

Enhanced BSM Mitigation Study Period

Christina Duong

Associate ICAP Mitigation Engineer

ICAP/MIWG/PRLWG Meeting

January 08, 2020, NYISO



Agenda

- Background
- MMU's Recommendation
- Preliminary Discussion
- Topics for Consideration
- Stakeholder Engagement Plan

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) supports 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

Enhancements to the Part A Exemption Test as part of the 2020 CMR Projects

- **Based on the MMU Proposal, the NYISO has proposed to**
 - Revise the order of the Part A Exemption Test to precede the Part B Exemption Test
 - Currently the NYISO conducts the Part B Exemption Test first to ensure that the most economic projects can qualify for an exemption
 - In its BSM Evaluation the NYISO orders Examined Facilities in the stack from least cost to highest cost based upon the lower of Unit Net CONE and the Default Offer Floor for each Examined Facilities
 - Order the Resources for the Part A Exemption Test by placing all PPR Examined Facilities before non-PPR Examined Facilities, even if the latter are lower cost

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

Buyer Side Mitigation

- **The NYISO administers BSM measures on proposed new entries requesting CRIS (both new entrant and Additional CRIS MW) and expected CRIS transferees**
 - Part A test compares 75% of Mitigation Net CONE and the ICAP Forecast price in the **first year of the Mitigation Study Period (MSP)** (MST Att. H 23.4.5.7.2 and 23.4.5.6)
 - Part B test compares the Unit Net CONE of each Examined Facility with the ICAP Forecast price over the **three years of the MSP** (MST Att. H 23.4.5.7.2 and 23.4.5.6)

Current Mitigation Study Period – the “3 Year Rule”

- In 2010, the NYISO, with stakeholder support, filed Section 205 revisions to the BSM Rules. Those revisions included a specifically defined MSP. FERC accepted those updates with an effective date of November 27, 2010 (ER10-3043-001)
- All Examined Facilities, regardless of unit technology are assumed to enter the NYISO’s ICAP markets beginning with the start of the Summer Capability Period that is 3 years from the year of the Class Year

Recently Affirmed Definition with CY Redesign filing made on December 19, 2019

- **“Mitigation Study Period” shall mean the duration of time extending six consecutive Capability Periods and beginning with the Starting Capability Period associated with a Class Year Study, Additional SDU Study, and/or Expedited Deliverability Study.**
- **“Starting Capability Period” is the Summer Capability Period that will commence three years from the start of the year of the Class Year Study and shall be the start of the Mitigation Study Period for any Examined Facility in a Class Year Study, as well as any Additional SDU Studies and Expedited Deliverability Studies and that are completed while the Class Year Study is ongoing. If no Class Year Study is ongoing when an Expedited Deliverability Study or Additional SDU Study arrives at the Decision Period, the Starting Capability Period used for the purposes of Section 23.4.5 of this Attachment H shall be the Starting Capability Period that applied to the most recently completed Class Year Study.**

Benefits of current MSP rules

- **Simple, predictable, and transparent**
- **Reasonably anticipates entry date for some units**
- **Decreases the potential to “game” BSM based on submitted entry dates**
 - Previously, the NYISO had used a “reasonably anticipated entry date” when making buyer-side mitigation determinations
 - Under the reasonably anticipated entry date, the NYISO performed the analysis based on the developer’s submitted entry date
 - Potential to “game” the BSM exemption and Offer Floor test
 - Low level of transparency and predictability because developers have the ability to change the entry date

MMU's Recommendation

Starting Capability Period

- **“We identify an issue with the Tariff related to the assumed Starting Capability Period. Although we find that this issue did not affect the final determinations for the CY17 BSM evaluations, it affected the forecasted capacity prices and could, therefore, adversely affect the Part B tests in future BSM evaluations. Therefore, we recommend the NYISO modify the MST to allow more reasonable assumptions regarding the Starting Capability Period in future BSM evaluations.”**

– MMU Class Year 2017 Report

Impact of the Starting Capability Period

- **“The Starting Capability Period is important because the timing of entry affects a number of inputs to the Part A and Part B tests, such as the load forecast, units assumed to be in service, ICAP reference points and the Unit Net CONE values. Consequently, a fixed Starting Capability Period could produce unreasonable ICAP price forecasts when actual commercial operation dates (“CODs”) are misaligned with the assumed COD. In addition, if the Starting Capability Period is not aligned with the CODs of Examined Facilities, it might disadvantage Examined Facilities that are likely to be operational earlier than other projects.”**

– MMU Class Year 2017 Report

Construction and Study Time

- **“The three-year rule was implemented to increase transparency and the certainty for developers and market participants regarding the assumptions used in the BSM evaluations and to avoid gaming of the timing a project’s identification of its COD. However, this approach results often in a misalignment of the Starting Capability Period with the likely CODs of Examined Facilities in two ways:**
 - First, the COD of an Examined Facility depends on the underlying technology and its timeline for securing the required permits. As a result, assuming that all Examined Facilities will begin operations three years from the calendar year of the Class Year is likely to be incorrect for several Examined Facilities.
 - Second, the tariff provision for determining the Starting Capability Period is tied to the start of the Class Year and does not account for the time required to perform CY studies. Therefore, in cases where the developer’s decision to move forward with the project is contingent on the PCA and/or the determination, the Starting Capability Period is much earlier than the likely commercial operation date.”
 - MMU Class Year 2017 Report

CY2017 Study Time Delay

- **“In addition, the developers of the CY17-2 Projects did not learn their project’s final Class Year PCA of interconnection costs and their BSM determinations until the second quarter of 2019 – less than a year before the Starting Capability Period. The BSM measures are intended to provide a developer with the exemption test results at an early stage in the development a new facility, since a competitive supplier might not move forward with such a large investment if it was not reasonably certain to receive capacity market revenues. In order for some of the CY17 Examined Facilities to begin operating by May 2020, construction would have had to begin before they learned their respective interconnection costs or BSM exemption test results.”**

– MMU Class Year 2017 Report

MMU Recommendation

- **“Hence, we recommend the NYISO modify its Tariff provisions related to the Starting Capability Period to improve alignment with the likely CODs of the Examined Facilities. A potential alternative to the three-year rule could be to assume a COD that is based on the underlying technology of the Examined Facility. Such a technology-specific start date rule could provide that that date be adjusted as needed to reflect an Examined Facility’s progress in meeting its permitting milestones and the timing of conducting the CY studies.”**

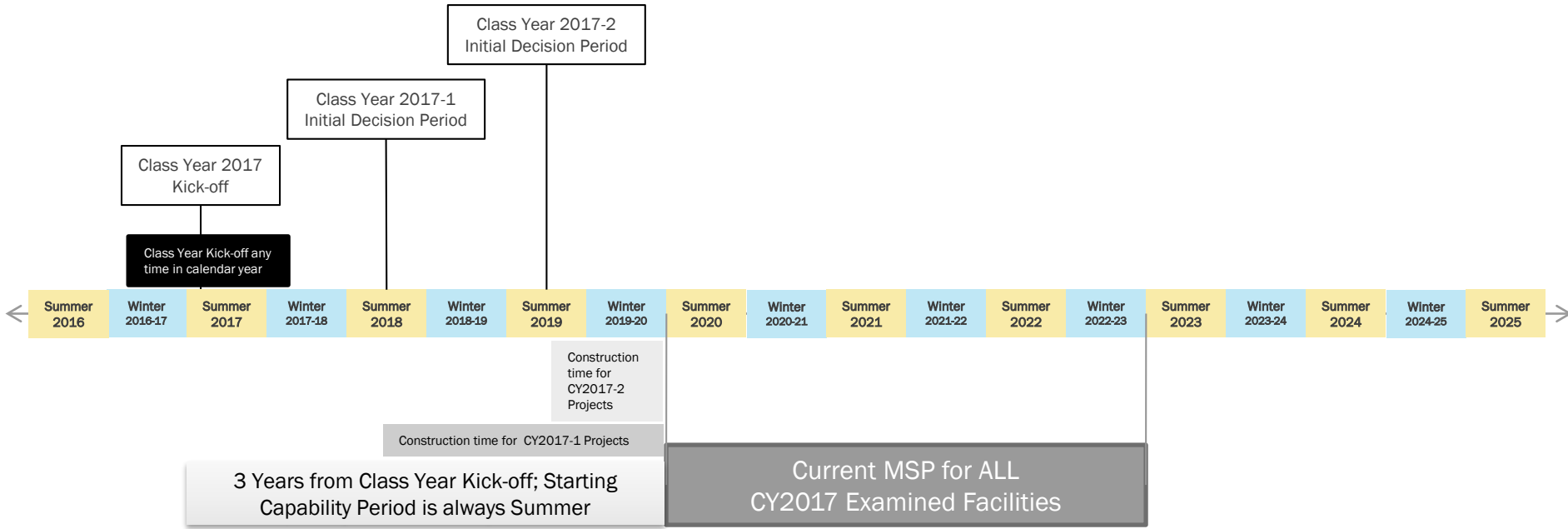
– MMU Class Year 2017 Report

NYISO's Perspective

- The NYISO believes there is merit in the MMU's recommendation in an effort to minimize the potential for over and under mitigation

Preliminary Discussion

Illustration of MSP used for CY2017

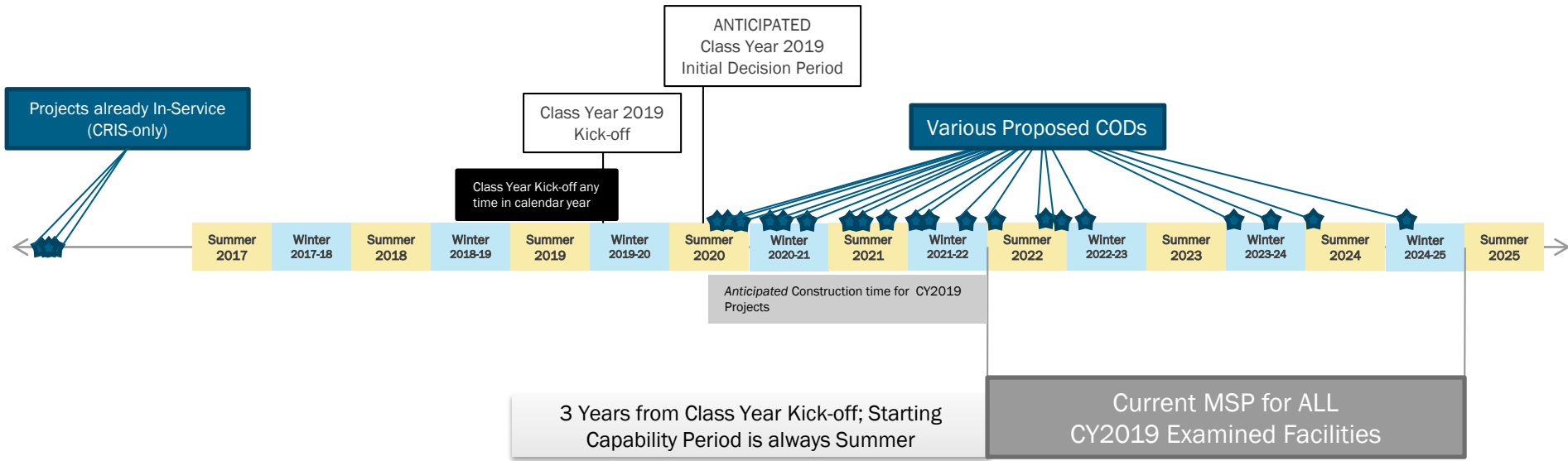


“ The Starting Capability Period is important because the assumed timing of entry affects the resource mix, gas futures prices and the load forecast, which are key drivers of the LBMP price forecast that is used to calculate net revenue. ”

Potomac Economics

Market Monitoring Unit for the New York ISO

Illustration of current MSP for CY2019



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

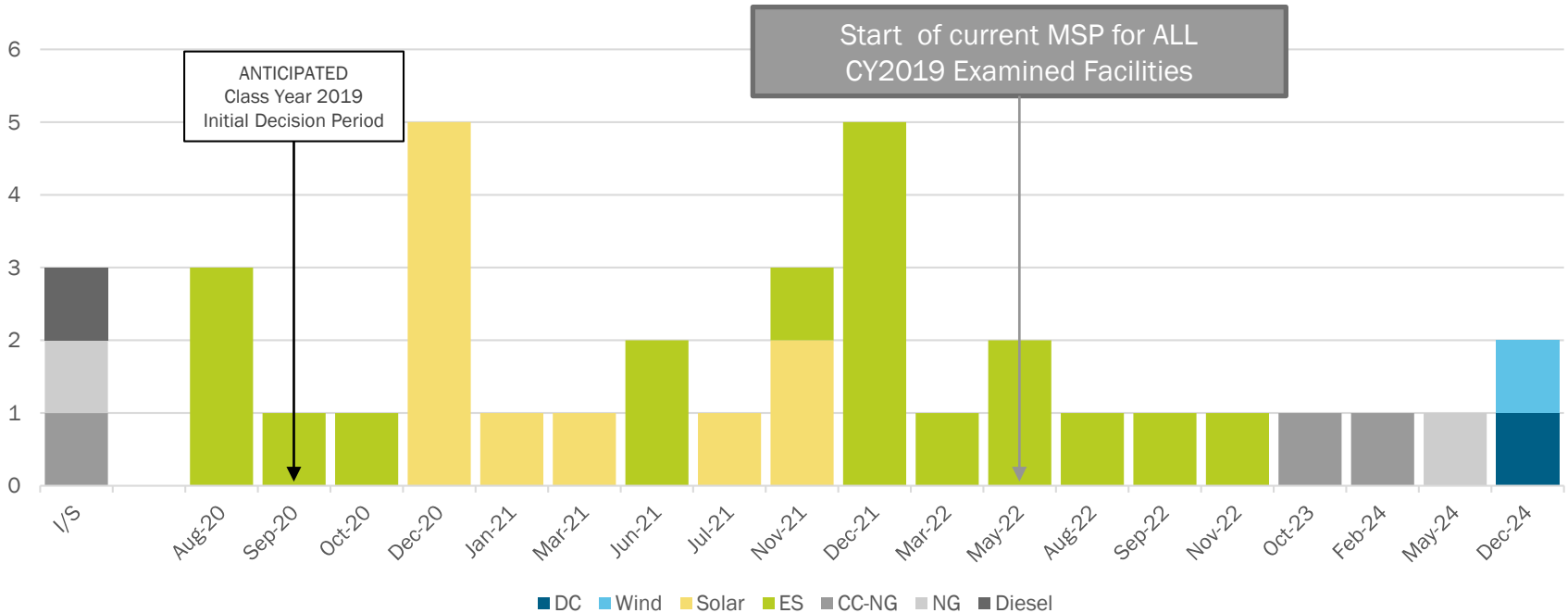


Class Year 2019

- **“This current class year includes projects with a wide range of development timeframes, including battery storage resources capable of entering in just a few months as well as HVDC transmission lines and offshore wind projects with much longer development timeframes. In the case of a battery storage project, the actual timing of entry is likely to be based on a combination of factors such as the permitting lead time, contractual incentives, when wholesale prices are likely to be most attractive, and forecasted reductions in battery purchase costs. Consequently, battery storage projects in the current class year might have a range of different plans with the potential for entering in 2020, 2021, 2022, or 2023, depending on individual circumstances.”**

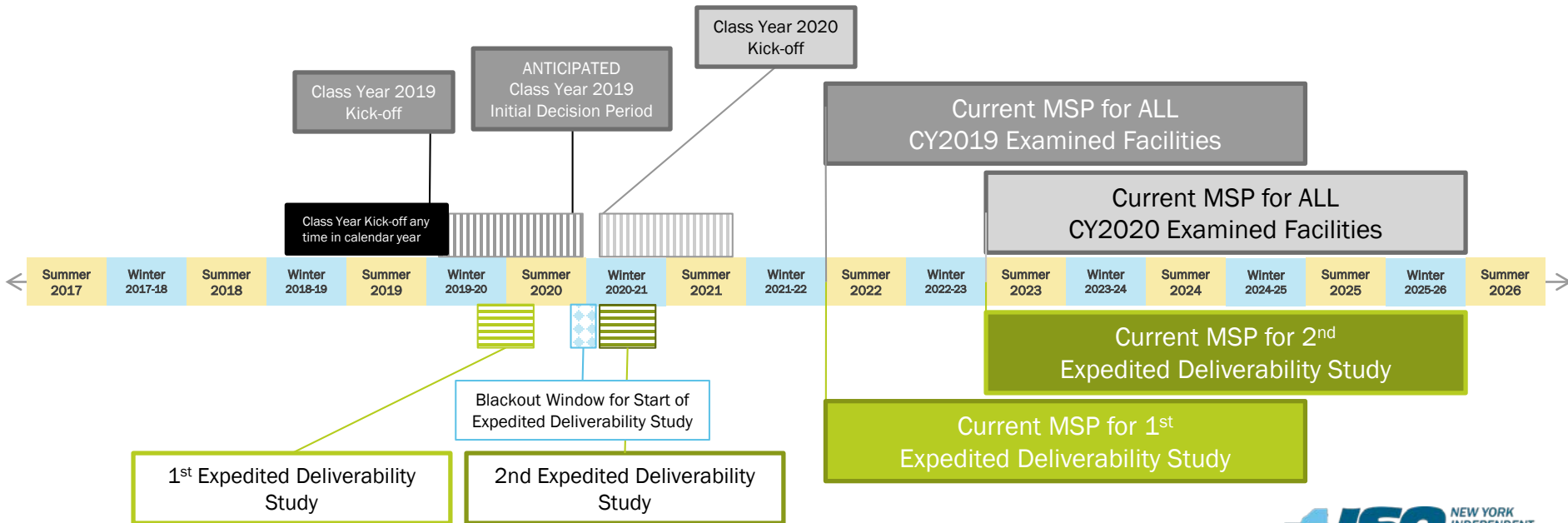
– MMU Comments regarding Proceeding on Motion of the Commission to Consider Resource Adequacy Matters

CY2019 Proposed CODs for Units in G-J



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

Illustration of current MSP for Class Year with Expedited Deliverability Studies



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



Topics for Consideration

Unit specific adjustments

- **Some Examined Facilities may have expedited timelines**
 - An Examined Facility may have begun construction prior to the Class Year
 - CRIS only requests may already be in service and capable of offering UCAP
- **Some Examined Facilities may have delayed timelines**
 - Required System Upgrade Facilities (SUFs) to interconnect the project to the system in a reliable manner
- **If NYISO were to consider unit specific adjustments**
 - How “reasonable” are Developer’s supported anticipated entry date
 - Would this create a potential to “game” BSM based on submitted entry dates
 - Level of transparency and predictability may decrease

Length of MSP

- **Increasing the length of the MSP would reflect a better representation of the project's life**
 - Are the current periods sufficient and appropriate
 - Due to forecasting limitations, this may be feasible by weighing the third year more heavily than the first two years

Forecast Input Assumptions

- **The ICAP Demand Curve reference point varies by Capability Year**
 - A MSP with a start date in a later year will have a reference point that has been escalated further than a reference point in an MSP that starts in an earlier year
- **The load forecast varies by year**
 - The load forecast affects the NYCA Minimum requirement, the LCRs and the net revenue forecast
- **The ICAP Forecast requires the NYISO to identify Additional Units and Excluded Units**
 - The ISO determines if a Generator or UDR project that potentially could return to service or continue in operation would have a positive net present in accordance with ISO Procedures
- **An Examined Facility with a later MSP start date will have a Unit Net CONE that is inflated more than a similar Examined Facility whose MSP start date is earlier**

Various Iterations

- All Examined Facilities are modeled in the ICAP and Net E&AS Forecasts with their respective entry dates (currently, all assumed entry dates are the same)
- Multiple MSPs would require additional thought of how to test interactions between Examined Facility and Examined Facility Revenues
- Assumptions of Additional Units and Excluded Units may change based on the iterative process and interactions

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 February/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 or cduong@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



Questions?

MMU References and Links

- **MMU Comments regarding Proceeding on Motion of the Commission to Consider Resource Adequacy Matters (November 2019)**
 - <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={ACAA1552-C59E-4F19-8F31-AF5B9B251AF8}>
- **Class Year 2017 Report (July 2019)**
 - <https://www.nyiso.com/documents/20142/3025517/MMU-Report-CY17--BSM-Evaluation-July-2019.pdf>
- **State of the Market Report (May 2019)**
 - <https://www.nyiso.com/documents/20142/2223763/2018-State-of-the-Market-Report.pdf>