

October 5, 2025

NYISO and ISO-NE: The Power of Clean Energy Subsidies

Despite challenges related to demand growth, expensive resource choices, federal opposition to offshore wind development, and increasing winter peaks, solid opportunities exist for renewable and storage development in both the New York Independent System Operator (NYISO) and ISO-New England (ISO-NE) electricity markets. For the moment, favorable state policies and robust subsidy programs for clean energy projects make both ISOs attractive, and the economics of existing generation look good, as well. However, risks remain – especially related to whether Northeast policymakers are willing to tolerate increasingly high energy costs and how their responses affect capacity market prices.

In a recent <u>webinar</u> previewing Ascend's latest NYISO and ISO-NE forecasts, Dr. Gary Dorris, CEO at Ascend Analytics, joined Dr. Brent Nelson, Managing Director of Markets and Strategy, to discuss why subsidy and procurement programs are essential for Northeast states, how market design impacts capacity prices and new entry, and strategies for maximizing risk-adjusted returns for renewable, storage, and thermal assets.

Key Takeaways

- Northeast states continue to face a dearth of good options when it comes to supporting load
 growth and meeting clean energy targets in a reasonably cost-effective manner. New resources
 such as long-duration storage or renewable fuels are high-cost and lack technical maturity, while
 new gas is both politically unpalatable and prohibitively expensive.
- Several offshore wind projects have been cancelled or delayed in New York and the ISO-NE states.
 NYISO has delayed thermal retirements to meet reliability needs and cancelled the Clean Path
 transmission project over cost concerns. These dynamics point to the continued likelihood that
 states will fall short of clean energy goals in the face of high decarbonization costs and near-term
 federal obstructions.
- Subsidies or bilateral contracts for new entry are the only way to avoid <u>exploding capacity costs</u> that provide significant capacity revenue windfalls to incumbent fossil generation. While these options create favorable conditions for new storage and renewable development, they also pose a significant risk for merchant-only strategies and incumbent generation.
- New York and several New England states have deployed subsidy programs to support new clean resources, such as New York's Index Storage Credit (ISC) and Massachusetts' Clean Peak Standard (CPS). These programs allow incoming clean capacity resources to enter the market profitably without creating windfalls for existing thermal generators.
- Leveraging analysis from <u>Ascend Market Intelligence™</u>, the webinar offers guidance for where, what, and when to add new capacity resources in NYISO and ISO-NE.



Meeting Clean Energy Goals in Northeast States: A Tough Situation Gets Tougher

Meeting clean energy goals on time in New York and in most New England states has become increasingly complicated. During the past two years, offshore wind projects, power purchase agreements (PPAs), and transmission projects have been cancelled due to high costs, while elected officials have frequently voiced concerns about cost sensitivity.

Things haven't gotten better. The Trump administration's opposition to offshore wind has compromised the ability of New England states to meet their goals. New Hampshire is toying with the idea of leaving ISO-NE. Long-duration winter storm peaks diminish the accredited capacity of short-duration storage, but their infrequency means that long-duration storage will see limited utilization. Political and environmental opposition make new gas supply difficult to build – even if turbines were available. The cost and immaturity of renewable fuels and associated distribution systems make new hydrogen expensive to build and operate. And, as with all other US markets, load growth is expected to return.

New entry is needed, and Northeast states face a series of suboptimal choices: to either allow <u>capacity prices to skyrocket</u>, subsidize new entry with diminishing reliability contributions, build new gas generation (and supporting infrastructure), or pay for dispatchable renewable fuel generation.

Taming Capacity Prices: The Power of Market Design

On top of the challenges that Northeast states already face, capacity markets have a cost problem when prices rise to support new entry. If structural change causes capacity markets to clear at the cost of new entry, this cost will flow across the entire supply stack – including to existing thermal generation – regardless of the amount of new entry needed, as illustrated in **Figure 1.**

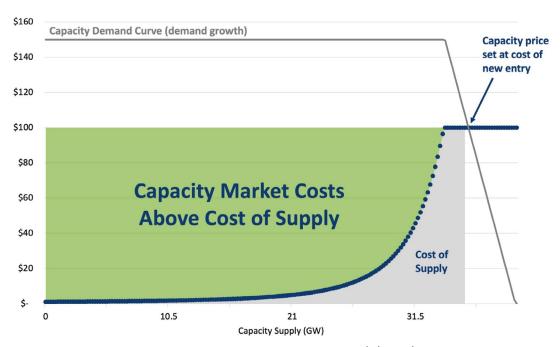


Figure 1. Illustrative Capacity Supply Curve (\$/kW-yr)



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Consequently, several states – most notably, New York and Massachusetts – have introduced programs to subsidize new clean entry. Other Northeast states will need to follow suit in order to support new clean energy resources entering the market.

To the Rescue: Index Storage Credit, VDER, Clean Peak Standard, and Procurements

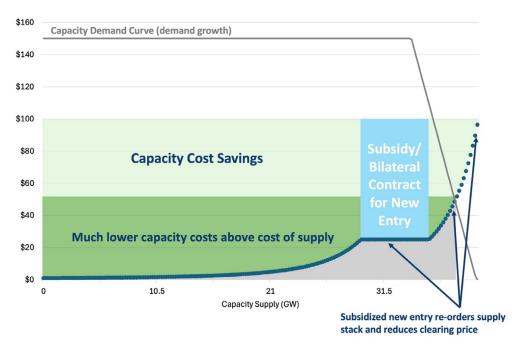


Figure 2. Illustrative Capacity Supply Curve (\$/MW-day)

Formally launched in July 2025, New York's Index Storage Credit (ISC) program aims to accelerate storage buildout while reducing investment risk. As shown in Figure 3, ISC projects must bid a strike price. If a subsequent reference calculation gauges proxy revenues as below the strike price, then then the project receives a payment to make it whole up to the strike price. If proxy revenues are above the strike price, then those get paid back by the project to the state.





Figure 3. Index Storage Credit Payment Mechanism

With the ISC, additional upside opportunities exist in the form of ancillary revenues, real-time premiums, and nodal premiums. However, those projects on the outside looking in will face significant risk: the ISC will only support 3 GW of utility-scale storage by 2030, with 40% of evaluation based on non-economic factors.

New York's <u>Value of Distributed Energy Resources (VDER)</u> compensation mechanism is also helping to accelerate small-scale renewable deployment. Developed as an alternative to traditional distributed energy resource compensation tariffs that are tied to the retail rate of electricity, VDER provides a multi-pronged revenue stack for ~1.5 GW of sub-5 MW projects, with energy and capacity revenues indexed to wholesale markets. The program also reduces development risks by allowing non-market value stack revenues to be locked in for 10-25 years.

Crucially, VDER allows projects that dispatch at full capacity during a single peak hour to receive full capacity accreditation – which represents an enormous opportunity for storage. Unlike the wholesale market, storage is not subject to effective load carrying capability (ELCC) deration, which means increased capacity revenue potential in VDER compared to utility-scale projects.

Under Massachusetts' Clean Peak Standard (CPS) program, credits are produced by clean generation during defined peak hours, with extra multipliers during different hours, seasons, and locations. Suppliers are required to procure these credits, proportional to load. The state defines bounding parameters, including quantities and price caps.

The CPS represents a strong opportunity for storage and renewable developers. CPS requirements will likely outpace supply for the next decade, leading to prices at the cap and substantial additional revenues for clean projects in Massachusetts. However, there are risks, too. Massachusetts has reduced requirements in the past and has shown growing cost sensitivity. The program may also evolve, redefining what the 'peak' period is and favoring longer durations.

Additionally, almost every state in New England is at least exploring a direct procurement program to create functionally contracted revenues for projects. But without contracted revenues, it becomes very difficult for purely merchant projects to compete in Northeast states.



Interested in Learning More?

Access the full webinar recording, which offers guidance for where, what, and when to add new capacity resources in NYISO and ISO-NE. The webinar also offers insights related to capacity prices, projected renewable energy buildout, and updated energy demand forecasts.

<u>AscendMI™</u> (<u>Ascend Market Intelligence</u>) delivers proprietary power market forecasts that have been trusted in hundreds of projects and resource planning activities, supporting over \$25 billion in project financing assessments. <u>Contact us</u> to learn more.

About Ascend Analytics

Ascend Analytics is the leading provider of market intelligence and analytics solutions for the power industry.

The company's offerings enable decision makers in power development and supply procurement to maximize the value of planning, operating, and managing risk for renewable, storage, and other assets. From real-time to 30-year horizons, their forecasts and insights are at the foundation of over \$50 billion in project financing assessments.

Ascend provides energy market stakeholders with the clarity and confidence to successfully navigate the rapidly shifting energy landscape. Visit us at <u>ascendanalytics.com</u>

