New York ISO
Independent System Operator

LCR Optimizer Enhancements- Proposed Consumer Impact Analysis Methodology

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June 27, 2023, KCC

Agenda

- Background
- Objectives of the LCR Optimizer Enhancement Project
- Consumer Impact Analysis Evaluation Areas
- Cost Impact and Market Efficiency Methodology and Assumptions
- Next Steps

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Background

- Since 2019, the NYISO has utilized an economic optimization software ("LCR Optimizer") to establish the Locational Minimum Installed Capacity Requirements (LCRs) for NYC, LI and GJ Locality. The LCR Optimizer is designed to produce least cost LCRs while maintaining the NYSRC's final IRM and the corresponding Resource Adequacy criterion for Loss of Load Expectation (or LOLE).
- Since implementing the LCR Optimizer, multiple concerns have been raised regarding the year over year stability of the LCRs and the transparency of the optimization function.
- Re-examining this process and the methodology could lead to improvements in the stability and transparency of the LCRs.

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LCR Optimizer Enhancement Presentations

- February 7 ICAP/MIWG: LCR Optimizer Enhancements - Kickoff
- April 27 ICAP/MIWG: LCR Optimizer Enhancements - Update

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LCR Optimization Objectives and progress

LCR Optimizer Enhancement Objectives and Progress

- **Investigate the need for (and develop) the necessary modifications and enhancements to the LCR Optimizer to improve the stability and transparency of the LCRs.**
  - Review the appropriateness of the current objective function in the LCR Optimizer.
- **The NYISO is exploring a change in the objective function from minimizing total procurement costs to minimizing total production costs.**

Note that procedures for determining and applying TSL floor values in the LCR Optimization are not in scope for this project. (See April 27 2023 LCR Optimizer Enhancements – Update presentation)

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Consumer Impact Analysis Evaluation Areas

Methodology

- Using the MARS analysis will be looking at how using the new function (based on minimizing production costs) to look at the procurement costs for NYCA.
- Using the results from the revised LCR Optimizer (employing the new objective function), the analysis will compare the NYCA capacity procurement costs using the original and revised methods.
- This is part of the work that the NYISO has contracted with GE Energy Consulting.

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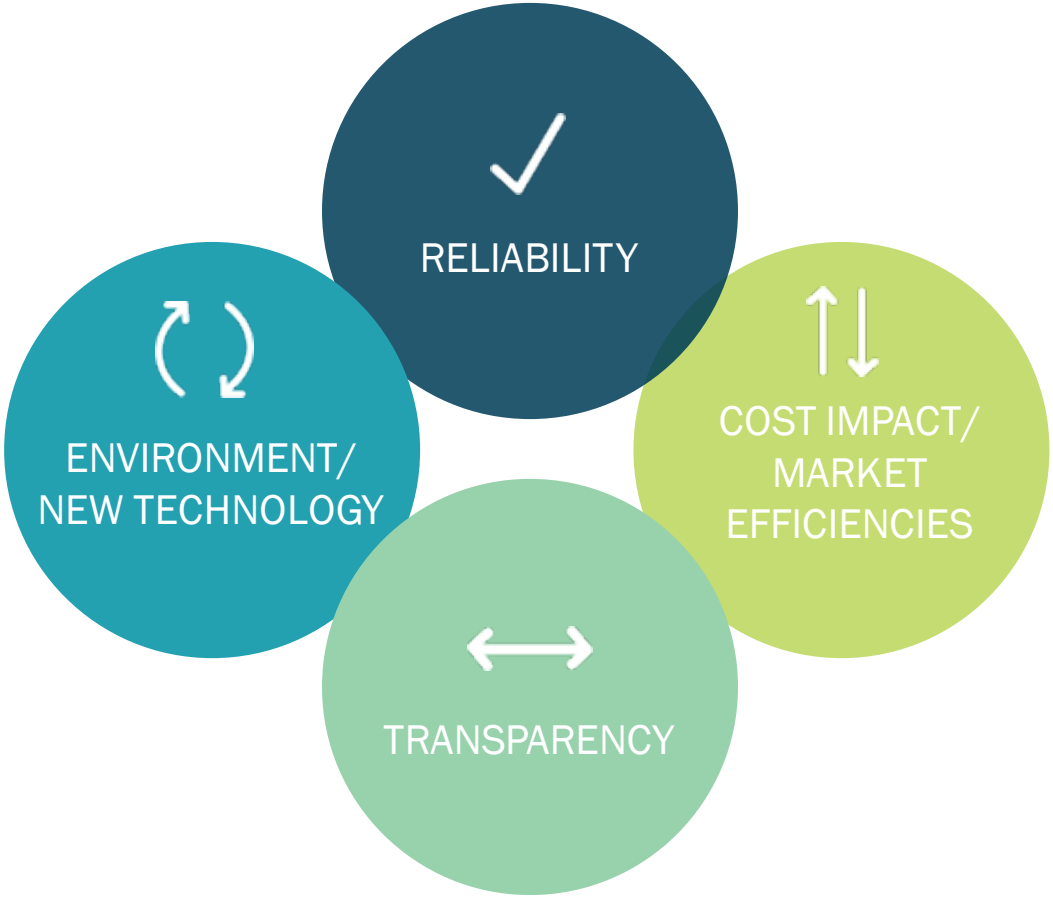

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Cost Impact/ Market Efficiencies- Methodology and Assumptions

Assumptions

- **Will be using the Final Base Case (FBC) for the 2023-2024 IRM study.**
  - See the NYCA IRM Requirement Study 2023-2024 Final Base Case (FBC) Model Assumptions Matrix for more information about FBC assumptions.
- **We will be running the analysis without TSL floors so that we don't have to separate the impact of TSL floors from the impact of the new function.**

Next Steps

Next Steps

- **July/August ICAP/MIWG**
  - Consumer Impact Analysis Presentation

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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

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Questions?