1 Expanding Peak Hour Definition

1.1 Problem / Opportunity

This section describes the business problem to be addressed or opportunity to be studied by the proposed project. Supporting background information, prior work, and analysis to the extent it is available should be included.

The NYCA peak load hour is currently defined as the single hour within a Capability Year with the highest measured system load. More recently, a proposal to limit the peak hour to weekdays during the months of July and August is being considered by stakeholders. 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, where LSEs use retail customer measures of peak period(s) usage that align with those used by the NYISO to assign capacity cost to their customers, it is imperative that those measurements be representative of the customers' capacity cost causation. Basing any given customer's capacity cost responsibility on metered demand during a single hour or day can place too much weight on an idiosyncratic, random event and not accurately measure the true impact that customer's use has on the system's 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 resources penetration increases.

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

This section describes what the project should do to address the business problem or opportunity. It summarizes the approach and desired outcome, and may build on project work in a prior year. It includes the expected deliverables to satisfy the project objective and is tied to the proposed project milestone. The NYISO will work with the stakeholder(s) proposing a project to formulate what may be feasibly delivered in a particular time frame based on resourcing estimated for the effort.

This project will investigate these issues pertaining to capacity obligation shares over multiple peaktype hours and use of gross rather than measured load. Findings and resulting suggestions will be reported and discussed with stakeholders. The project deliverable will be Market Design Concept Proposed.

1.3 **Project Justification**

This section describes why the candidate project should be considered including what the benefits are and associated risks if we do not complete the project. Examples would include addressing a FERC Order, Tariff requirements, automate manual processes, mitigate risk, market enhancements, State of the Market recommendations.

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.