Buyer Side Mitigation: Overview

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CY2019 Buyer Side Mitigation Data Submission Information Session

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Session Objectives

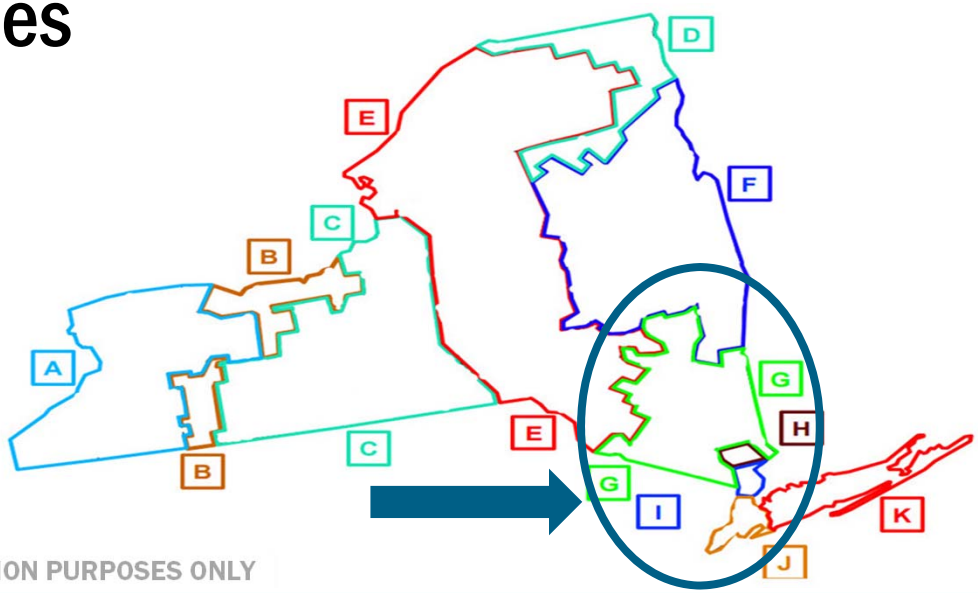
- **Why? – Lou Lombardi**
  - Purpose of buyer-side mitigation and implications
- **What? – Christina Duong**
  - Project data submission requirements
- **How? – David Parries**
  - Demo of ICAP reference system

Mitigation Measures

- **NYISO Market Power Mitigation Measures**
  - Implemented as instructed by FERC
  - Allow the ISO to mitigate the market effects of conduct that would substantially distort competitive outcomes
  - Avoid unnecessary interference with competitive price signals
- **Capacity market-specific measures**
  - Supplier-Side Mitigation
  - Buyer-Side Mitigation
- **Capacity market measures are specified in Market Services Tariff (MST) Att. H, Section 23.4.5**

Mitigated Capacity Zones

- Capacity market mitigation measures are applied in Mitigated Capacity Zones
  - NYC
  - G-J Locality



Buyer Side Mitigation Measures

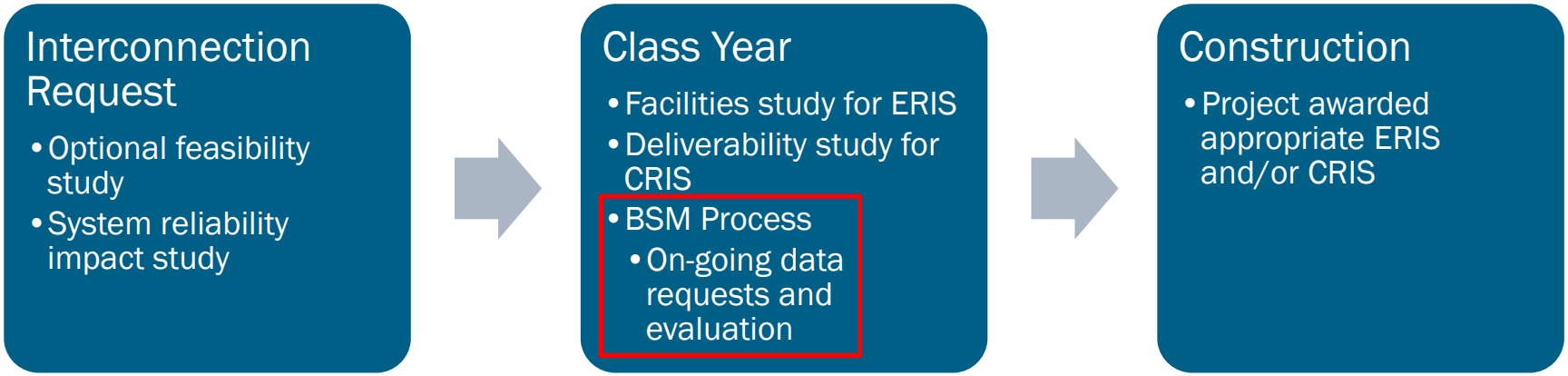
The purpose of Buyer Side Mitigation ("BSM") is to prevent uneconomic entry from artificially suppressing capacity prices.

Buyer-Side Mitigation Measures

- **Resources subject to the BSM rules are:**
  - Proposed generators seeking new CRIS or a transfer of CRIS in G-J
  - Proposed UDR projects (controllable HVDC line) with a terminus in G-J
  - Existing generators or UDR projects that seek to add CRIS either through Class Year process or a transfer ("Additional CRIS MWs")
- **Proposed new generators, UDR projects, and Additional CRIS MW are referred to as "Examined Facilities"**
  - Examined Facilities are examined in a two-part test to determine whether an offer floor is applicable
  - An examined facility may request a Competitive Entry Exemption, Renewable Exemption* or Self-Supply Exemption*
    - The tariff-specified deadline for requesting these exemptions has passed

*Pending at FERC

BSM Process is Concurrent with Class Year



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Unit Net CONE

- **CONE – Cost of New Entry**
- **Unit Net CONE ("UNC")**
  - Specific to an individual project
  - Unit Net CONE = Unit Costs - Unit Revenues
  - The capacity market price a project requires to break even
- **The NYISO uses your submitted data to calculate UNC which is required for performing exemption tests (Part A and Part B)**
  - Goal of this information session is to enable you to submit this data

Part B Test

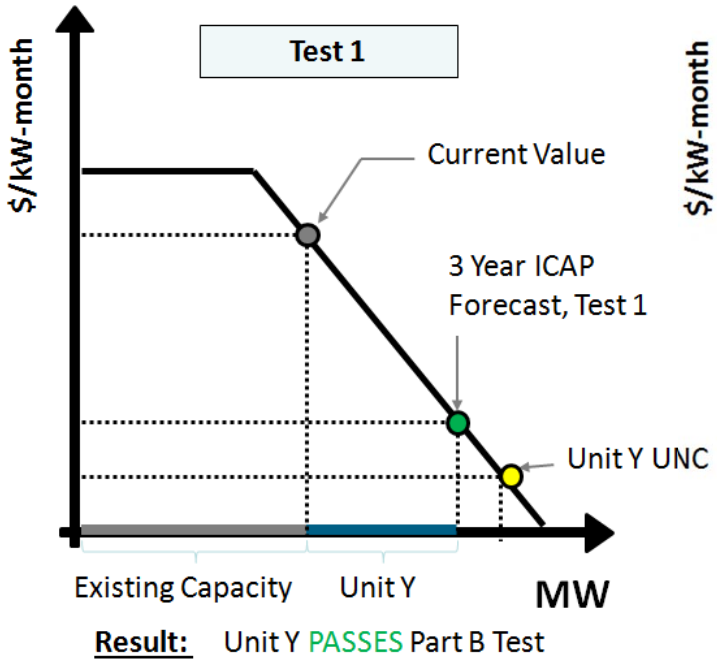
- "Are these MWs economic?"
- Performed first to avoid subversion by part A
  - Ensures most economic MWs are given the best chance
- Mitigation Study Period – 3 year window beginning 3 years from start of class year
  - 2022 – 2025 for class year 2019
- Projects tested in order of Unit Net CONE, starting with the lowest
  - Favors economically efficient projects
- Forecast price during study period must remain above UNC to pass

"Fail" in these examples means not exempt;
"Pass" means exempt

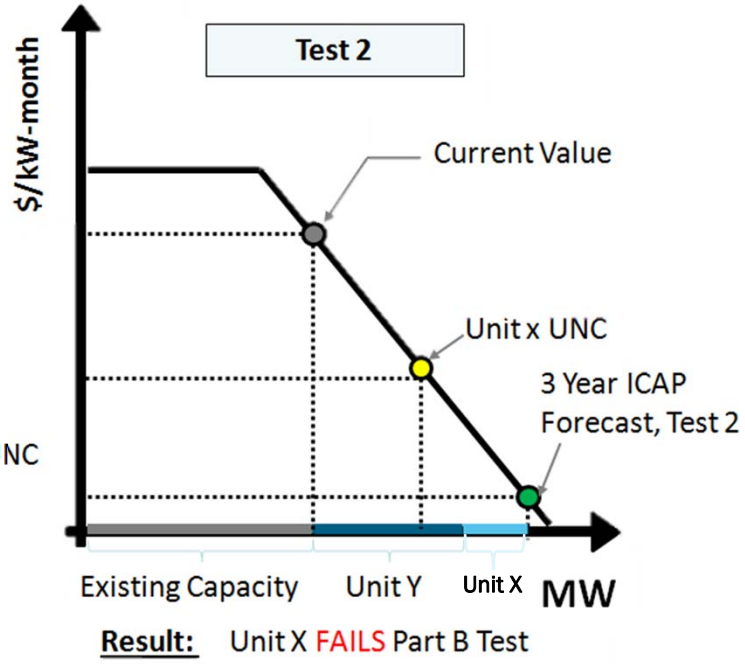
Example

Part B

Examined Facility	Size (MW)	Unit Net CONE ($/kW-yr)	3 Year ICAP Forecast ($/kW-yr)
Unit X	100	170	120
Unit Y	200	140	150



Result: Unit Y PASSES Part B Test



Result: Unit X FAILS Part B Test

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Part A Test

- "Are these MWs needed in the locality?"
- Performed second to avoid subverting intent of part B
  - Ensures most economic MWs are given the best chance
- Timeframe is 1st year of 3 year mitigation study period
  - 2022 - 2023 for class year 2019
- Projects tested in order of Unit Net CONE, starting with the lowest
  - Favors small and economically efficient projects

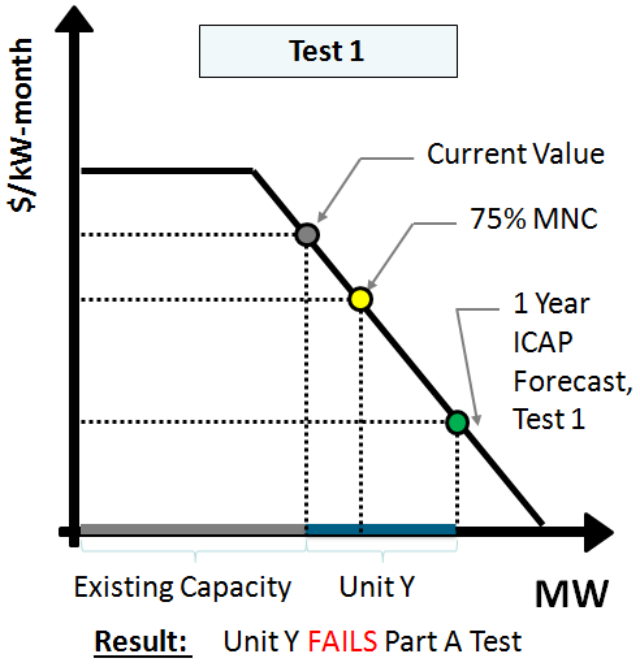
"Fail" in these examples means not exempt; "Pass" means exempt

Example

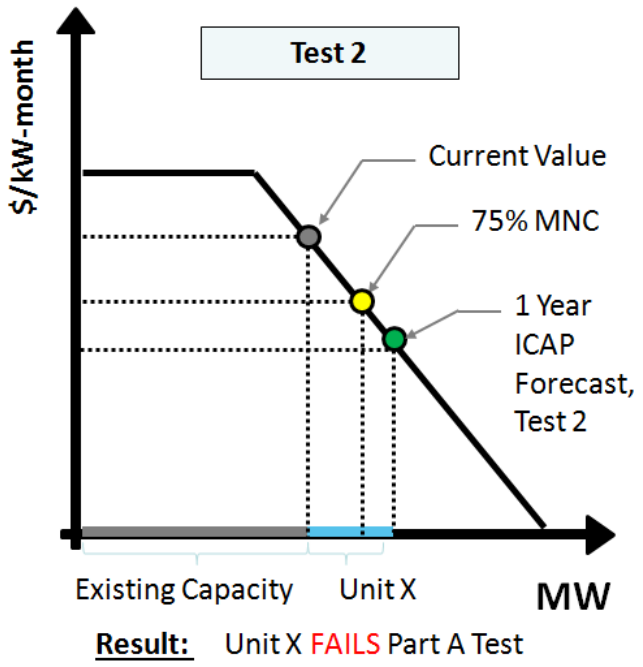
Part A

MNC – Mitigation Net CONE, based on simple cycle combustion turbine peaker

Examined Facility	Size (MW)	75% Mitigation Net CONE ($/kW-yr)	1 Year ICAP Forecast ($/kW-yr)
Unit X	100	200	175
Unit Y	200	200	165



Result: Unit Y FAILS Part A Test



Result: Unit X FAILS Part A Test

Exemptions

- **Some projects may have requested an exemption**
  - Competitive entry exemption
  - Renewable exemption
- **Projects that have requested these exemptions <u>are still required</u> to submit required data for the NYISO to calculate UNC**
  - BSM tests and exemptions are unrelated

Exempt Facility

- **What are the consequences of passing either Part A test or Part B test or receiving an exemption?**
  - Capacity market activity is unrestricted
    - Can enter bilateral contracts
    - Can participate in strip, monthly, spot auctions
    - Can offer capacity at $0, guaranteeing MW will clear

Non-Exempt Facility

- **What are the consequences of failing both Part A and Part B tests and not receiving any exemption?**
  - Can you still interconnect?
    - Yes, assuming other class year requirements are met
  - Capacity market activity restricted to spot auction
  - Offer floor will be applied

Offer Floor

- **Offer floor based on lower of:**
  - Annual Unit Net CONE
  - Default Net CONE (75% Mitigation Net CONE)
- **Calculated for first year of Mitigation Study Period**
  - Adjusted for seasons and inflation as necessary
- **If market conditions develop as expected**
  - MWs will not clear, project likely to lose money
- **If market conditions deviate from forecast**
  - Any MWs clear for 12 months (not necessarily consecutive)
    - Floor is removed on that MW quantity

Class Year 2019 Compared

- **Class Year 2015, zones G-J**
  - 5 developers, 6 projects
- **Class Year 2017, zones G-J**
  - 6 developers, 7 projects
- **Class Year 2019, zones G-J**
  - 22 developers, 64 projects
  - First time for energy storage

Questions?

We are here to help. Let us know if we can add anything.

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- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system

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