



Mitigation Review Analysis

Scope, Method, and Inputs

August 9, 2021



Today:

- Background
- Overview of Assignment
- Modeling Structure and Inputs
- Next Steps



Background



Buyer Side Mitigation

- NYISO discussed potential BSM reforms in a July 13, 2021 presentation to ICAPWG:
 - Proposed rules would extend comprehensive mitigation review (CMR) to resource types that align with New York State's CLCPA mandates. These include:
 - Solar, wind, and run-of-river hydro
 - Energy storage
 - Demand response (participating as SCR or DER)
- NYISO has hired Analysis Group to analyze the potential impacts of BSM reforms on the competitiveness of the capacity market, and the ability of wholesale markets to ensure sufficient incentives for the development of resources needed for reliability



Overview of Assignment



Overview of Assignment

- Analysis Group (AG) task:
 - Assess NYISO capacity market outcomes in a forward-looking period under alternate BSM rules
 - Model capacity supply and demand curve in periods of interest, and characterize capacity market outcomes
 - Provide a report documenting the approach and findings
- Conditions to review:
 - Model capacity market outcomes for three representative years 2022, 2026, and 2031 to assess impact of BSM changes over a ten-year period
 - Incorporate expected CLCPA resources in a manner consistent with proposed BSM rule changes
 - Use demand and resource conditions and forecasts consistent with recent NYISO analyses



Modeling Structure and Inputs



Model Overview

- Modeling Years: 2022, 2026, 2031
- Four nested capacity zones: NYCA, G-J Locality, Zone J, Zone K
- Model will include summer and winter supply and demand curves by zone, along with crossing points and prices
- Main data sources:
 - AG's 2020 Demand Curve Reset Study
 - NYISO and other public data on predicted loads and capacity retirements
 - Brattle Group's 2020 Grid in Transition study on the evolution of New York's power system through 2040

Model Overview

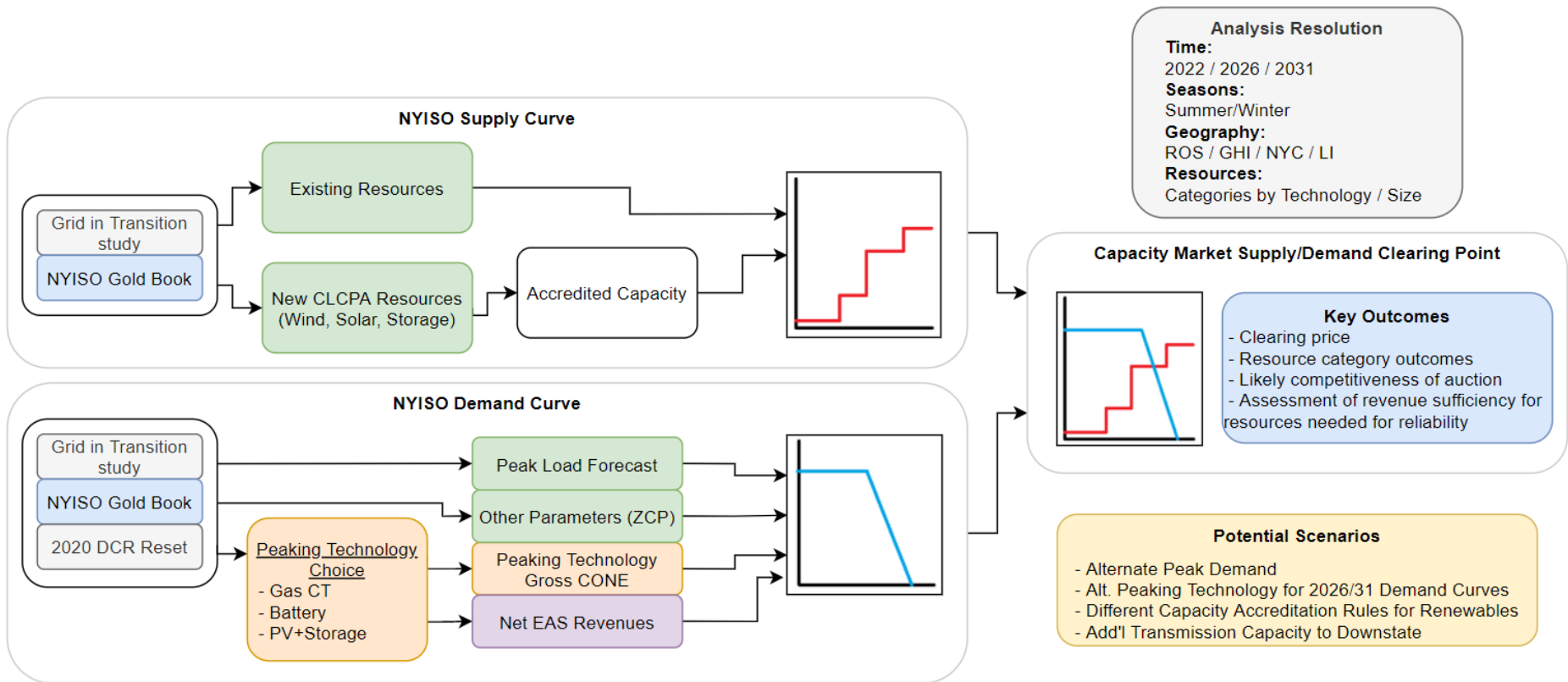
- Supply Curve Parameters
 - Not a specific model of individual resources
 - Instead, construct supply curve using representative going-forward costs by resource category, consistent with categories and data used in Grid in Transition study
 - Exempt units added to supply curves based on expected timelines and quantities consistent with CLCPA
- Demand Curve Parameters
 - High-level representation, not as granular as DCR process
 - Starting point will be the 2020 Demand Curve Reset
 - Curves will then be adjusted based on a limited set of factors:
 - Expected changes in demand (ICR/LCR)
 - Estimated decline in peaking technology costs
 - Estimate of net EAS revenues
- Key model outcomes for each modeled year:
 - Identification of price and resource category outcomes
 - Likely competitiveness of auction
 - Assessment of revenue sufficiency for resources needed for reliability



Potential Scenarios and Sensitivities

- Capacity market outcomes may be evaluated under different resource/market scenarios
 - Variations in peak demand
 - Alternative demand curve peaking technologies in 2026/2031
 - Additional transmission capacity to downstate zones

Overview of Analytic Method





Next Steps



Next Steps

- ICAPWG presentation on findings September 9
- Final Report



Contact

Paul Hibbard, Principal
Paul.Hibbard@analysisgroup.com

Charles Wu, Manager
Charles.Wu@analysisgroup.com