

## Winter Reliability Capacity Enhancements: Consumer Impact Analysis

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#### **ICAP/MIWG**

October 14, 2025 - Revised: Slides 42, 44, 47 and 49 added

### **Purpose**

 This presentation presents the Consumer Impact Analysis of the Winter Reliability Capacity Enhancements project





## Agenda

- Project Overview
- Consumer Impact Analysis
  - Reliability
  - Cost Impact and Market Efficiencies
  - Transparency
  - Environment and New Technology
- Next Steps





# **Project Overview**



## **Project Objective**

- The objective of this project is to develop potential changes to the Installed Capacity (ICAP) market that will support efficient market outcomes as the New York Control Area (NYCA) trends towards increasing winter resource adequacy risk.
  - NYISO efforts this year are focused on developing winter capacity requirements, seasonal demand curves, and seasonal elections.
- The 2025 project goal is Market Design Complete.



#### Summary of the Market Design Proposal\*

#### Seasonal Minimum ICAP Requirements

- Derive Winter ICAP Requirements from the available capacity in the winter peak month of the final Installed Reserve Margin (IRM) study case reflecting the New York State Reliability Council (NYSRC)-approved IRM.
- Calculate the Winter NYCA Minimum ICAP Requirement using the Winter NYCA forecasted peak load value.
- Calculate Winter Locational Minimum Installed Capacity Requirements (LCRs) using the applicable Locality non-coincident peak load forecast. The results of the LCR optimizer would be used to derive the Winter LCRs.
- Allocate the Winter Minimum ICAP Requirements to Transmission Districts and Load Serving Entities based on their forecasted load during the forecasted Winter Peak Load.



<sup>\*</sup> See the  $\underline{9/22/2025}$  ICAPWG and  $\underline{10/06/2025}$  ICAPWG presentations for more information.

### **Summary of Market Design Proposal\* (cont.)**

- Seasonal Elections for Unforced Capacity Deliverability Rights and External-to-Rest of State Deliverability Rights
  - On August 1 prior to the applicable Capability Year, Unforced Capacity Deliverability Rights (UDRs) and External-to-Rest of State Deliverability Rights (EDRs) holders will be required to submit distinct seasonal elections: one for the Summer Capability Period and one for the Winter Capability Period.
    - A UDR/ EDR shall have a "must offer" requirement (with no exemptions provided) for all elected MWs for all months in a season in which an UDR/EDR elects to participate.
  - All other election types (annual participation model, duration, and firm fuel) will continue to apply to the entire Capability Year.



<sup>\*</sup> See the 9/22/2025 ICAPWG and 10/06/2025 ICAPWG presentations for more information.

#### **Summary of Market Design Proposal\* (cont.)**

#### Demand Curve Enhancements

- No longer use the seasonal capacity availability ratios (winter-to-summer ratio (WSR) and summer-to-winter ratio) to determine the maximum clearing and reference point prices of the demand curves because distinct seasonal minimum ICAP Requirements directly represent the applicable levels of seasonal capacity, eliminating the need for seasonal capacity availability adjustments.
  - If the NYISO were to add the seasonal NYCA Minimum ICAP Requirements without removing the seasonal capacity availability ratios, the seasonal ICAP demand curves would be adjusted for seasonal ICAP differences twice.
- Transition to seasonal zero crossing points (ZCPs)
  - The NYISO is proposing to annually calculate the ZCP percentages for the winter ICAP Demand Curves, such that the resulting ICAP MW quantities of the ZCP for the summer and winter ICAP Demand Curves are equal
  - The NYISO proposes to adjust the ZCP percentages using the ratio of the expected Summer NYCA Minimum ICAP Requirements to Winter NYCA Minimum ICAP Requirements based on the IRM case reflecting the most recently NYSRC-approved assumptions matrix for the upcoming Capability Year



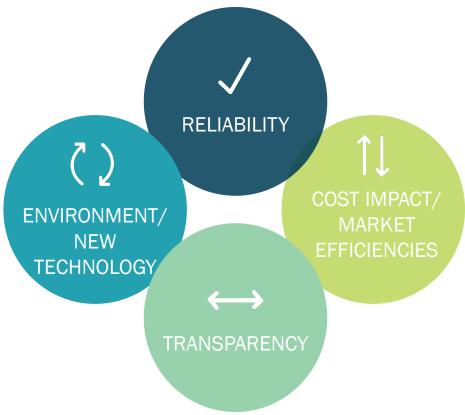
## **Consumer Impact Analysis**



**Consumer Impact Analysis** 

**Evaluation** 

**Areas** 





# Reliability



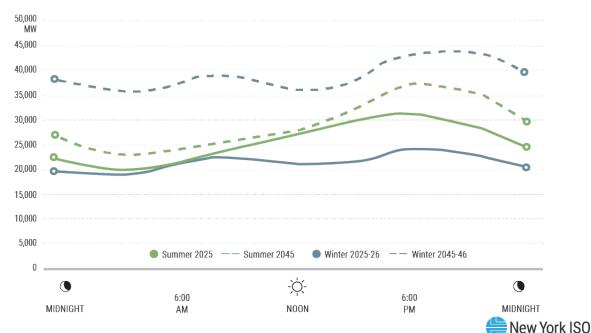
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#### High-Demand Patterns: Current & Forecasted



- Load shapes for high-demand days are forecasted to shift in the future.
  - Electrification will lead to increased overall demand.
  - Behind-the meter solar resources will likely push peak demand to later in the day.

#### **Actual & Forecasted Hourly Demand: Winter-Summer**



Source: 2025 Power Trends, The New York ISO Annual Grid and Market Report.

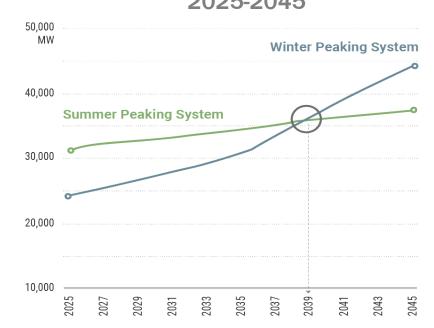
#### Demand Trends: 2025-2045 Summer & Winter

#### **Peak Demand Forecast**

RELIABILITY

- The NYISO winter and summer peak load forecasts suggest that electrification will drive a shift in NYCA from a summer-peaking system to a winter-peaking system.
- The timing and degree of this shift will be influenced by electric vehicle and heat pump technology adoption.

## Forecasted Electric Summer & Winter Peak Demand: 2025-2045





ource: 2025 Power Trends, The New York ISO Annual Grid and Market Report. See also 2025 Load and Capability Data (Gold Book) (NYCA forecasted to become a winter peaking system by 2038-39.)

# NYCA Forecasted Peak Demand Shift: Impact on ICAP Market



- As explained on the prior slides, the NYCA peak demand is forecasted to shift from summer to winter due to, among other things, the electrification of space heating and transportation to meet state and local clean energy goals.
  - Winter risk, as measured by loss of load expectation of no more than 0.1 days per year, may arise sooner due to factors such as fuel availability constraints.
- Although the ICAP market is seasonal, many processes and requirements in the ICAP market are annual and currently based on the summer peak.
- Therefore, the current ICAP market construct may no longer provide the appropriate incentives in the winter as resource adequacy risk increases during the winter. The Winter Reliability Capacity Enhancement project seeks to better align the market signals with reliability needs.





## **Market Focus**



#### Market Focus\*



- The market design changes proposed in the Winter Reliability Capacity Enhancements project may impact the following:
  - Resource adequacy The proposed market design changes will improve the resource availability assumptions in the resource adequacy assessment and the alignment between the capacity requirement model and the actual capacity market requirements.
  - ICAP market Wholesale capacity costs may be meaningfully different because the market design proposal changes the translation of the demand curve, produces distinct seasonal requirements, and introduces new offer rules for UDRs. In aggregate, these changes are expected to change both price and quantity of cleared Unforced Capacity (UCAP) supply.
  - Energy market There are no direct impacts on the energy market. However, changes to ICAP market incentives may lead to different ICAP auction outcomes that may change entry and exit decisions. In turn, this may cause secondary effects to the energy market. We will not be analyzing these secondary impacts, but we will qualitatively speak to them where possible.
- This Consumer Impact Analysis will focus on the cost impacts of the proposed market design changes on NYCA and Locality ICAP market consumers.
  - Note: It is not possible to model the changes to individual Load caused by the proposed allocation of the Winter Minimum ICAP Requirements to Transmission Districts and Load Serving Entities based on forecasted Load during forecasted winter peak Load.



<sup>\*</sup> See the  $\underline{9/22/2025}$  ICAPWG and  $\underline{10/06/2025}$  ICAPWG presentations for more information.

# Methodology



#### Assumptions and Approach (1/4)



- The Winter Reliability Capacity Enhancement project is expected to influence wholesale capacity prices, and the indicative procurement cost outcomes of the proposed seasonal design and evolving seasonal resource mix can be measured. Additional second-order effects are not modeled.
- Some of the impacts of these ICAP market design changes are not estimable over the long-term, but it is possible to quantify indicative short-run NYCA and Locality ICAP market impacts for the proposed market design using indicative IRM and LCRs.
  - The outcomes with and without the proposed market design changes are compared.
- Long-run impacts are not quantifiable because we would need to know how entry and exit would be impacted.



#### Assumptions and Approach (2/4)



- The following changes to the ICAP market are modeled:
  - Seasonal UDR/EDR Elections & Must-Offer Requirement;
  - Distinct Summer/ Winter Seasonal Minimum ICAP Requirements; and
  - Removal of the seasonal capacity availability adjustments and adoption of seasonal ZCPs in calculating the seasonal ICAP Demand Curve reference point prices
- Case 1 is representative of 2026-2027 NYCA system without the addition of Champlain Hudson Power Express (CHPE) or the retirement of the Gowanus and Narrows barge units.
  - Case 1 supply is established using the 2025 peak winter supply, adjusted for the generation additions and retirements (excluding the Gowanus and Narrows barge units)1 assumed in the 2026-2027 IRM Preliminary Base Case (PBC)2 and the implementation of Non-Firm Capacity Accreditation Factors (CAFs). Case 1 assumes annual ICAP market participation by all included UDR and EDR rights holders.
  - Seasonal Minimum ICAP Requirements are derived from Sensitivity Case 7a of the 2026-2027 IRM PBC.3 This
    case excludes the addition of CHPE and maintains the Gowanus and Narrows barge units that are not in IIFO.



<sup>&</sup>lt;sup>1</sup>Consistent with Sensitivity Case 7a, Gowanus 3-6, Narrows 2-1, and Narrows 2-7 are assumed to be in ICAP Ineligible Forced Outage (IIFO).

<sup>&</sup>lt;sup>2</sup> See the 2026-2027 IRM PBC Model Assumption Matrix

<sup>&</sup>lt;sup>3</sup> See 2026-2027 IRM Study Special Sensitivities, Slide 6.

#### Assumptions and Approach (3/4)



- Case 2 assumes a supply scenario more representative of the 2027-2028 Capability Year, when the NYISO targets implementing the proposed market design.
  - Case 2 assumes the addition of CHPE as a summer only resource, the retirements of the Gowanus and Narrows barge units, submitted deactivations, and expected non-offshore wind<sup>1</sup> additions as identified in NYISO's short-term reliability needs process and Q2 2025 STAR Report.
    - Seasonal Minimum ICAP Requirements are derived from the 2026-2027 IRM PBC.<sup>2</sup>
- Sensitivity cases were also conducted on Cases 1 and Case 2 to assess the impact of the proposed market design under alternative Import and Export assumptions.
  - We previously proposed a sensitivity looking at the change in wholesale procurement cost outcomes given different annual Non-Firm CAFs. However, a single IRM case produces a unique set of annual CAFs. Because alternative IRMs are not available, we are unable to perform this sensitivity.
  - Instead, these cases test the sensitivity of the Rest of State (ROS) capacity ICAP market procurement costs to varying levels of Imports and Exports.



<sup>&</sup>lt;sup>1</sup>Offshore wind additions were excluded from this Consumer Impact Analysis since their impact on the seasonal Minimum ICAP Requirements is not known at this time.

<sup>&</sup>lt;sup>2</sup>See 2026-2027 IRM PBC (Tan45), Slide 5

#### Assumptions and Approach (4/4)



- Cases 1 and 2 and their corresponding sensitivities use the <u>2025-2026 ICAP Demand Curve</u> <u>parameters</u> and the <u>2026-2027 Informational CAFs (iCAF) Set 1</u>.
  - The iCAFs are used to determine the ICAP to UCAP translation factors and UCAP available.
- All cases use Minimum ICAP Requirements derived from Tan45 IRM cases.
  - At this time, seasonal transmission security limits are not available to derive indicative LCRs using the LCR optimizer.
- Summer consumer procurement cost impacts are not expected to change based on the proposed market design and therefore are not shown in this Consumer Impact Analysis.



# Analysis



#### Case 1: 2026-2027 Supply Scenario



- In Case 1, the proposed market design lowers consumer procurement costs in all capacity zones
  - In this case, the Winter Minimum ICAP
     Requirements are higher than the Summer
     Minimum ICAP Requirements in all capacity
     zones
  - All else equal, a higher Winter Minimum ICAP
    Requirement would increase costs, but the
    removal of the WSR and adoption of
    seasonal ZCPs decrease costs, yielding a net
    decrease in costs for all capacity zones.
  - NYCA ICAP market procurement costs decrease by 15%.

Case 1: Average Winter Month ICAP Market
Procurement Costs







#### Case 2: 2027-2028 Supply Scenario

- In Case 2, the proposed market design lowers NYCA procurement costs, but the Long Island Locality costs increase.
  - The Winter Minimum ICAP Requirements are lower than the Summer Minimum ICAP Requirements in all capacity zones except for the Long Island Locality.
    - Lower Winter Minimum ICAP Requirements lead to lower procurement costs in all capacity zones, except the Long Island Locality.
    - Under the proposed market design, Long Island Locality capacity prices increase due to separation from ROS, which increases procurement costs. Under the status quo design, Long Island Locality prices are set by ROS.
  - NYCA ICAP market procurement costs decrease by 45%.

Case 2: Average Winter Month ICAP Market
Procurement Costs





## Sensitivities: Net Imports/ Exports



- Sensitivities A and B evaluate ROS market procurement costs under varying Import and Export levels
  - We focus on ROS because it is directly impacted by Import and Export assumptions.
  - Sensitivity A was conducted using the assumptions of Case 1, and Sensitivity B was conducted using the assumptions of Case 2
- Winter net Imports/Exports are changed to the maximum and minimum historic levels from the past three Winter Capability Periods.
  - Since Imports and Exports can vary in magnitude across and within the Winter Capability Period, these sensitivities shows the range of potential consumer impacts from month to month and year to year.

#### Findings:

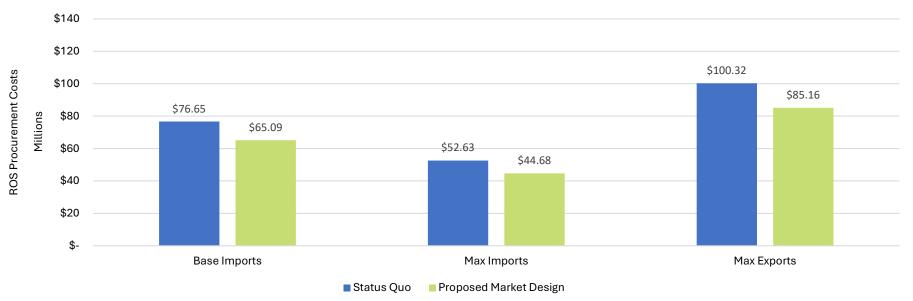
- Maximizing net Imports to the highest historic values decreases modeled procurement costs because additional MW are offered in the Spot Market Auction, causing market clearing prices to decrease and decreasing the consumer savings of the proposed market design.
- Maximizing net Exports to the highest historic values increases modeled procurement costs because fewer MW
  are offered in the Spot Market Auction, causing market clearing prices to increase. However, the proposed
  market design still provides consumer savings.





#### Sensitivity A (Case 1) – Results

#### Sensitivity A: Average Winter Month ICAP Market Procurement Costs (ROS)

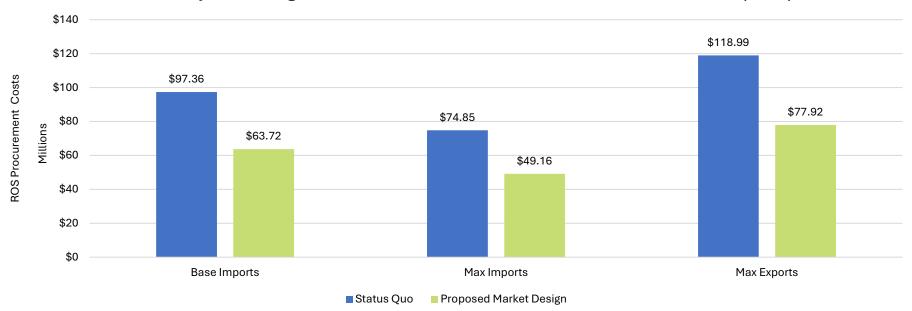






#### Sensitivity B (Case 2) – Results

#### Sensitivity B: Average Winter Month ICAP Market Procurement Costs (ROS)







## **Market Efficiency**

- The seasonal ICAP market design proposal is likely to improve market efficiency.
  - Seasonal Minimum ICAP Requirements more accurately represent future NYCA system needs in upcoming Spot Market Auctions, which may result in more accurate price signals and lower procurement costs.
  - A seasonal Minimum ICAP Requirement structure may offer superior and effective price signals, obligations, and incentives as NYCA winter resource adequacy risk increases.
  - Proxy unit revenue sufficiency is maintained.



## **Transparency**



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### **Transparency**

- A seasonal ICAP market construct may increase market transparency:
  - Providing better seasonal pricing signals to meet seasonal risks
  - Aligning seasonal Minimum ICAP requirements with capacity modeled in the resource adequacy assessment, including different seasonal elections
  - Aligning Level of Excess with seasonal peak (as opposed to summer peak) and removing seasonal capacity availability ratios from setting seasonal maximum market clearing prices and reference point prices of the seasonal demand curves.
- The proposed seasonal ICAP market design will extend the transparency of existing annual parameters into corresponding seasonal parameters.





## **Transparency – Price Signals**

- The seasonal ICAP market construct may offer superior price signals for market entry and exit.
  - As winter resource adequacy risk increases, solving for seasonal Minimum ICAP Requirements may provide price signals that reflect distinct seasonal risk contributions.



# **Environment and New Technology**







#### Environment:

No environmental impacts have been identified at this time.

#### New Technology:

- A seasonal ICAP market construct may increase the potential profitability for new technologies capable of providing capacity when needed for reliability.
- Consumers may pay less for resources whose capabilities are not aligned with reliability needs.
- Therefore, a seasonal ICAP market construct should provide the correct incentive for new resources.



# **Next Steps**



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### **Next Steps**

- The NYISO is currently targeting seeking approval of the proposed tariff revisions related to the Winter Reliability Enhancements project at 11/12/2025 Business Issues Committee (BIC).
- For any questions or feedback, please email nbouchez@nyiso.com



RELIABILITY

### **Appendices**



## Appendix 1 - Previous Winter Reliability Capacity Enhancements Presentations

Date	Working Group	Discussion Points and Links to Materials
January 30, 2025	ICAPWG	2025 Winter Reliability Capacity Enhancements: Project Kick-off https://www.nyiso.com/documents/20142/49408264/04%202025%20Winter%20Reliability%20Kick-off%20Presentation.pdf/
April 1, 2025	ICAPWG	Winter Reliability Capacity Enhancements: Winter Requirements <a href="https://www.nyiso.com/documents/20142/50614388/2025%20Winter%20Reliability%20Capacity%20Enhancements%20April%201%20ICAPWG%20(1).pdf/">https://www.nyiso.com/documents/20142/50614388/2025%20Winter%20Reliability%20Capacity%20Enhancements%20April%201%20ICAPWG%20(1).pdf/</a>
April 9, 2025	ICAPWG	Winter Reliability Capacity Enhancements: Seasonal Elections <a href="https://www.nyiso.com/documents/20142/50769536/2025%20Winter%20Reliability%20-%20Seasonal%20Elections%204.9.25%20Final.pdf/">https://www.nyiso.com/documents/20142/50769536/2025%20Winter%20Reliability%20-%20Seasonal%20Elections%204.9.25%20Final.pdf/</a>
May 5, 2025	ICAPWG	Winter Reliability Capacity Enhancements: Existing Annual Capacity Accreditation Factor Methodology <a href="https://www.nyiso.com/documents/20142/51249988/Winter%20Reliability%20-%20Annual%20CAF%20Methodology%205.5.25%20-%20Final.pdf/">https://www.nyiso.com/documents/20142/51249988/Winter%20Reliability%20-%20Annual%20CAF%20Methodology%205.5.25%20-%20Final.pdf/</a>
May 20, 2025	ICAPWG	2025 Winter Reliability Capacity Enhancements: Demand Curves Review <a href="https://www.nyiso.com/documents/20142/51501157/Winter%20Reliability%20-%20Demand%20Curves%2052025%20icap.pdf/">https://www.nyiso.com/documents/20142/51501157/Winter%20Reliability%20-%20Demand%20Curves%2052025%20icap.pdf/</a>
July 29, 2025	ICAPWG	Winter Reliability Capacity Enhancements: Concept Proposal <a href="https://www.nyiso.com/documents/20142/52778669/2025%20Winter%20Reliability%20-%20July%2029%20ICAPWG%20MDC_Final.1.pdf/">https://www.nyiso.com/documents/20142/52778669/2025%20Winter%20Reliability%20-%20July%2029%20ICAPWG%20MDC_Final.1.pdf/</a>
August 5, 2025	ICAPWG	Winter Reliability Capacity Enhancements: Proposed Consumer Impact Analysis Methodology <a href="https://www.nyiso.com/documents/20142/52908106/2025%20Winter%20Reliability%20-%20CIA%20Methodology%20FOR%20APPROVAL%2007302025.pdf/">https://www.nyiso.com/documents/20142/52908106/2025%20Winter%20Reliability%20-%20CIA%20Methodology%20FOR%20APPROVAL%2007302025.pdf/</a>

## Appendix 1 - Previous Winter Reliability Capacity Enhancements Presentations (Cont.)

Date	Working Group	Discussion Points and Links to Materials
August 19, 2025	ICAPWG	Winter Reliability Capacity Enhancements: Proposed Demand Curve Changes <a href="https://www.nyiso.com/documents/20142/53169595/Winter%20Reliability%20-%20Proposed%20Demand%20Curve%20Changes%20Final.pdf/">https://www.nyiso.com/documents/20142/53169595/Winter%20Reliability%20-%20Proposed%20Demand%20Curve%20Changes%20Final.pdf/</a>
August 19, 2025	ICAPWG	Winter Reliability Capacity Enhancements: Analysis of Seasonal Capacity Accreditation Factors <a href="https://www.nyiso.com/documents/20142/53169595/2025%20Winter%20Reliability%20-%20August%2019%20ICAPWG_CAF%20Analysis.pdf/">https://www.nyiso.com/documents/20142/53169595/2025%20Winter%20Reliability%20-%20August%2019%20ICAPWG_CAF%20Analysis.pdf/</a>
September 22, 2025	ICAPWG	Winter Reliability Capacity Enhancements: Final Market Design Concept Proposal <a href="https://www.nyiso.com/documents/20142/53966122/2025%20Winter%20Reliability%20-%20September%2022%20Final%20MDC%20-%20Final_2.pdf/8f2d7576-1985-833a-a3c5-55e6046ef0a3">https://www.nyiso.com/documents/20142/53966122/2025%20Winter%20Reliability%20-%20September%2022%20Final%20MDC%20-%20Final_2.pdf/8f2d7576-1985-833a-a3c5-55e6046ef0a3</a>
October 6, 2025	ICAPWG	Winter Reliability Capacity Enhancements: Market Design Update and Review of Proposed Tariff Revision <a href="https://www.nyiso.com/documents/20142/54258786/2025%20Winter%20Reliability%20-%200ctober%2006%20ICAPWG.pdf/e575228a-5e3d-d9c7-1d36-573c182878b4">https://www.nyiso.com/documents/20142/54258786/2025%20Winter%20Reliability%20-%200ctober%2006%20ICAPWG.pdf/e575228a-5e3d-d9c7-1d36-573c182878b4</a>



### **Appendix 2 - Assumptions**



### **Case 1 Assumptions**

NYISO Modeling Inputs	Case 1 Assumption
SCR ICAP/ UCAP	Monthly UCAP Reports  January 2025 for Winter  *Installed Capacity Market (ICAP) – NYISO → Monthly Report → Monthly UCAP Reports → 2025
CHPE	Not available
Firm Fuel Availability	Assumed <b>12,025 MW</b> UCAP of Firm Fuel Generators in Winter in Zones F-K <u>*Fuel Availability Constraints Modeling Phase 2</u> → Slide 9
CAFs	All CAF values are equal to 2026-2027 Informational CAFs (iCAF) Set 1
Import/ Exports	Average from the 2024-2025 Winter Capability Period
Seasonal Supply Stack (+) Assumed Additions (-) Assumed Retirements	Winter Supply assumed equal to January 2025 supply Retirements and additions identified from 2026-2027 IRM PBC Model Assumption Matrix
ICAP Requirement	ICAP Requirements based on Sensitivity Case 7a of the 2026-2027 IRM PBC
Demand Curve Assumptions	The ICAP Demand Curves use the existing 2025-2026 Capability Year Demand Curve parameters. When calculating reference point prices for the proposed market design, the WSR is removed from the calculation, and a separate winter level of excess and winter ZCP is calculated based on the winter ICAP Requirement of the case.
Peak Load Forecast	2026-2027 Capability Year peak load forecasts from the 2025 Gold Book

#### Case 1 Assumption Details - New Slide

### Winter Minimum ICAP Requirements (MW)

# NYCA GHI NYC LI Status Quo 40,499 13,356 8,540 5,524 Proposed Market Design 41,259 14,039 9,019 5,912

	NYCA	GHI	NYC	LI
Status Quo	\$4.33	\$5.29	\$14.64	\$8.78
Proposed Market Design	\$3.10	\$3.48	\$10.10	\$4.32



#### **Case 2 Assumptions**

NYISO Modeling Inputs	Case 2 Assumptions
ICAP Requirement	ICAP Requirements based on 2026-2027 IRM PBC
CHPE	Assumed available at 1250 in the summer for the setting of the Minimum ICAP Requirements. Assumed not available in the winter.
Seasonal Supply Stack (+) Assumed Additions (-) Assumed Retirements	Winter Supply assumed equal to January 2025 supply Retirements identified from:  1) Submitted deactivations in NYISO's Short-Term Reliability process. Short-Term Reliability Process - NYISO → Generator Deactivation Notices → Planned Retirement Notices 2) Q2 2025 Short-Term Assessments of Reliability (STAR) Report Short-Term Reliability Process - NYISO → Quarterly STAR Report Additions identified from: 1) Q2 2025 STAR Report Short-Term Reliability Process - NYISO → Quarterly STAR Report *Offshore wind additions were excluded from the analysis since their impact on the Minimum ICAP Requirements are not known at this time.
Demand Curve Assumptions	The ICAP Demand Curves use the existing 2025-2026 Capability Year Demand Curve parameters. When calculating reference point prices for the proposed market design, the WSR is removed from the calculation, and a separate winter level of excess and winter ZCP is calculated based on the winter Minimum ICAP Requirement of the case.
Peak Load Forecast	2027-2028 Capability Year peak load forecasts from the 2025 Gold Book

All other assumptions are unchanged from Case 1



#### Case 2 Assumption Details - New Slide

## Winter Minimum ICAP Requirements (MW)

# NYCA GHI NYC LI Status Quo 41,092 13,768 8,914 5,445 Proposed Market Design 40,693 13,008 7,903 5,963

	NYCA	GHI	NYC	LI
Status Quo	\$4.33	\$5.29	\$14.64	\$8.78
Proposed Market Design	\$3.06	\$3.18	\$8.87	\$5.10



#### **Sensitivity Assumptions**

	Base Net Exports	Max Net Imports Scenario	Max Net Exports Scenario
Imports MW	627.3 MW	1,384.5 MW	66.3 MW
Exports MW	(841.6) MW	(525.4) MW	(1,568.5) MW
Net Imports (Exports) MW	(214.3) MW	823.1 MW	(1,502.2) MW

All other assumptions were left unchanged from the Case 1 or Case 2, respectively.



#### Appendix 3 – Status Quo ZCP

- The market design proposal is to transition to seasonal ZCPs with distinct ZCP percentages
  - Cases 1 and 2 include the impact of this change, which retains the current ZCP
    percentages for the summer ICAP Demand Curves and calculates separate winter
    ZCP percentages by multiplying the current ZCP percentages by a ratio of the
    expected Summer Minimum ICAP Requirement to Winter Minimum ICAP
    Requirement.
- Cases 3 and 4 show the impact of the proposed market design changes with the status quo ZCP percentages applied in both seasons
  - In these cases, the current ZCP percentages are applied to both the summer and winter ICAP Demand Curves, but all other assumptions are unchanged from Cases 1 and 2 respectively.



#### Case 3 Assumption Details - New Slide

## Winter Minimum ICAP Requirements (MW)

# NYCA GHI NYC LI Status Quo 40,499 13,356 8,540 5,524 Proposed Market Design 41,259 14,039 9,019 5,912

	NYCA	GHI	NYC	LI
Status Quo	\$4.33	\$5.29	\$14.64	\$8.78
Proposed Market Design	\$3.07	\$3.27	\$9.35	\$3.56

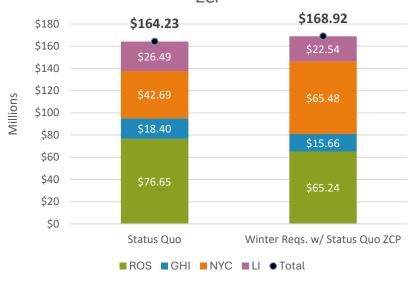


#### Case 3: 2026-2027 Supply Scenario



- In Case 3, adopting Winter Minimum ICAP requirements while retaining status quo ZCP percentages lowers consumer procurement costs in all capacity zones except for the New York City (NYC) Locality.
  - The Winter Minimum ICAP Requirements are higher than the Summer Minimum ICAP Requirements in all capacity zones
  - All else equal, a higher Winter Minimum ICAP
    Requirement would increase costs, but the removal
    of the WSR decreases costs in all capacity zones
    except the NYC Locality
    - Increased NYC Winter Minimum ICAP Requirements causes price separation that is not offset by removal of the WSR.
    - The NYC Locality prices are set by ROS under status quo design.
  - NYCA ICAP market procurement costs increase by 3%.

Case 3: Average Winter Month Capacity
Market Procurement Costs w/ Status Quo
ZCP





#### Case 4 Assumption Details - New Slide

## Winter Minimum ICAP Requirements (MW)

# NYCA GHI NYC LI Status Quo 41,092 13,768 8,914 5,445 Proposed Market Design 40,693 13,008 7,903 5,963

	NYCA	GHI	NYC	LI
Status Quo	\$4.33	\$5.29	\$14.64	\$8.78
Proposed Market Design	\$3.07	\$3.29	\$9.53	\$3.56

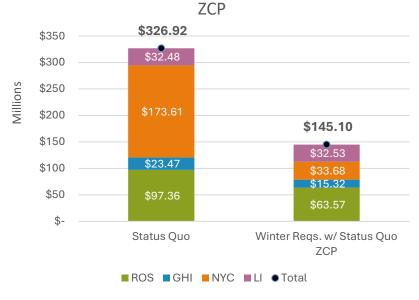


#### Case 4: 2027-2028 Supply Scenario



- In Case 4, adopting Winter Minimum ICAP Requirements while retaining status quo ZCP percentages lowers NYCA procurement costs but increases the Long Island Locality costs.
  - The Winter Minimum ICAP Requirements are lower than the Summer Minimum ICAP Requirements in all capacity zones except in the Long Island Locality.
    - Lower Winter Minimum ICAP Requirements lead to lower procurement costs in all capacity zones except the Long Island Locality.
    - Under the seasonal design, the Long Island Locality capacity price increases due to separation from ROS that increases procurement costs.
  - NYCA ICAP market procurement costs decrease by 56%.

Case 4: Average Winter Month Capacity Market Procurement Costs w/ Status Quo





#### **Our Mission and Vision**



#### **Mission**

Ensure power system reliability and competitive markets for New York in a clean energy future



#### **Vision**

Working together with stakeholders to build the cleanest, most reliable electric system in the nation



