New York ISO
Independent System Operator

NYCA Peak Load Forecast and Minimum Unforced Capacity Requirements for LSEs

Ying Guo

Associate Resource Adequacy Analyst

LFTF

August 24, 2020

©COPYRIGHT NYISO 2020. ALL RIGHTS RESERVED

Background

- **The minimum capacity requirement (NYCA Minimum Unforced Capacity Requirement) is determined using the NYCA Peak Load Forecast, pursuant to 5.10 and 5.11 of the MST and ISO Procedures**
  - The NYCA Peak Load Forecast is determined using the prior calendar year's highest hourly actual Load in the NYCA then adjusted to "design conditions"
  - The minimum capacity requirement is then allocated among the individual LSEs
- **Each LSE's share of the minimum capacity requirement is determined pursuant to 5.11 of the MST**
  - Each LSE's share is determined by it's Load during the highest hourly actual Load in the NYCA (i.e., the hour used to determine the NYCA Peak Load Forecast)
  - The calculation does not contain any adjustments to account for LSE consumption patterns at "design conditions"
- **The NYISO expects ICAP market "design conditions" to occur on a non-Holiday weekday in July and August**
  - 80% of the annual highest coincident NYCA peak load hours has been observed in July and August

New York ISO

©COPYRIGHT NYISO 2020. ALL RIGHTS RESERVED

Concern with Current Method (MST 5.11)

- **Each LSE's share of the minimum capacity requirement is determined by it's consumption on the highest hourly actual Load in the NYCA, regardless of whether consumption on that hour is consistent with consumption at "design conditions"**
  - Consumption patterns when the highest hourly actual Load occurs outside the NYISO's "design conditions" may be very different than consumption patterns at "design conditions"
- **The highest actual Load in 2019 occurred on a Saturday in July**

New York ISO

©COPYRIGHT NYISO 2020. ALL RIGHTS RESERVED

Proposal and Required Tariff Changes

- **The proposed tariff revision would require the use of the highest NYCA Load hour occurring on a non-holiday weekday during July and August when calculating the NYCA Peak Load Forecast pursuant to sections 5.10 and 5.11 of the MST**
    - The change will ensure that each LSE's share of the minimum capacity requirement will be consistent with the "design conditions" used to calculate the minimum capacity requirement
    - The NYCA Peak Load Forecast will continue to be consistent with "design conditions"
- **Implementing this change in the tariff requires deleting the phrase "NYCA peak Load" and several other wording changes in MST sections 2, 5.10 and 5.11**

New York ISO

©COPYRIGHT NYISO 2020. ALL RIGHTS RESERVED

Insights

- **The change will not statistically change the NYCA Peak Load Forecast used to determine the minimum capacity requirement (NYCA Minimum Unforced Capacity Requirement) because the process today already aligns the peak load forecast with "design conditions"**
  - If the highest load hour occurs on a weekend or holiday then load is added to account for expected additional Load that would have occurred if the highest load hour had been a non-holiday weekday
  - Similarly, additional Load is added when the highest Load hour occurs outside the months of July and August to account for expected additional Load that would have occurred if the highest load hour had been in July or August
  - The above adjustments are part of the process of determining the Adjusted Actual Load
    - Other adjustments factor into this analysis as well. For example, if the temperature is higher than the design temperature then load is removed to account for the expected lower load that would have occurred if the highest load hour had taken place at the "design" temperature
- **The NYISO believes the change will ensure the incentive to reduce peak demand aligns with when our peak demand is expected to occur**

New York ISO

©COPYRIGHT NYISO 2020. ALL RIGHTS RESERVED

Timeline

- MC Approval - June 16th
- Board Approval – July
- FERC Filing – July 30th
- NYISO will likely request 60 days effective date (September)
- If FERC approves, the Tariff will be effective for 2021-2022 Capability Year

New York ISO

©COPYRIGHT NYISO 2020. ALL RIGHTS RESERVED

Questions?

New York ISO

© COPYRIGHT NYISO 2020. ALL RIGHTS RESERVED.

Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policymakers, stakeholders and investors in the power system

New York ISO

©COPYRIGHT NYISO 2020. ALL RIGHTS RESERVED