Group 2 unless:

- It is already In-Service
- It is a category of resource with a shorter construction timeline:
 - Li-ion Battery
 - Solar Photovoltaic
 - Small projects of <20MW
 - Additional CRIS Uprates to existing facilities

There will likely be exceptions

• The NYISO, in consultation with the MMU, will make a determination of whether an EF qualifies to be evaluated in Group 1



Grouping Exceptions

- The NYISO may determine that an EF, despite appearing to belong to a "fast-build" category, should be evaluated as part of Group 2
- For example, an EF may be evaluated in Group 2 if:
 - It has indicated a construction timeline or COD that would result in its placement in Group 2
 - If necessary System Upgrade Facilities are identified that will delay its COD past that which would place it in Group 2
 - The NYISO reasonably determines that it will not be In-Service until a date that would place it in Group 2
- The NYISO is proposing that the "cutoff date" for Group 1 placement be midway through the MSP for Group 1
 - That is, the last day of the second Summer Capability Period in the Group 1 MSP



Grouping Exceptions (cont.)

Grouping "lockdown"

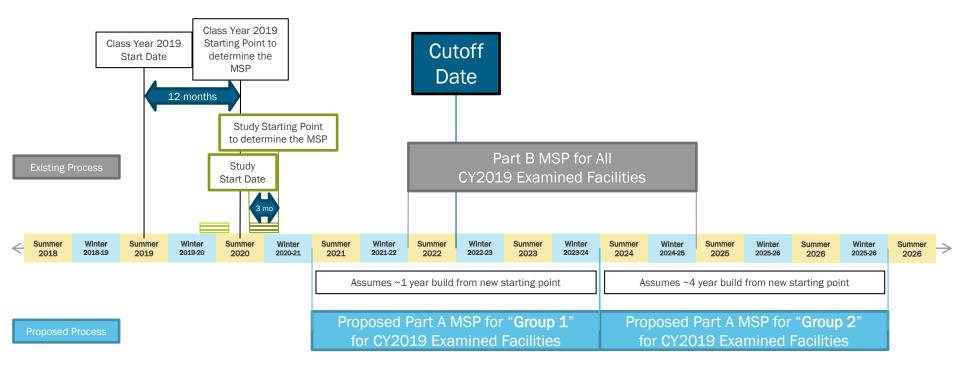
 In order to be practicable, the NYISO will need to make final grouping determinations for EFs some time ahead of issuing determinations

The NYISO proposes that final grouping determinations be made:

- 120 days after the ATBA lockdown of a Class Year
- 30 days after the start of an Expedited Deliverability Study



Proposed Study Periods for Part A (cont.)





The dates contained in this figure are for illustrative purposes only and do not necessarily reflect the timeframe of an ongoing study.

CY2019 – Requested CRIS MW & Proposed CODs



Proposed CODs are based on TPAS January 7, 2020 CY19 Status Update, posted on the NYISO website.

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New York ISO

Part A: Chronological Testing



Existing Part A Rules (Review)

- Under the existing rules, the Part A test is performed for the first year of the Mitigation Study Period only
 - Part A compares the "Default Net CONE" to the average ICAP Spot Market price forecasted by the NYISO
 - Default Net CONE is defined as 75% of Mitigation Net CONE a value derived from the CONE of the Demand Curve Reset Proxy Unit
 - The Part A test does not consider ICAP prices forecasted for the second and third years of the MSP



Discussion

 The existing rules for Part A provide a mechanism whereby a resource can be granted an exemption if forecasted ICAP prices provide for a sufficient market signal to support new entry

This approach has limitations

- Does not capture market response to anticipated events (e.g. retirements) occurring in later years
- It may be difficult for an EF to judge the correct Class Year to enter in order to appropriately reflect its development timeline



Proposal: Perform Part A for Each Year

- The NYISO is proposing to perform the Part A test for each year of an EF's Mitigation Study Period
 - Each Part A test will retain its current one-year format
 - Part A will continue to compare one year of forecasted ICAP prices to the Default Net CONE for that year
 - Under the NYISO's proposal, Part A will be performed up to three times for each Examined Facility – once for each year of its MSP
- EFs in Group 1 will not be tested for years in Group 2's MSP, nor will EFs in Group 2 be tested for years in Group 1's MSP



Proposal: Perform Part A Chronologically

- The NYISO is proposing to perform the Part A test sequentially, for each year
 - That is, the NYISO will begin by performing the Part A test for the first year of the MSP for Group 1
 - It will then perform Part A for the second and third year of the MSP for Group 1, before moving on to each year of the MSP for Group 2

The Part A test for each year subsequent the first will reflect the results of the Part A tests for prior years

• That is, facilities determined to be exempt will be included in the supply stack of the ICAP Forecast for each following year



Proposal: Timed Part A Exemptions

- The NYISO is proposing to put a timestamp on Exemptions granted under Part A
 - e.g., An Examined Facility is granted an exemption under the Part A test performed for the 2025/26 Capability Year. If it were to enter the ICAP market in October 2024, it would be subject to the Offer Floor for seven months before its exemption took effect for the 2025 Summer Capability Period.
 - The Offer Floor is based on the lower of Unit net CONE and the Default Net CONE
- Timed exemptions are necessary to ensure that exemptions under Part A do not result in suppressed prices due to misalignments between the timing of expected retirements and new entry



Part A: Ordering



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Discussion

- The NYISO believes it is appropriate to acknowledge, in its BSM rules that the construction and market entry of public policy resources ("PPRs") is reasonably certain
 - In particular, the PPR status of an EF may be a better predictor of eventual market entry than its Unit net CONE relative to other EFs
 - The existing rules for the Part A test orders units by Unit net CONE
 - In past Class Years, it has been reasonable to assume that the most economic resources would be the first to construct in response to market signals



Proposal: PPR Definition

- A Public Policy Resource may be defined as a resource that is fully capable of serving electrical load in NY with zero emissions from generation
 - PPR status is determined assuming the resource is part of a statewide zero emissions electrical system
 - *i.e.,* Energy Storage would operate with zero carbon emissions in a 100%x2040 grid of the future
 - An Examined Facility requesting a Renewable Exemption could (and likely would) also qualify as a PPR



Proposal: Test PPRs First Under Part A

- The NYISO is proposing to revise the order in which Examined Facilities are tested under Part A
- For each year of the MSP(s), the Examined Facilities that qualify as PPRs will be tested before non-PPR Examined Facilities
 - PPRs will be ordered from lowest to highest Unit Net CONE
 - Remaining non-PPR Examined Facilities will follow PPRs and be ordered from lowest to highest Unit Net CONE
- Part A testing for a given year will be completed, for all eligible EFs, before testing begins for the subsequent year



Part A Before Part B



Proposal: Exemption Testing Process

- **1.** The Part A test is performed for all EFs
- 2. The Part B test is performed, incorporating the results from Part A
- 3. Renewable & Self Supply Exemptions are granted to eligible EFs that have not yet received an exemption under Part A or Part B
- Separate from this timeline, Competitive Entry Exemptions will continue to be granted to qualifying resources irrespective of the results from Part A and Part B



Part A: Nested Localities



Proposal: Nested Localities

- The NYISO is proposing to perform, for each Examined Facility, the Part A test is for each Locality in which it is located
- Part A performed for the nested locality first
 - The NYISO compares forecasted ICAP prices to the DNC for the Locality in which the Examined Facility is located
- Part A is then performed for the nesting locality
 - The NYISO compares forecasted ICAP prices to the DNC for the Locality in which the Examined Facility is nested in
 - This will allow Examined Facilities to receive an exemption if the Part A test shows a market signal in any of the Localities in where they are located
 - e.g., an Examined Facility in Zone J that is not exempt under the Part A test for Zone J may still receive an exemption under the Part A test for the G-J Locality



Example



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Part A: Year 1 of the MSP for Group 1

- A) 20MW PPR \$10/kW-year is tested, passes
- B) 5MW PPR \$50/kW-year is tested, passes
- C) 100MW PPR \$100/kW-year is tested, fails
- D) 10MW PPR \$150/kW-year is tested, fails
- E) 5MW non-PPR \$5/kW-year is tested, passes
- F) 50MW non-PPR \$50/kW-year is tested, fails



Part A: Year 2, Group 1

- Included Units (exempt under Part A: Year 1)
 - A) 20MW PPR
 - B) 5MW PPR
 - E) 5MW non-PPR
- C) 100MW PPR \$100/kW-year is tested, fails
- D) 10MW PPR \$150/kW-year is tested, passes
- F) 50MW non-PPR \$50/kW-year is tested, fails



Part A: Year 3, Group 1

- Included Units (exempt under Part A: Year 1 or 2)
 - A) 20MW PPR
 - B) 5MW PPR
 - D) 10MW PPR
 - E) 5MW non-PPR
- C) 100MW PPR \$100/kW-year is tested, passes
- F) 50MW non-PPR \$50/kW-year is tested, fails



Part A: Year 4 (Year 1 of Group 2)

- Included Units (Group 1 units exempt under Part A)
 - A) 20MW PPR
 - B) 5MW PPR
 - C) 100MW PPR
 - D) 10MW PPR
 - E) 5MW non-PPR



Future Discussions

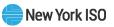


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Comprehensive Mitigation Review Project (CMR Project) Overview

- The Enhanced BSM Mitigation Study Period and Revisions to the Part A Exemption Test efforts are part of the BSM Exemption Redesign option under the CMR Project
- Discussions will continue throughout the year
 - These may include the various complexities stakeholders and the NYISO have raised about MSP enhancements
 - A comprehensive set of enhancements may be discussed for implementation in the near future

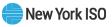


Enhanced BSM Mitigation Study Period

 2020 Project Deliverable: Q3 2020 – Market Design Complete

Project Description:

 The NYISO will examine what, if any enhancements can be made to the existing timelines assumptions to more appropriately evaluate projects, with the objective of improving the accuracy of BSM determinations



Stakeholder Engagement Plan



Stakeholder Engagement Plan

- The NYISO will consider feedback received from Stakeholders and continue discussions
- The NYISO's goal is to propose a BIC and MC vote in March such that these changes could be used for the current ongoing Class Year (2019)
- Broader discussion on Comprehensive Mitigation Review will continue throughout the year
- Stakeholders may provide additional comments in writing to <u>deckels@nyiso.com</u>



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





Appendix



Background



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Comprehensive Mitigation Review Project (CMR Project) Overview

• The project objective is:

Modify NYISO Installed Capacity market framework in a balanced manner that (i)
preserves competitive price signals and economically efficient market outcomes
required to maintain system reliability and (ii) enables the Climate Leadership and
Community Protection Act (CLCPA) goals

• The project goal is to complete the study Market Design Complete in 2020

- The Enhanced BSM Mitigation Study Period and Enhancements to the Part A Exemption Test efforts are also part of the BSM Exemption Redesign option under the CMR Project
- NYISO has been working with stakeholders to fast-track development of the MMU's proposed enhancements to the Part A Exemption Test and Enhancements to the Mitigation Study Period as an initial phase of the CMR Project



Fast-track Development

- NYS Public Service Commission initiated Proceeding to Consider Resource Adequacy Matters (Case 19-E-0530)
 - NYISO filed initial comments acknowledging the need to better harmonize the wholesale markets with state environmental policies, in particular those embodied in the CLCPA, while maintaining competitive price signals
 - MMU filed initial comments that described the value of the competitive wholesale market for ensuring resource adequacy in a manner that reduces costs for consumers and for integrating intermittent renewable generation and other public policy resources in an efficient and reliable manner
- MMU Comments included various proposed enhancements to the NYISO's energy, ancillary services, and capacity markets
 - Among other things, the MMU described the benefits of changes to the Part A Exemption Test and the Mitigation Study Period



The MMU's Proposed Enhancements



MMU's Proposal to Revise the Part A Exemption and Mitigation Study Period

Prong 1 involves changes to the Part A and Part B exemption tests such that

- Public Policy Resource ("PPR") Examined Facilities would be placed in the supply stack before non-PPR Examined Facilities
 - Currently projects are placed in the supply stack from lowest to highest Unit Net CONE
 - This change will allow legitimate PPR supply resources be awarded a Part A exemption before non-PPR resources that may be less expensive but do not further the State's policy objectives

Prong 2 involves changes to the Part A and Part B exemption tests such that

- The Mitigation Study Period would be revised to apply to each project based upon the characteristics of the technology that it uses
 - Currently the Mitigation Study Period is the same three year period for all Examined Facilities
- Conduct the Part A test using each year of the Mitigation Study Period



NYISO's Perspective

- The NYISO believes there is merit in the MMU's recommendation and recognizes numerous complications and issues to be addressed with stakeholders
- The NYISO has continued to develop a proposal and is seeking additional stakeholder comments
 - The proposal incorporates revisions to the ordering of the Part A test that utilizes two Mitigation Study Periods (MSP), which the NYISO believes could be implemented for CY2019 while minimizing the risk of delaying the CY
 - These enhancements would also apply to Expedited Deliverability Studies and Additional SDU Studies pending FERC approval



Questions?

