

Comprehensive Mitigation Review: Revisions to Part A Exemption Test

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ICAP/MIWG/PRLWG Meeting

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Agenda

- **Proposal Overview**
- **Discussion**
- **Future Discussions**
- **Stakeholder Engagement Plan**

Proposal Overview

Proposal: Overview

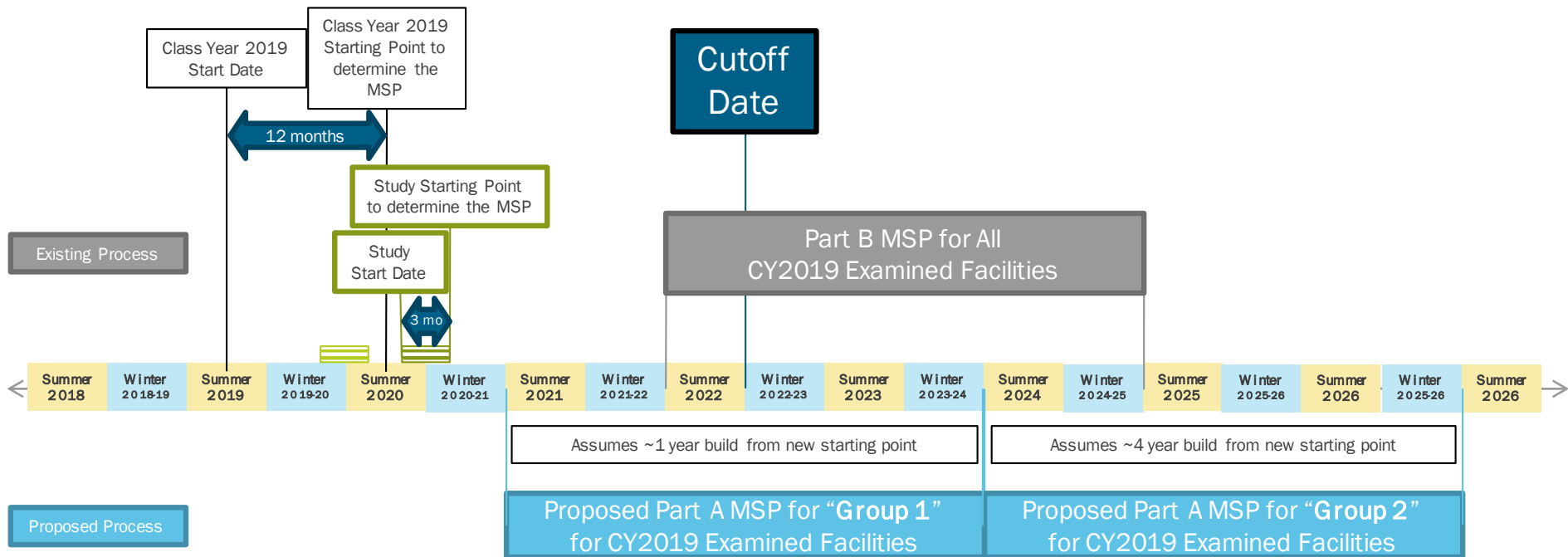
- a) Enhance the Part A Exemption Test by creating two Mitigation Study Periods (MSP) to reflect the variability of the expected In-Service dates for Examined Facilities
- b) Perform the Part A test for each year of the EF's MSP
- c) Grant Part A Exemptions beginning with the first year the EF passed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

Proposal Overview: MSP 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 Mitigation Study Periods – “Group 1” and “Group 2”**
- **An Examined Facility will be evaluated in Group 2 unless:**
 - It is already In-Service, or it is determined by the NYISO to be in a category of resource with a shorter construction timeline:
 - Li-ion Battery
 - Solar Photovoltaic
 - Small projects of $\leq 20\text{MW}$
 - Additional CRIS – Uprates to existing facilities
 - The NYISO may determine that an EF, despite appearing to belong to a “fast-build” category, should be evaluated as part of Group 2

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.

Proposal Overview: Exemption Process, Ordering & Chronological Testing

Proposal: Perform Part A for Each Year

- **The NYISO is proposing to perform the Part A test for each year of an EF's Part A 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 Part A MSP
- **EFs in Group 1 will not be tested for a Part A exemption during years in Group 2's Part A MSP, nor will EFs in Group 2 be tested for years in Group 1's Part A MSP**

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 Test in detail

- Year 1
 - Group 1 Public Policy Resources (in ascending order by Unit net CONE)
 - Group 1 other Examined Facilities (in ascending order by Unit net CONE)
- Year 2
 - *EFs exempt in Year 1 included in forecast as price-takers*
 - Remaining Group 1 PPRs
 - Remaining Group 1 other EFs
- Year 3
 - *EFs exempt in Years 1 & 2 included in forecast as price-takers*
 - Remaining Group 1 PPRs
 - Remaining Group 1 other EFs
- Year 4
 - *Group 1 EFs exempt in Years 1-3 included in forecast as price-takers*
 - Group 2 Public Policy Resources
 - Group 2 Other Resources
- Year 5
 - *Group 1 EFs exempt in Years 1-3 included in forecast as price-takers*
 - *EFs exempt in Year 4 included in forecast as price-takers*
 - Remaining Group 2 PPRs
 - Remaining Group 2 other EFs
- Year 6
 - *Group 1 EFs exempt in Years 1-3 included in forecast as price-takers*
 - *EFs exempt in Years 4 & 5 included in forecast as price-takers*
 - Remaining Group 2 PPRs
 - Remaining Group 2 other EFs

Proposal: Timed Part A Exemptions

- **The NYISO is proposing to put a timestamp on Exemptions granted under Part A**
 - Part A exemptions will go into effect starting the first year the exemption was granted
 - 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.

Discussion

Overview

Topics for further discussion:

- Chronological testing for resources in Expedited Deliverability Studies
- Ordering of PPRs & Renewable Exemption resources
- Part A exemptions under negative outlook conditions
- Grouping & Exceptions – solicitation of feedback
- Renewable Exemption Cap
- Sunset provisions – NYISO is still evaluating

Part A: Expedited Deliverability Study

- **Under the NYISO proposal for chronological Part A testing, Examined Facilities in an EDS may “go first” and be tested before Examined Facilities in the Class Year**
 - The NYISO views this as appropriately reflecting the ‘first mover advantage’ of resources qualifying for an EDS
 - Even if they were in a Class Year, the types of resources qualifying for an EDS would likely also qualify for Group 1; thus, they would still be tested first under Part A

Part A: Ordering PPRs & Renewables

- **Under the as-filed Renewable Exemption rules, Renewable Exemptions are granted to Qualified Renewable Exemption Applicants that have not yet received an exemption under Part A or Part B**
 - Renewable Exemption Applicants with a Part A or Part B exemption do not count towards the 1,000 MW Cap
- **Renewable Exemption Applicants are ordered normally (by Unit net CONE) in the proposed Part A testing process and in Part B**
 - Renewable resources are tested under Part A & Part B in the same manner as other Examined Facilities
 - There are no special assumptions made to reflect the expected Renewable Exemption status in the current BSM Forecast rules

Part A: Ordering PPRs & Renewables *(cont.)*

- **Some stakeholders are concerned that the treatment of Qualified Renewable Exemption Applicants in the Part A test could result in under-mitigation**
 - The concerns are premised on the idea that – similar to PPRs – the market entry of these resources is reasonably certain and – unlike PPRs – there is reasonable certainty that these resources will receive a Renewable exemption
 - Stakeholders have suggested that, absent modifications, the total amount of MW receiving Renewable Exemptions and exemptions under Part A could be too large
- **Modifications to address this concern would reflect Renewable Exemption Applicants as price-takers in the Part A testing of other Examined Facilities**
 - This could be accomplished by:
 - Adjusting the ordering of Part A such that Renewable Exemption Applicants are tested first, or
 - Modeling Renewable Exemption Applicants as price-takers in the Part A test for all facilities

Part A: Ordering PPRs & Renewables *(cont.)*

- **There are arguments against making modifications to address under-mitigation concerns**
 - The Renewable Exemption is premised on the idea that intermittent renewable resources lack the ability and incentive to suppress capacity prices
 - Intermittent renewable resources are not a cost-effective means to suppress prices because, relative to traditional generating resources, they have low capacity factors and high installed costs
 - Resources are able to qualify for a Renewable Exemption irrespective of forecasted capacity prices
 - It is unclear whether there are any circumstances created by the proposed revisions that merit additional protections, or whether the circumstances giving rise to concerns exist today, under the current rules. There are no provisions in the current rules to protect against these circumstances.
 - Ordering Renewable Exemption Applicants first in the Part A test would give these resources an unassailable – and thus, uncompetitive – advantage over other PPRs
 - For example: A hypothetical *non*-intermittent renewable resource, with a higher capacity factor and lower costs than an intermittent renewable could find itself arbitrarily displaced and unable to secure an exemption under Part A. This is a counterproductive outcome from both an economic and Public Policy perspective – and results in increased costs to consumers.

Part A: Negative Outlook Conditions

- **Stakeholders voiced concern with granting a Part A exemption for a favorable year when it is followed by a drop in prices**
 - One such scenario could result from modeling a Prior CY Group 2 Examined Facility as entering part-way through the MSP for Group 1 in a subsequent CY
 - Another scenario contemplated negative load growth or other negative outlook
- **These concerns could be alleviated in a number of ways**
 - Multi-year testing
 - Testing using a multi-year average has issues; exemptions might be granted too early
 - Could alternatively require that an EF pass an additional year, years, or all years following the first year it passes
 - Assumptions for Prior CY Examined Facilities in subsequent Class Years
 - Does not address all possible drivers of negative outlook
- **The NYISO believes there are important considerations that counter-balance concerns, and is not proposing any changes to its proposal**
 - Forecast uncertainty increases rapidly farther into the future, which calls into question whether a negative outlook can be considered a sufficient condition to deny an exemption
 - It is difficult to justify *not* granting an exemption in one year because of a failure in a later forecast year with greater uncertainty

Grouping & Exceptions

- **The NYISO is seeking additional stakeholder comments and feedback on its proposed mechanism for determining whether an EF should be in Group 1 or Group 2**
 - EFs that despite being in a “fast-build” category, should be evaluated as part of Group 2:
 - Indicated construction timeline or COD
 - Necessary System Upgrade Facilities causing delay
 - The NYISO reasonably determines that it will not be In-Service until a date that would place it in Group 2

Grouping & Exceptions *(cont.)*

- **The NYISO is proposing that the “cutoff date” for Group 1 placement be midway through the Part A MSP for Group 1**
 - That is, the last day of the second Summer Capability Period in the Group 1 MSP
- **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

Renewable Exemption Cap

- **The current language filed with last year’s Class Year Redesign provisions addresses the possibility that Examined Facilities are not limited to entering the market through a Class Year:**
 - **Att. H 23.4.5.7.13.1.1(b):**
 - “A total amount of CRIS MW not exceeding 1,000 MW of Installed Capacity may be determined to be exempt pursuant to the Renewable Exemption for all Examined Facilities evaluated using a common Mitigation Study Period.”
- **The NYISO is not proposing to change the “common Mitigation Study Period,” and as such will refer to the Part B Mitigation Study Period under the proposed revisions.**

Future Discussions

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 deckels@nyiso.com

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 A

Background

Background

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

Appendix B

NYISO Proposal

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

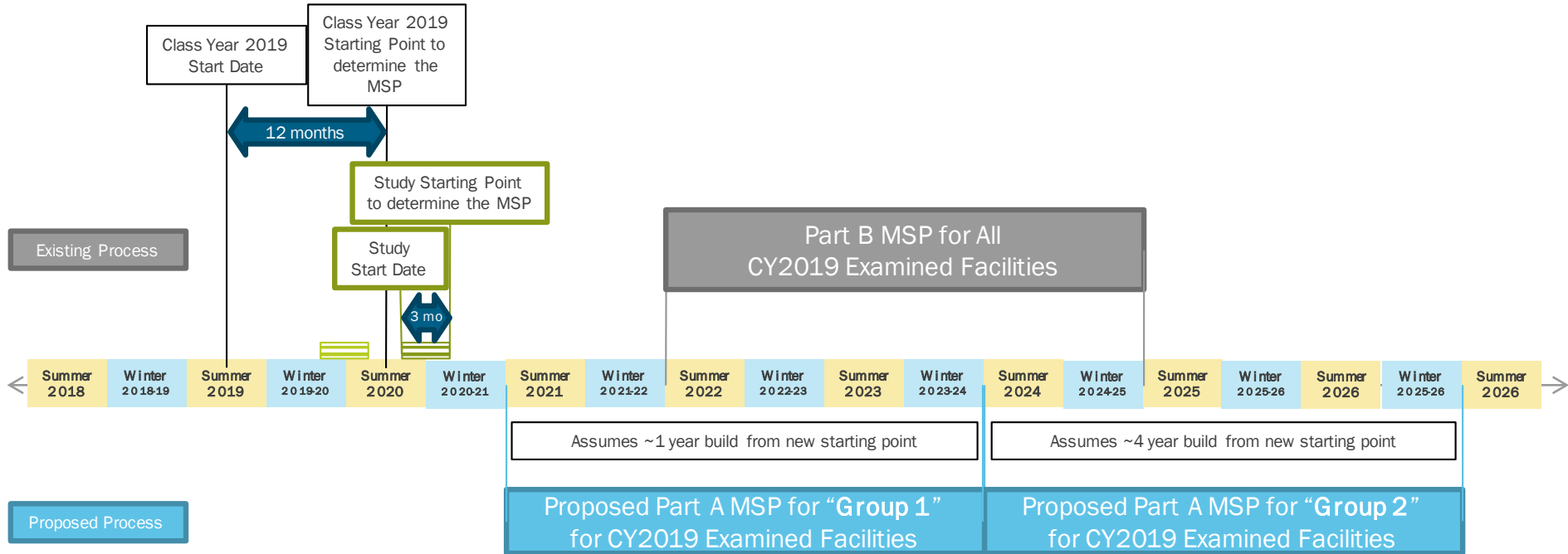
- Enhance the Part A Exemption Test by creating two Mitigation Study Periods (MSP) to reflect the variability of the expected In-Service dates for Examined Facilities
- Perform the Part A test for each year of the EF's MSP
- Grant Part A Exemptions beginning with the first year the EF passed
- Revise 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.

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.)*

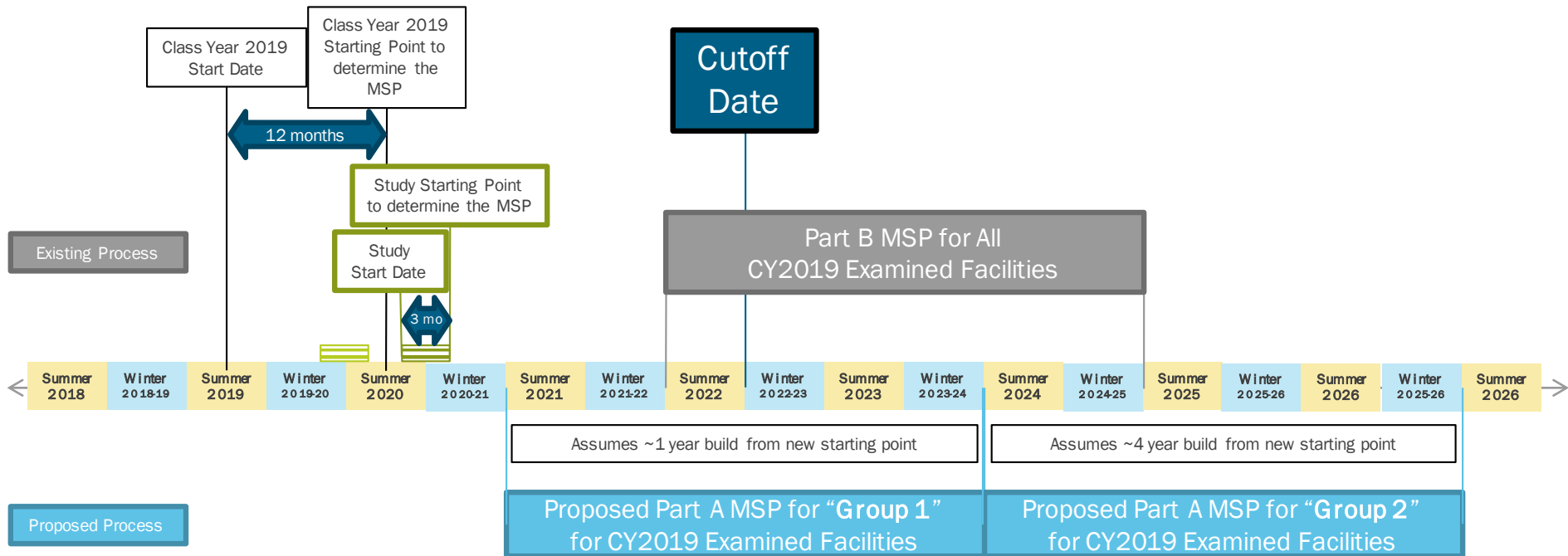
■ Grouping “lockdown”

- 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:**

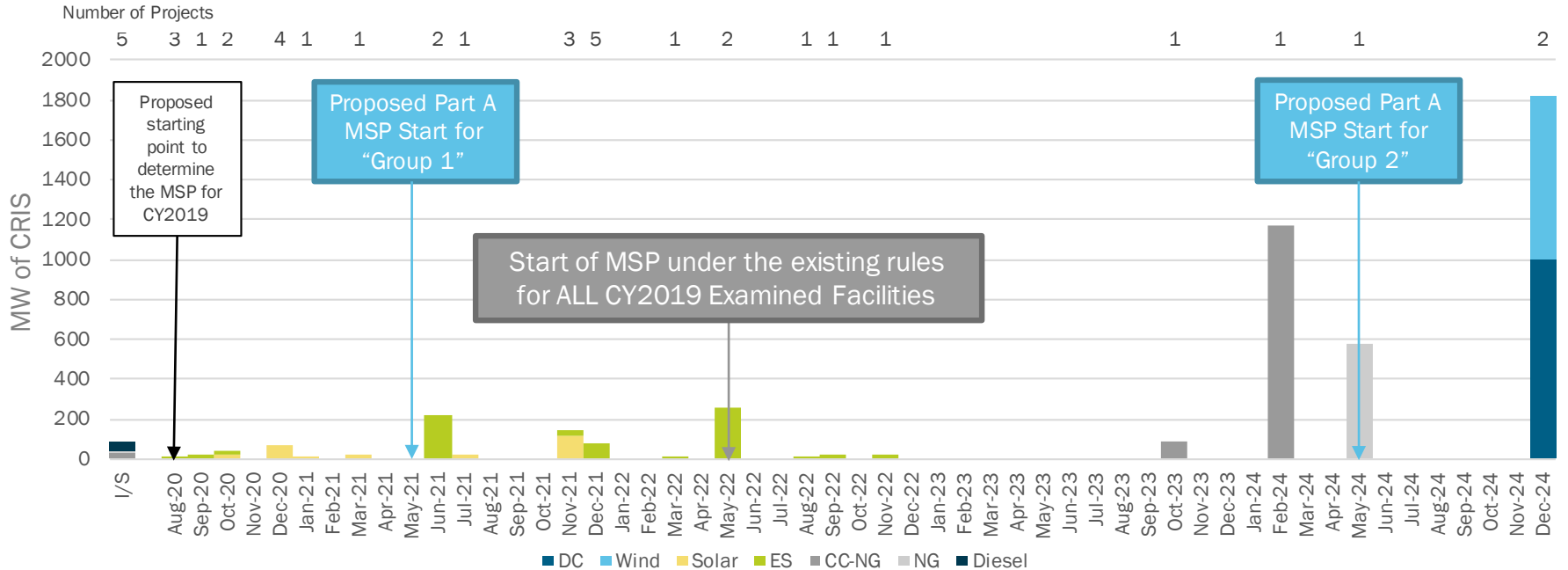
- 120 days after the ATBA lockdown of a Class Year
- 30 days after the start of an Expedited Deliverability Study

Proposed Study Periods for Part A *(cont.)*



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CY2019 – Requested CRIS MW & Proposed CODs



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

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



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

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

Appendix C

Example

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

Questions?