

Addressing Electricity Load Growth

Achieving New York State Energy Goals through Integrated Planning

NASEO Electricity Committee

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The Emergence of New Large Loads in New York State

New York State anticipates long-term load growth related to the energy transition, largely driven by building and transportation electrification.

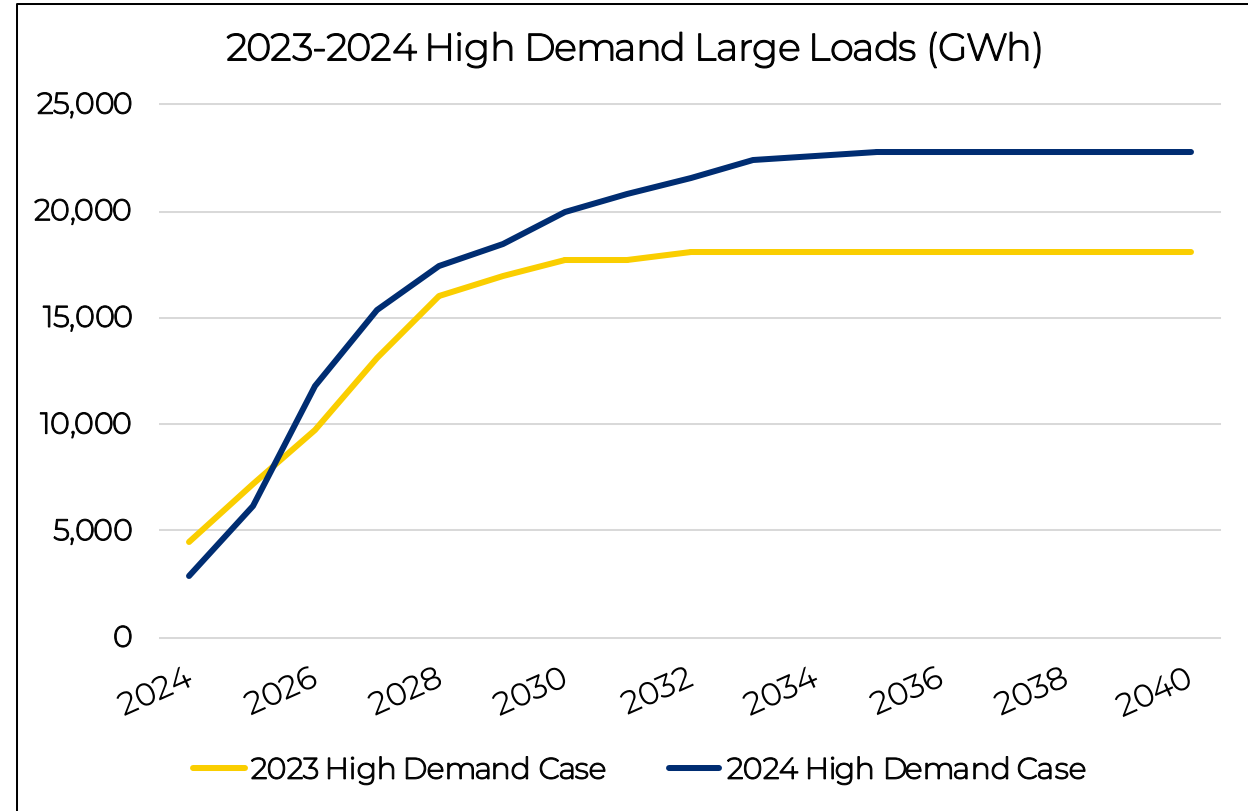
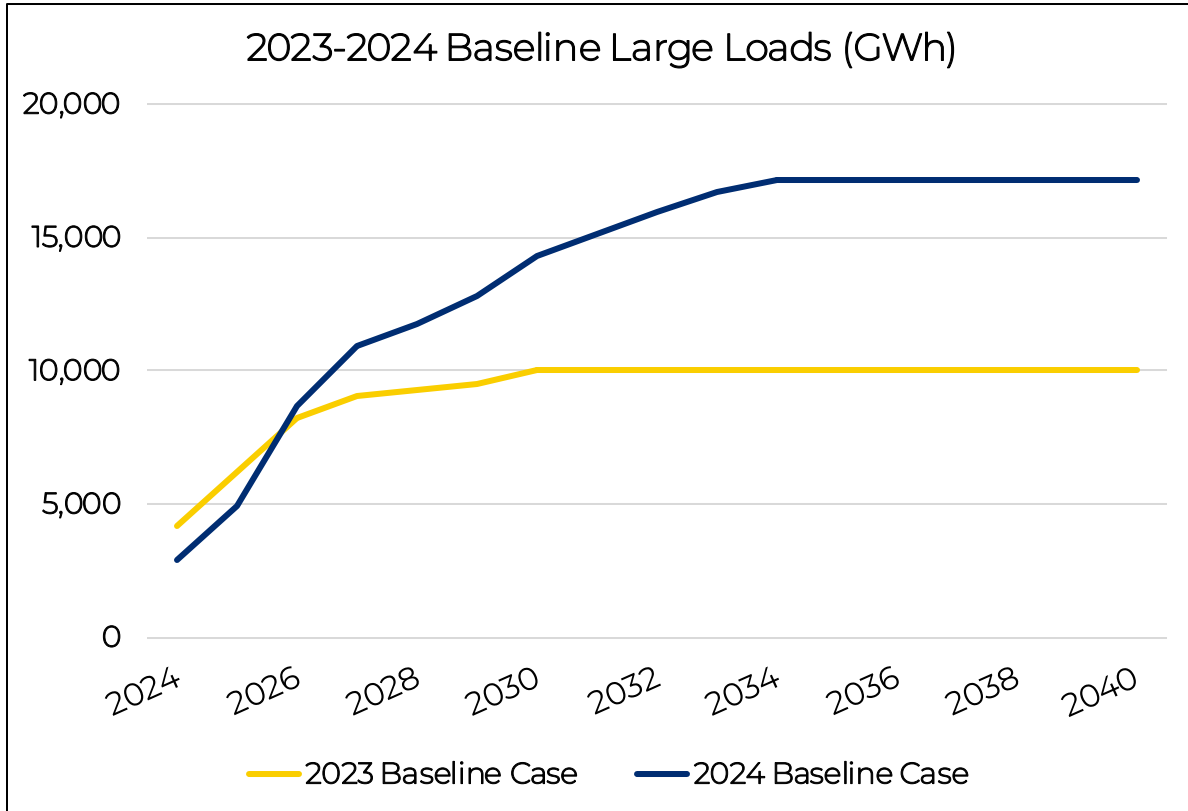
At the same time, New York (like many states) is also adjusting to new large loads, which are driven by economic development projects across the state.

The New York Independent System Operator (NYISO) began explicitly forecasting large loads in 2023, capturing high levels of uncertainty and short development timelines.

This year we will add large load forecasts to our State Energy Plan.



New York State Projected Large Load Growth



NYISO Interconnection Queue

As demonstrated by the NYISO IQ, large loads encompass such projects as data centers, crypto mining, AI computing, and electrolysis.

NYISO Large Load Interconnection Requests*						
Owner/Operator	Project	Project Type	Zone	Proposed Date	Summer (MW)	Winter (MW)
Lake Mariner data LLC	Lake Mariner	Data Center	A	Apr-25	250	250
Olean Digital LLC	Olean Digital Data Center	Data Center	A	Jun-26	150	150
Genesee County Economic Development	WNY STAMP	Hydrogen Production	B	Dec-25	300	300
GCEDC	580 STAMP Load increase	Manufacturing	B	Dec-25	300	300
Micron New York Semiconductor Manufacturing LLC	White Pine Phase 1	Manufacturing	C	Jun-25	480	480
Micron New York Semiconductor Manufacturing LLC	Micron Fab 2	Manufacturing	C	Sep-25	576	507
North Country Data Center	North Country Data Center	Data Center	D	Dec-25	176	176
Petawatt Holdings, Inc.	St Lawrence Data & Agriculture	Data Center	D	Jan-25	200	200
Sabey Data Center Properties, LLC	SDC St Lawrence	Data Center	D	Aug-25	120	120
Air Products and Chemical Inc	Massena Green Hydrogen	Hydrogen Production	D	Oct-25	110	110
ZeroC Data Centers, LLC	NY State Artificial Intelligence Data Center	Data Center	D	Dec-25	300	300

**Based on IQ requests accessed on January 29, 2025*

Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act -- In 2020 the Public Service Commission initiated a proceeding to develop new proposals for distribution and transmission upgrades, capital expenditures and planning.

A Coordinated Grid Planning Process was proposed by the Utilities, working in concert with the NYISO and State Staff

Carbon neutral economy, mandating at least an 85% reduction in emissions below 1990 levels by 2050

40% reduction in emissions by 2030

100% zero-emissions electricity by 2040

70% renewable electricity by 2030

9,000 MW of offshore wind by 2035

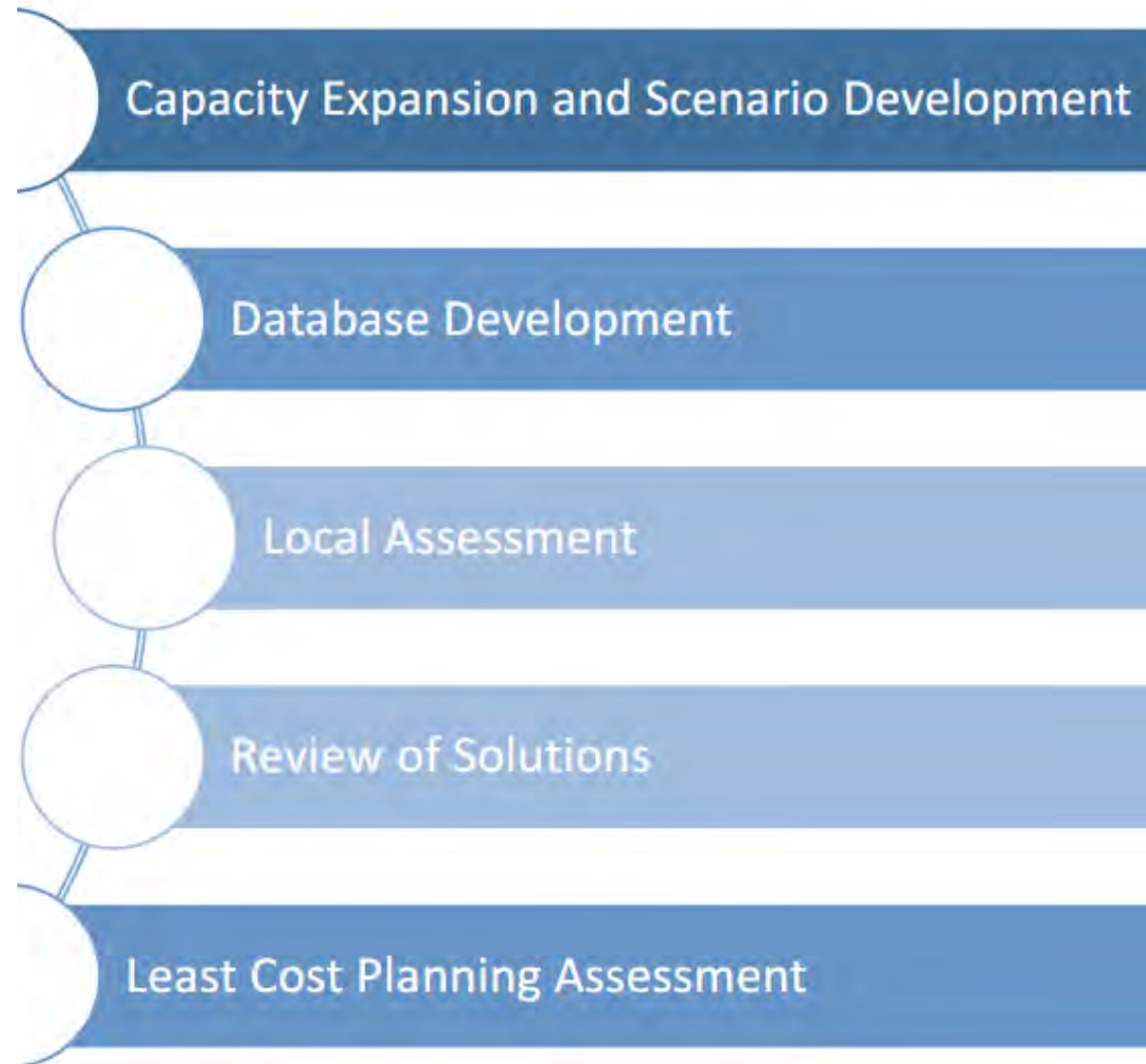
6,000 MW of distributed solar by 2025

3,000 MW of energy storage by 2030

185 Tbtu on-site energy savings by 2025

Commitments to climate justice and just transition

The goal of the **Coordinated Grid Planning Process** is to identify expansion of the local transmission and distribution systems that can help unlock renewable energy for the purpose of meeting New York State clean energy goals



Bulk System Planning Fits into the Coordinated Process

- Using capacity expansion models, sensitivities will be run that look at the impact of increasing the bulk transmission capability
- If new bulk capability is found beneficial in achieving the policy mandates, a recommendation would be made to the PSC that a Public Policy Transmission Need be initiated
- This buildout will then be one of the scenarios carried into the Coordinated Process
- When the Public Policy Transmission Need process identifies projects they will be considered in the **Least Cost Planning Assessment**

Least Cost Planning Assessment

The capacity expansion model will be rerun:

- add energy and capacity headroom at a cost equal to that of the local T&D projects that must be completed to add the headroom
- increasing the size of the transfer capability at a cost equal to the cost of the identified public policy project(s)

Outcome: indicate what combination of generation, local transmission and distribution projects and bulk transmission projects result in the least cost way to meet policy objectives

Integrated Energy Data Resource (IEDR)

On March 31, 2023, NYSERDA launched the Initial Public Version of the IEDR

Objective: A centralized web platform offering access to energy data from New York's utilities and other sources to support clean energy solutions

- **Inform and Accelerate Investment Decisions**
- **Promote Innovation and Encourage New Business Models**
- **Identify Potential Operational and Policy Improvements**

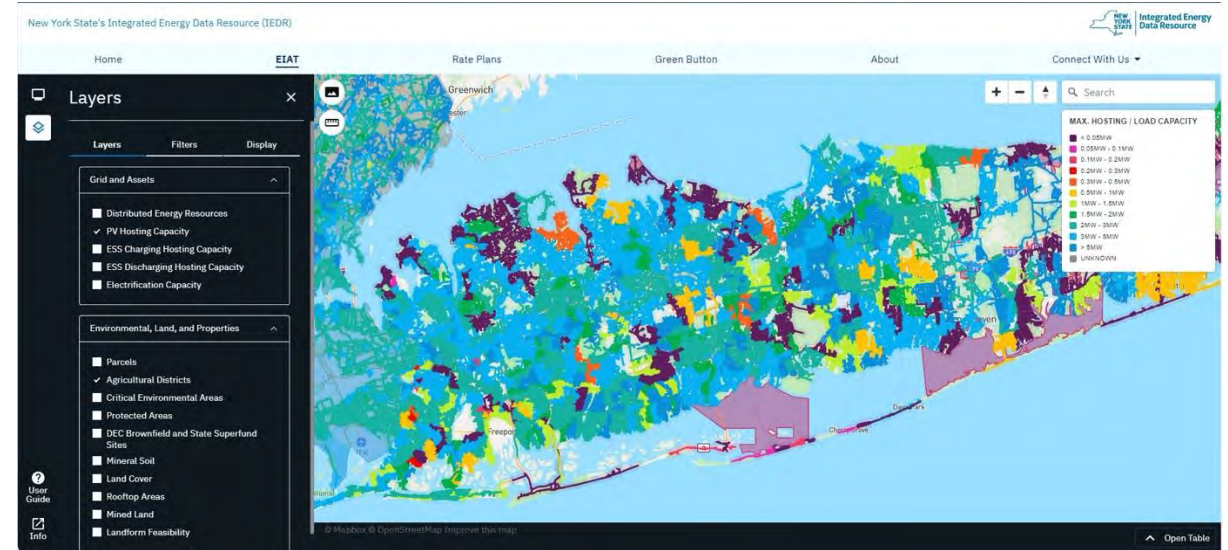
Current Platform Tools

- Rate Plan Browser

Central repository of structured, machine-readable data from participating utilities that is in a standardized form for populating rate plan modeling tools

- Green Button Connect

Currently allows users to digitally access mock customer utility data sets in a sandbox environment to explore the tool's functionality and value (development of "live" release in progress)



- Electric Infrastructure Assessment Tool

Includes grid, environmental, land, and property data to help plan and site new distributed energy resources (solar, battery, energy storage, electric vehicle charging stations)

Integrated Energy Data Resource Next Steps

Continue to gather feedback from subject matter experts and stakeholders to design and build platform tools for upcoming use cases such as **community energy planning and **whole building energy analysis** through 2026**

Continue to test and enhance current platform tools to improve data quality and user experience

Thank You



*IEDR
platform*

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