MMU Comments on NYISO's 2023-2032 Comprehensive Reliability Plan

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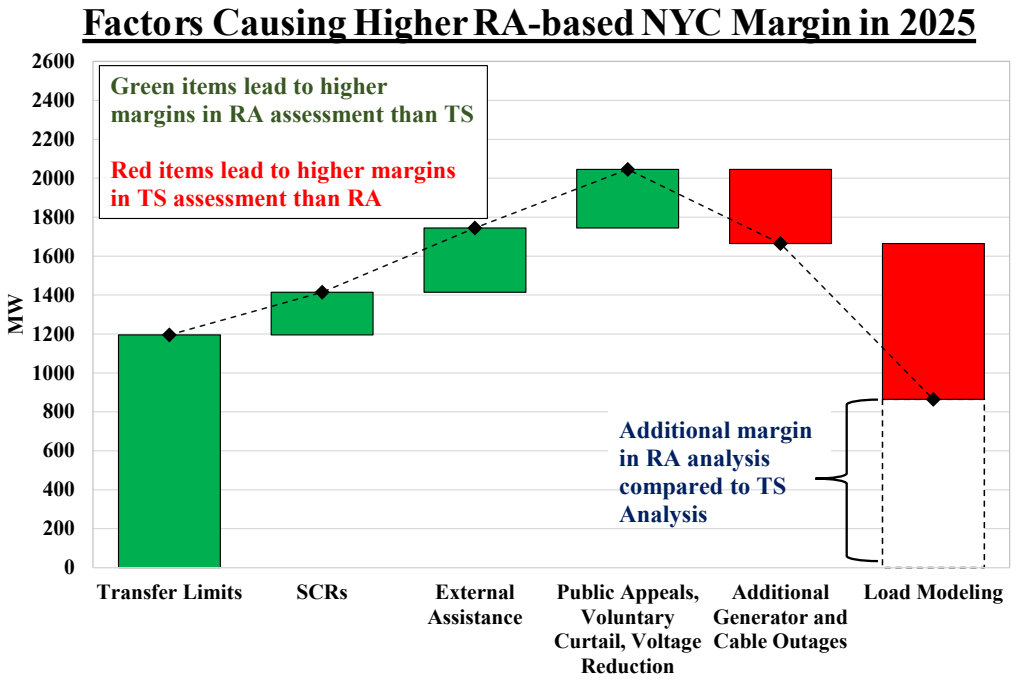
Introduction

- The tariff requires the MMU to comment on the CRP regarding whether the market rule changes are needed to address a failure of the ISO's markets.
- The presentation provides an overview of our comments:
  - ✓ Discussion of key findings and conclusions in the CRP
  - ✓ Comparison of capacity requirements resulting from:
    - Resource adequacy criteria
    - Transmission security criteria
  - ✓ Discussion of incentives for resources that provide less value towards transmission security (than resource adequacy)
  - ✓ Recommendations related to transmission security assessment and market design

Maintaining Reliability in the Energy Transition

- The CRP finds:
  - ✓ Transmission security-driven reliability needs starting in 2025
  - ✓ Risk of delayed new entry
  - ✓ Shift to winter reliability risk
  - ✓ Risk of extreme weather
- Efficient market incentives are critical to successful transition
- Capacity margins are much smaller in transmission security vs. resource adequacy assessment. For example, in 2026:
  - ✓ NYC margin is 1.3 GW lower,
  - ✓ Long Island margin is 330 MW lower, and
  - ✓ Statewide margin is 220 MW lower.

Transmission Security Assessments Find Smaller Capacity Margins than Resource Adequacy



- Key factors:
  - ✓ Transfer limits
  - ✓ EOPs
  - ✓ Extreme loads
- Differences will rise because of:
  - ✓ Entry of HVDCs, wind, solar, ESRs
  - ✓ Proposed use of 90/10 load forecast in TS

- Market design considerations:
  - ✓ ICAP requirements based on RA and TS
  - ✓ ICAP accreditation based on RA only

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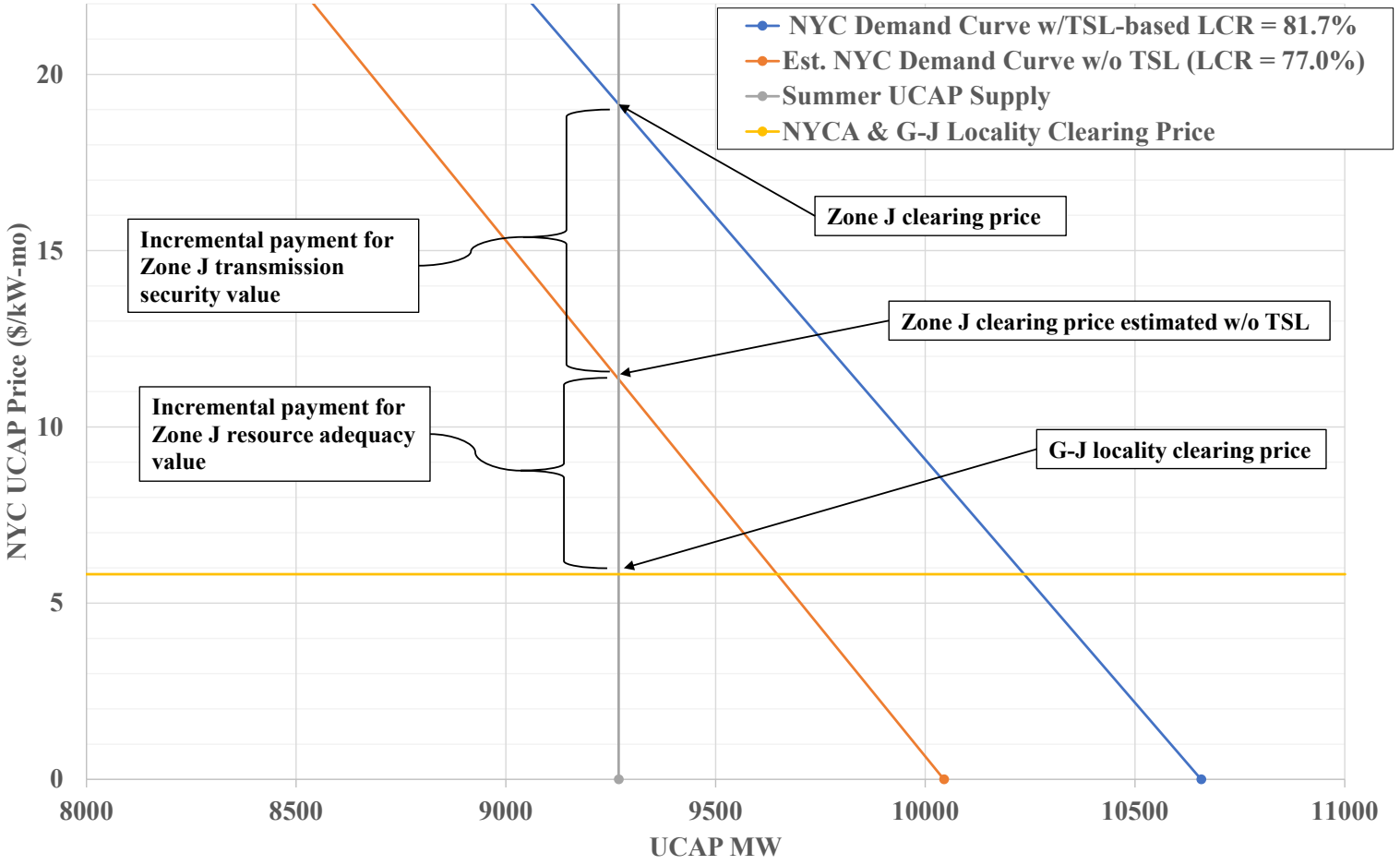
Capacity Accreditation Should Consider Transmission Security Criteria

- Capacity market enhancements are needed to provide efficient investment incentives
  - ✓ LCRs are set considering Transmission Security Limits
  - ✓ However, capacity accreditation is based on RA only
- Problem: Capacity prices will be efficient, but some resources will have inappropriate investment incentives
- SOM Recommendation #2022-1: Compensate resources based on requirements they contribute to meeting
  - ✓ The following slide illustrates how this could work for an example where the NYC LCR is set by the TSL floor

Recommended Approach to Accreditation Considering Transmission Security



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Illustrative Settlements under Recommended Accreditation Approach

- SCRs – Would receive $11.50/kW-mo of UCAP based on the RA value of Zone J resources.
- 1000 MW generator – Assuming third-largest contingency is 720 MW and EFORd is 5 percent, this resource would be paid:
  - ✓ 720 MW of UCAP at Zone J price of $19/kW-mo; and
  - ✓ 230 MW of UCAP at $11.50/kW-mo, the Zone J price for resources that do not contribute to transmission security.
- 800 MW offshore wind – Assuming an MRI of 25% under soon-to-be implemented accreditation rules, it would be paid:
  - ✓ 200 MW of UCAP (based on 25% MRI for 800 MW ICAP) at $11.50/kW-mo price for resource adequacy in Zone J; and
  - ✓ 80 MW of UCAP (based on 10% contribution) at $7.50/kW-mo component for transmission security in Zone J.

Conclusions and Recommendations

- NYISO's markets are generally well-designed, but enhancements are needed to manage the resource mix transition
- Bulk Power System reliability needs are increasingly driven by transmission security criteria (rather than resource adequacy)
- We recommend NYISO:
  - ✓ *Develop additional capacity accreditation reforms to account for reliability needs that are driven by transmission security criteria.*
  - ✓ *Provide clear justifications for key assumptions in its transmission security assessments to ensure clarity related to factors affecting capacity compensation.*