

NY-BEST Update and the Growing Ecosystem for Batteries in New York State

Wednesday, February 19, 2025 NAATBatt Annual Meeting



New York Battery and Energy Storage Technology Consortium (NY-BEST)

NY-BEST is a not-for-profit industry association founded in 2010 in collaboration with New York State/NYSERDA

- We are a membership-based organization and currently have approximately 185 member companies, ranging from small startup companies to large multi-nationals, government agencies, public utilities, service providers and more.
- Member companies span a wide range of technologies—electrochemical, thermal, mechanical, hydrogen and fuel cells, etc.



Meet the NY-BEST Team



William Acker Executive Director



John Cerveny Sr. Director, Supply Chain



Claudia Villar-Leeman Sr. Director, Policy



Carly DuPuis Sr. Program Manager



Victoria Shaw Sr. Program Manager



Chris Ladopoulos Program Manager



Richard Sturtevant Policy Associate



NY-BEST Core Services

- Policy Education and Advocacy
 - Policy Leadership Circles
- Ecosystem Development
 - Prototyping, testing, characterization resources
 - Supply chain development support & attract
- News & Information and Events
 - Free "State of Charge" monthly newsletter
 - Capture the Energy, Innovation conferences
 - Online events, topical webinars, courses



Recent New York Energy Storage Wins

- Public Service Commission Order authorizes approximately \$2 billion in funding for energy storage deployment programs
- Raymond opens Battery
 Manufacturing Plant in Binghamton
- NYISO planning to use a battery as proxy unit as opposed to a fossil plant for the first time
- NY State Fire Code update will address energy storage safety



The Raymond Corporation and Toyota Material Handling announce the official opening of the Energy Solutions Manufacturing Center of Excellence in Broome County, New York on September 9, 2024.



NY-BEST 2025 Priorities

- Policy & Regulatory
 - Implementation of grid ES deployment programs Bulk, Retail, Residential
 - Deployment pathways for long duration storage, H2, V2G, and SATA
 - Drive appropriate fire code and programmatic revisions
- Ecosystem Growth
 - Supply Chain Development –existing manufacturers and attract new
 - Startup and company acceleration
- Member Assistance and facilitation of relationships
- Education and Events



NY-BEST 2025 Plans & Priorities

Ecosystem Growth and Development





EDA Build Back Regional Challenge (awarded) 2022-2026 \$63M Federal + \$50M State



16 Partners
NSF Engines (awarded)
2024-2026 (2034)
\$15M in 2 years (up to \$160M/10 years)
30+ Partners



EDA Tech Hub (designation) 2023-Up to \$70M opportunity 60+ Partners





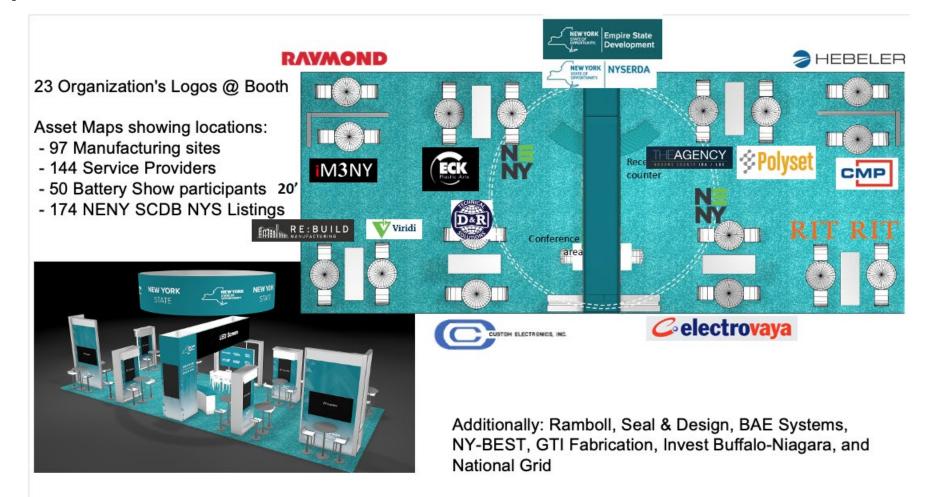
New Energy New York

The NENY Supply Chain Team led by NY-BEST Provides:

- Technical Assistance
 - Assessing and assisting with expanding or entering BESS market
 - Facilitate access to ecosystem resources
 - RIT Battery Prototyping Center (BPC)
 - BEST Test and Commercialization Center
 - ...and more
- Sourcing suppliers and service providers
 - Supply Chain database and one-one introductions/screening
 - Products and services (project developers, research, other services)
- Engaging with Economic Development Organizations (EDOs)
- Identify and navigate funding opportunities
- Help to establish and expand facilities in New York State



Battery Show North America: Detroit - 2024





Education and Events Capture the Energy: NY-BEST Annual Meeting & Expo May 13-15, 2025 Albany Capital Center, Albany, NY

Fall Energy Storage Innovation Conference October 2025 Upstate NY



Education and Events

Educational Courses

Recent Topics:

- Storage as a Transmission Asset (SATA)
- Interconnection (Distribution & NYISO)
- Economic Development of ES in NY
- Mitigating ES Safety Risks
- NYS Inter-Agency Fire Safety Working Group Fire Code Recommendations

Access past courses via our online library https://ny-best.org/page/NYBESTeducationalcourses

Share your ideas/suggestions with us!

- ES Supply Chain Opportunities
- Understanding Utility Tariffs
- NYC Power Plan
- Controls Test Methods



Thank you for attending!

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Legislative and Budget Priorities

- 1. Incorporating safe energy storage permitting under ORES jurisdiction
- 2. Embedding Hazard Support personnel into existing government Emergency Response infrastructure
- 3. Passing a **Sales Tax Exemption** for commercial energy storage systems
- Establishing a competitive **Domestic** Manufacturing program to build a robust energy storage supply chain in NY



New York State Senate. Source: Newsday



6 GW Energy Storage Roadmap

- PSC issued historic Order approving "Roadmap 2.0" in June 2024
 - Formally expands State goal to 6 GW by 2030, unlocking nearly \$2B in incentives
 - Bulk storage (5 MW or larger): 3,000 MW target \$701M \$1,400M
 - Retail storage (less than 5 MW): 1,500 MW target \$489M
 - Residential storage (small BTM): 200 MW target \$74M
 - PSC Case <u>18-E-0130</u>; NY-BEST summary of Order <u>here</u>
- NYSERDA developing Implementation Plans, subject to public comment
 - Bulk Implementation Plan will be released in mid October
 - Retail/Residential Implementation Plan posted, comments due November 18



Supporting Long-Duration Energy Storage (LDES)

- NYS needs Dispatchable Emissions-Free Resources (DEFRs):
 - 10 GW x 2035
 - 20 GW x 2040
- NY-BEST advocating for dedicated LDES procurement program using Cap & Invest funds

50 NYISO Outlook 45 Scenario 1 Capacity Needs (GW) 40 35 30 NYISO Outlook Scenario 2 25 Roadmap 2.0 LDES Study Forecasted DEFR 20 Scoping Plan Scenarios 1-4 **Proposed Penetration Rate:** 15 10 GW by 2035 10 5 2035 2025 2030 2040

Year

20 GW of DEFRs by 2040: A Conservative Target



Other Public Service Commission Proceedings

Proceeding	Case #	Purpose	Next Steps
Coordinated Grid Planning Process (CGPP)	<u>20-E-0197</u>	Utilities, NYISO and others collaborate on transmission planning	Modeling White Paper - Fall 2024 Grid Upgrade Report - Dec 2025
Proactive Grid Planning	<u>24-E-0364</u>	Utilities plan for grid upgrades to support electrification	Urgent Upgrade proposals - Nov 13 Proactive Planning Framework - Dec 13
Grid of the Future (GOTF)	<u>24-E-0165</u>	PSC plans for increased deployment and integration of flexible resources	Flexibility Study - Nov 15 GOTF Draft Plan - Dec 31
Marginal Cost of Service (MCOS)	<u>19-E-0283</u>	Determine value of components of the VDER stack for distributed resources (DRV, LSRV)	Technical Conference - Oct 1
Clean Energy Standard (CES)	<u>15-E-0302</u>	To achieve goals of NYS Climate Act, including 70x30 and 100x40	Ongoing Biennial Review Zero Emissions Proceeding



NYISO Matters

Demand Curve Reset

- For the first time, proxy unit will be 2-hr battery, not fossil plant
- Final report <u>here</u>, comments due Oct 9. (Prior NY-BEST comments <u>here</u>)

• FERC Order No. 2023

- Reforms interconnection procedures to address queue backlogs and improve certainty
- NY-BEST comments <u>here</u>
- Storage as Transmission



Supporting Downstate Storage

New York City

- Supporting City ESS strategy
- Addressing Noise Code concerns
- Streamlining FDNY permitting
- Leveraging LL97

Long Island

- Pushing back on PSEG Utility 2.0 Plan NY-BEST comments <u>here</u>
- Revising VDER in LIPA territory
- Ensuring LIPA participation in NYSERDA Roadmap programs



Microgrid Network (MGN) 5MW BESS, Brooklyn NYC.



Transportation Policy Leadership Committee

- PSC Proceedings and Working Groups
 - Alternatives to Traditional Demand Based Rate Structures for Commercial EV Charging
 - Load Management Technology Incentive Program (LMTIP)
 - Electric Vehicle Infrastructure Interconnection Working Group (ÉVIIWG)
 - Grid of the Future

• NYSERDA Initiatives (ITWG)

- UL 1741 SB Waiver
- Flexible Interconnection
- Harmonizing the interconnection process for V2G projects