



Department
of Public Service

Grid of the Future Proceeding

NYISO Environmental Advisory Council

June 18, 2024

Context for Grid of the Future... why now?

1. The rapid growth in DER adoption across NY
2. The status of the Advanced Metering Infrastructure (AMI) rollout in NY
3. Investment activity in private sector
4. The CLCPA's 0x40 target
5. Lessons learned since NY REV

Grid of the Future Initiating Order

“Achieve our clean energy goals at a manageable cost and at the highest levels of reliability”

Objectives

Develop & maintain a plan that encourages investment in flexible resources to:

- Reduce infrastructure & operational costs
- Improve system reliability
- Increased customer benefits & bill savings

Deliverables

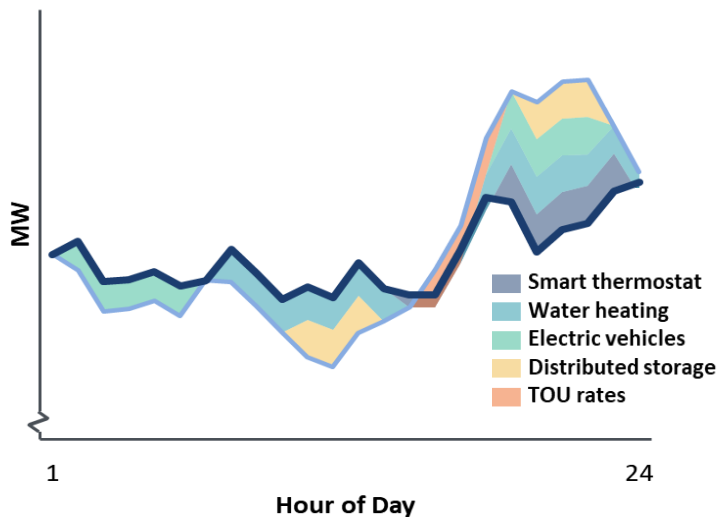
- Grid Flexibility Study, November 15, 2024
- Inaugural New York Grid of the Future Plan, December 31, 2024
- Second New York Grid of the Future Plan, December 31, 2025

Primary focus on distribution sited flexible resources, avoided bulk infrastructure and operation costs are in scope.

Grid Flexibility Study

Due November 15, 2024

Net Load on Peak Day (representative image)
With All Modeled Grid Flexibility Capability



Components of the Study

- Assess the **present** and **potential future** capabilities of **flexible resources**
- Identify, characterize, and recommend approaches to **integrate flexible resources into grid planning and operations**
- Examine **summer & winter** peaks; needs at **different levels of grid** and **regional differences** between upstate and downstate utilities
- Recommend **near term actions** to better deploy identified resources

Study and stakeholder comments to inform the second Grid of the Future Plan filed 12/31/2025

New York Grid of the Future Plan

The 2024 plan will focus on the Distributed System Implementation Plan (DSIP) process and incorporate feedback from the Market Design and Integration Working Group (MDIWG)

Deployment Goals by resource type and grid services provided.

DSP & DSIP elements needed and planning process revisions.

Compensation structures for flexible resources.

Customer Savings potential and benefits.

Roles of key entities such as distribution utilities, NYISO & aggregators.

Digital Technology needed to provide situational awareness, control of flexible resources & settle transactions.

Physical & Cyber Security protocols that maintain high levels of protection.

Varying Grid Needs by time and location.

Equitable allocation of costs & benefits related to the investments proposed in the plan.

The 2025 Plan will leverage insights from the Grid Flexibility Study as well as incorporate the 9 elements described above



Foundational Guidance from Commission

Customer Experience: prioritize serving the needs of electricity users with minimal effects on their comfort, convenience, and capabilities. Price signals need to be clear, understandable, and compelling.

Value Driven: focus on decreasing the need for incremental infrastructure upgrades, avoiding foreseeable costs, and maximizing the value of avoidable emissions. Build on the successful implementation of the Value of Distributed Energy Resources (VDER) proceeding and Standby Rates to provide actionable price-signals for customers to follow for mutual benefit of the grid, program participants, and customers at large.

Transparency: data reporting that tracks the amounts of flexible resources available to the grid, along with the costs, benefits, customer savings, and flexible services provided over time should be visible and transparent, to ensure efficient decision making by grid planners and market.

Next steps

- DPS and NYSERDA are currently are currently contracting with a consultant to support the Grid Flexibility Study and 2024 Grid of the Future Plan.
- Utilities have formed a Utility Coordination Team, with primary and secondary points of contact for Grid of the Future initiatives.
- Identify and include NYISO Staff who will engage in the proceeding.
- Parties can register for case 24-E-0165 on the Document Matter Management site: <https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=24-E-0165>
- Key issues for NYISO staff and stakeholders: future inclusion of flexible resources in the Coordinated Grid Planning Process, System Resource Outlook and reliability planning processes.