

# 1 Expanding Peak Hour Definition

## 1.1 Problem / Opportunity

The NYCA peak load hour is currently defined as the single hour within a Capability Year with the highest measured system load limited to weekdays during the months of July and August. The peak load is weather normalized, and a peak load forecast for the following year is generated by the NYISO in conjunction with the Transmission Owners. This peak load forecast is used for the IRM study and the ICAP market forecast and determines the total load obligation for each Transmission District.

Current practice dictates that the Transmission Owners share out their capacity obligation to their Load Serving Entities (LSEs) based on the measured share of load consumed by each LSE during the NYCA peak load hour. Using multiple peak and near-peak load hours (e.g. the top five or top ten load hours) to share out obligations within a Transmission District may improve this process and create more robustly defined and consistent LSE shares. Likewise, in the distribution network, as LSEs use measures of peak period(s) usage to assign capacity cost to their customers, it becomes imperative that those measurements are representative of the customers' capacity needs. Basing a customer's capacity needs on demand during a single hour or day can leave too much to chance and not accurately measure the capacity need. Using the peaks from multiple high load days would be more stable and more reflective of long run cost causation.

Currently, the NYCA peak hour is determined using net hourly load as measured on the system. However, it is worth considering whether peak load should be based entirely or in part on gross load, which may become more important as demand response and distributed energy resource penetration increases.

## 1.2 Project Objective(s) & Anticipated Deliverable(s)

In 2020 this project was adopted by market participants. Over the course of 2021, NYISO Staff presented at the ICAPWG/MIWG (February 25, 2021, March 25, 2021, May 4, 2021, June 3, 2021, June 30, 2021, and July 27, 2021). This resulted in a Market Design Concept Proposed, but the issue was not adopted for 2022. This project will continue from the Market Design Concept Proposed and determine what changes are needed in order to implement altering the way that capacity obligations are allocated to LSEs. Findings and resulting suggestions will be reported and discussed with stakeholders. The project deliverable will be Market Design Complete and proposal for deployment.

## 1.3 Project Justification

Many other jurisdictions consider more than a single hour when determining peak obligations for demand and resources. Given the upcoming changes planned for New York's grid, ensuring the determination of peak load hours used for capacity allocations is robust will be important for maintaining reliability and fair and equitable allocation of costs.

As retail electric metering evolves across New York state, LSEs will be better able to track customer usage on an hourly basis. The Public Service Commission first required hourly pricing for large C&I customers in April 2006 in Case 03-E-0641 Order Adopting Mandatory Hourly Pricing (MHP), those MHP customers are billed for capacity on the basis of their usage during the peak hour. Over the years, the threshold for MHP has decreased. In the last seven years Utilities have proposed, approved, and installed AMI meters that provide hourly load data for all customers. This allows LSEs to allocate capacity cost more specifically to customers causing the need for capacity. As customers become responsible for the capacity cost they cause, they will seek to manage that cost. This helps to engage the demand side to manage peak hour demand.