

Load Interconnection Process: Challenges and Considerations

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Agenda

- **Objective**
- **Background**
- **Considerations & Challenges**
- **Related Industry Efforts**
- **Schedule and Next Steps**

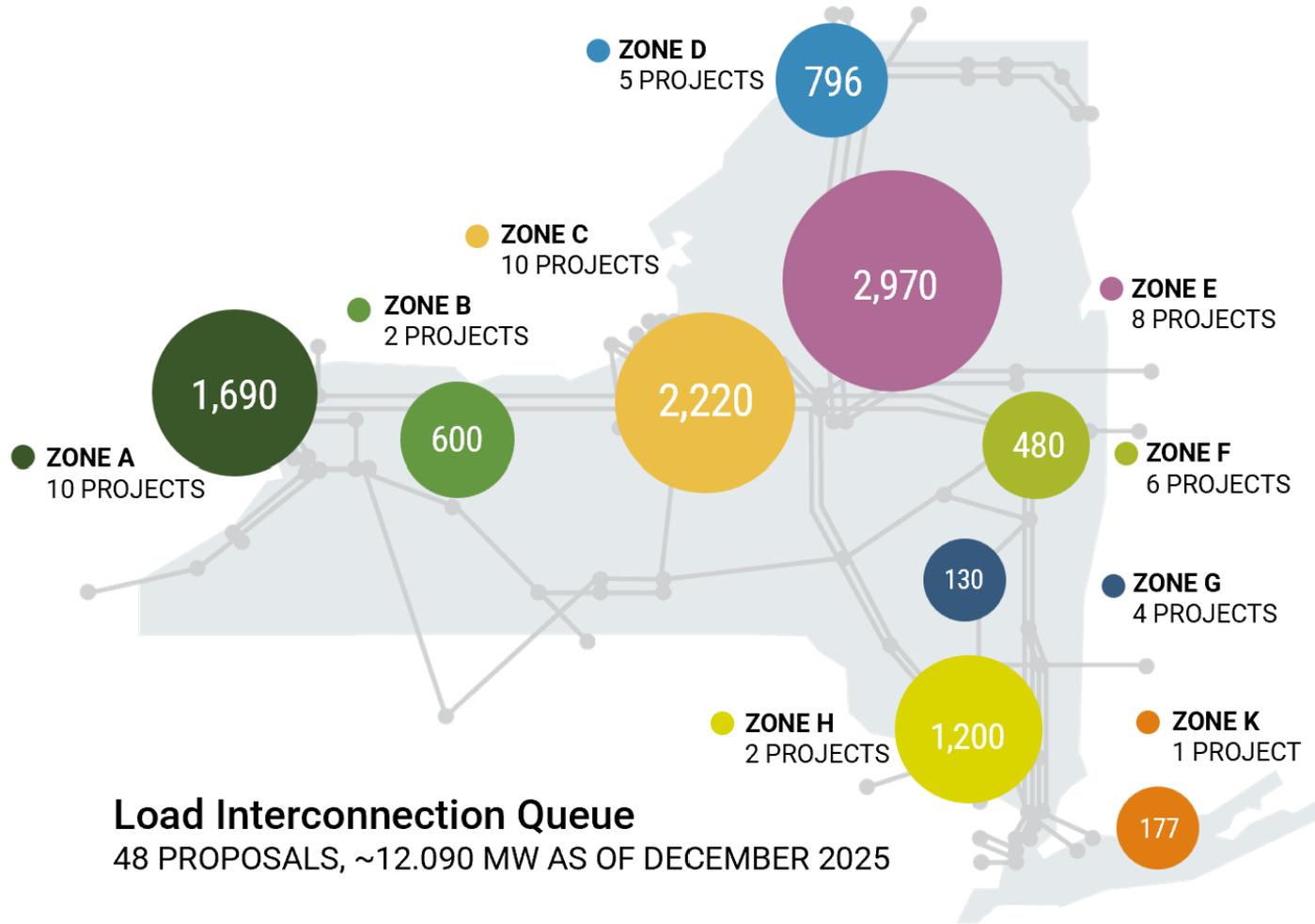
Objectives

- **NYISO Market Project - Reliability Planning & Large Load Integration:** The objective of this project is to improve the current load interconnection process to further address bulk system reliability concerns and speed up the overall load interconnection process to provide solutions for the unique issue presented by these types of large load projects and accelerated timelines for project development and in-service dates. The NYISO will propose revisions to the load interconnection process and adjustments to the organizational structure (if needed) to sustain the improvement.
- The purpose of today's presentation is to begin discussions with stakeholders on key challenges and considerations for revising the Load Interconnection process, and to define an anticipated schedule for such revisions.

Background

Development of Large Load Interconnections

- The pace and size of new load interconnection requests in New York has grown dramatically over the past several years.
- The trend of rapid large load additions is observed across the country with regional variations in the speed and types of loads.
- It is projected that over the next decade numerous additional manufacturing and data center projects will be constructed and begin consuming large amounts of electricity.
- The timing and level of large load interconnections will have major impacts on future load growth and system risk.

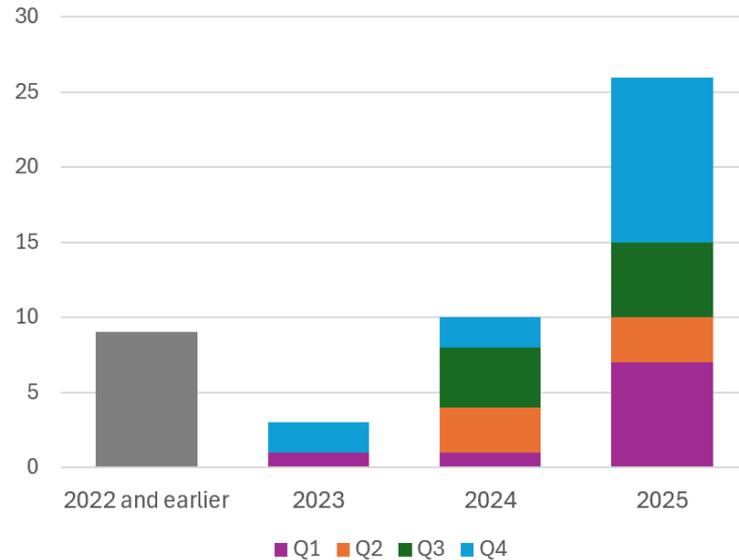


Load Interconnection Queue

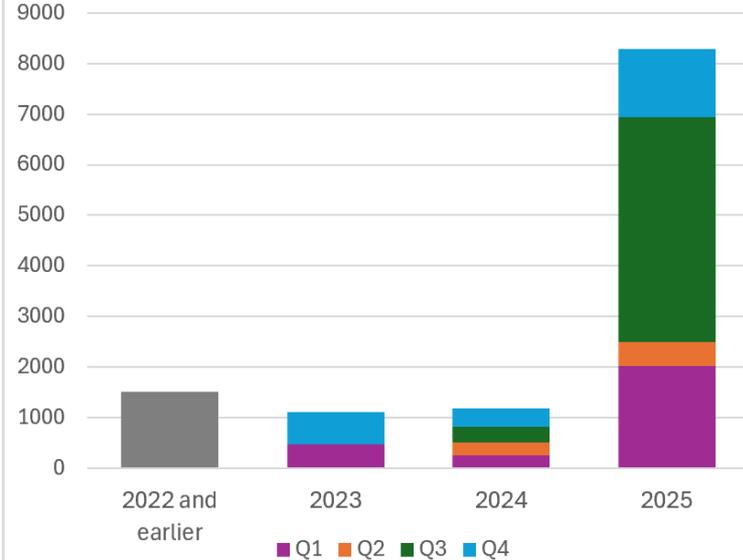
48 PROPOSALS, ~12.090 MW AS OF DECEMBER 2025

NYISO Interconnection Queue Trends

Load Interconnection Project Requests Over Time



Requested MW from Load Projects Over Time



As of 12/31/25

Reliability Considerations

Planning for large loads is challenging because of uncertainty in load performance and behavior, such as:

- **Level of certainty to become in-service, i.e., if a project in the queue would eventually be in-service, it's ramp-up schedule, and how long it is anticipated to be in-service**
- **Willingness and ability to curtail (i.e., flexibility) during peak hours**
- **Willingness and ability to bring generation to supply all or portion of the demand**

Reliability Considerations (cont.)

Potential adverse reliability impacts to the grid, such as:

- **Narrowing reliability margins and decreased resource/energy adequacy**
- **Degradation of interface transfer limits and system voltage performance**
- **Inability to ride through faults potentially leading to wide-area system stability concerns**
- **Collective adverse reliability impacts of proposed load interconnections, especially in identifying any necessary system upgrades**

Current Load Interconnection Process

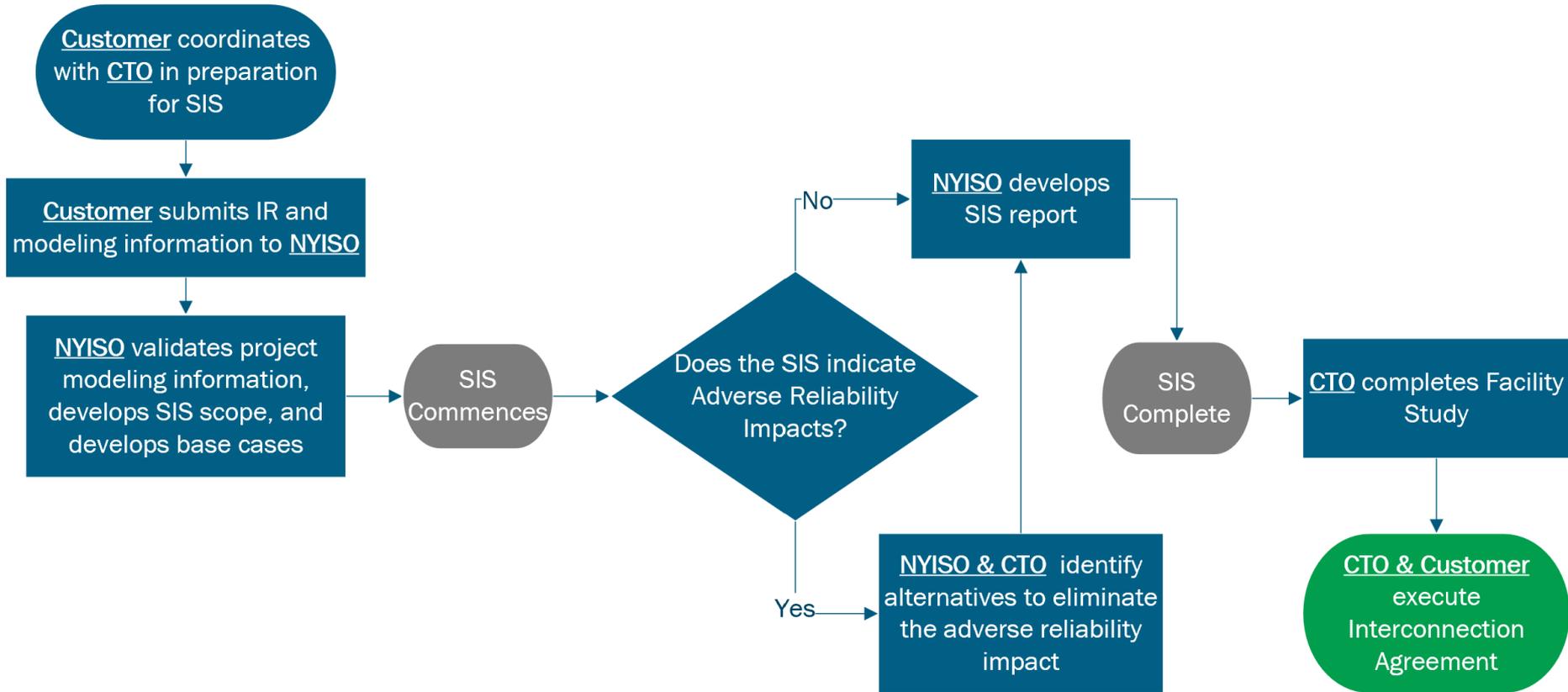
Current Load Interconnection Process

- Study procedures associated with new Load interconnections to the NYS Power System are contained in Section 3.9 of the OATT and described in the Transmission Expansion and Interconnection manual section 3.5.
- The NYISO Load interconnection procedures apply to Load interconnections that are either:
 - a) greater than 10 MW connecting at a voltage level of 115 kV or above, or
 - b) 80 MW or more connecting at a voltage level below 115 kV
 - This includes uprates to existing or previously planned load projects.
 - Proposed Load interconnections that fall outside these criteria are not subject to the NYISO procedures but instead fall under the Transmission Owner's procedures.

Current Load Interconnection Process

- **NYISO's role in the Load interconnection process focuses on determining the reliability impacts of Load projects to the system during the System Impact Study (SIS)**
 - The Load SIS is informational and non-binding.
 - At the completion of the SIS, the Customer may elect to proceed with the Connecting Transmission Owner (“CTO”) on the facilities studies and then enter into a two-party interconnection agreement with the CTO.

Current Load Interconnection Process Overview



Recent Improvements to Current Load Interconnection Process

- Load Interconnection Projects System Impact Study (SIS) Procedure [Technical Bulletin](#)
- Base system representation for load SISs will be a year five representation consistent with a planning study, such as the latest Short-Term Assessment of Reliability (STAR)
- Depending on the timing and proximity of proposed projects, several projects may be modeled in the same post-project case
 - Streamlines some administration tasks, allows for the incremental impacts of load projects to be studied efficiently
 - The SIS will identify the individual contribution of each project to the potentially significant impacts on the NYS power system reliability
- Non-binding good faith estimates of cost and time to construct potential Network Upgrades are not provided as part of the SIS. Rather, these details will be determined during the facilities study with the CTO
- More detailed load modeling data request form is required for each interconnection request
- Improved communication/transparency with developers via interconnection portal weekly updates

Challenges and Proposed Concepts for Revising the Load Interconnection Process

Challenges with Existing Load Interconnection Process

- Large volume of requests may lead to time delays for projects to complete the SIS
- Resource adequacy is not currently considered in load interconnection studies
- Limited opportunity to identify an individual load interconnection's contribution to reliability impacts considering several load interconnections collectively
- Limited rules for capturing impacts of the load interconnection on the broader transmission system (e.g., Affected Systems' involvement in the SIS process)
- Variations in facilities studies practices and interconnection agreement requirements that are dependent on the CTO
- Limited process for evaluating material modifications to projects
- No specific process for studying co-located generator and load interconnections

Proposed Principles for Revising the Load Interconnection Process

- 1. Reduce and improve predictability of the timeline for the load interconnection study process**
- 2. Allow for the evaluation of more complex and compounding impacts of load interconnections to reliability and the broader transmission system, including identification of system upgrades**
- 3. Clarify processes for the modification of a large load interconnection**
- 4. Define milestones for inclusion of large load interconnections in Reliability Planning Process studies and Short-Term Assessments of Reliability**

Potential Document Revisions

- **Potential tariff changes to the following OATT sections:**
 - Section 3.9
 - Section 4.5
 - Attachment FF
 - Attachment HH
- **Potential changes to the following manuals :**
 - Transmission Expansion and Interconnection
 - Reliability Planning Process
 - Demand Forecasting
 - Reliability Analysis Data

Related Industry Efforts

Related Industry Efforts

- On October 27, 2025, FERC issued a Notice Inviting Comments on the U.S. Department of Energy's proposed Advanced Notice of Proposed Rulemaking (ANOPR), *Ensuring the Timely and Orderly Interconnection of Large Loads*. If a NOPR and/or final rule is issued in 2026, it could influence the design direction, timing, and/or associated tariff language.
- NY DPS tasked to streamline interconnection rules and improve transparency around grid upgrades through Energize NY Development effort, which could influence the design direction, timing, and/or associated tariff language.
- NYISO involvement in NERC, EIPC, ESIG, and NYSRC large load working groups and whitepapers:
 - NERC Large Load Task Force White Papers
 1. Characteristics and Risks of Emerging Large Loads published July 2025
 2. Assessment of Gaps in Existing Practices, Requirements, and Reliability Standards for Emerging Large Loads to be published in 2026
 - ESIG Large Load Task Force upcoming reports
- Other NYISO projects related to large loads include flexible load models and DER enhancements.

Schedule and Next Steps

Preliminary Schedule

- **February - May: Discuss concepts and challenges**
- **June - July: Discuss straw proposal**
- **August: Discuss detailed proposal Review the initial tariff revision**
- **September - October: Continue review of tariff revisions**
- **November: Committee review and approval of tariff and process revisions**
- **December: Board approval and file tariff revisions with FERC**

Next Steps & Feedback

- NYISO will return to future meetings to continue discussions on Load Interconnection process reform
- NYISO will consider stakeholder feedback in further detailing process reforms and tariff revisions
- Proactive feedback will help advance stakeholder process
- Please send feedback to Kirk Dixon, kdixon@nyiso.com by February 20, 2026

Our Mission and Vision



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



Questions?