

Energy Storage Update



**NEW YORK BATTERY
AND ENERGY STORAGE**
TECHNOLOGY CONSORTIUM

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Central Hudson Gas & Electric Solar+ Summit
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NY-BEST Mission

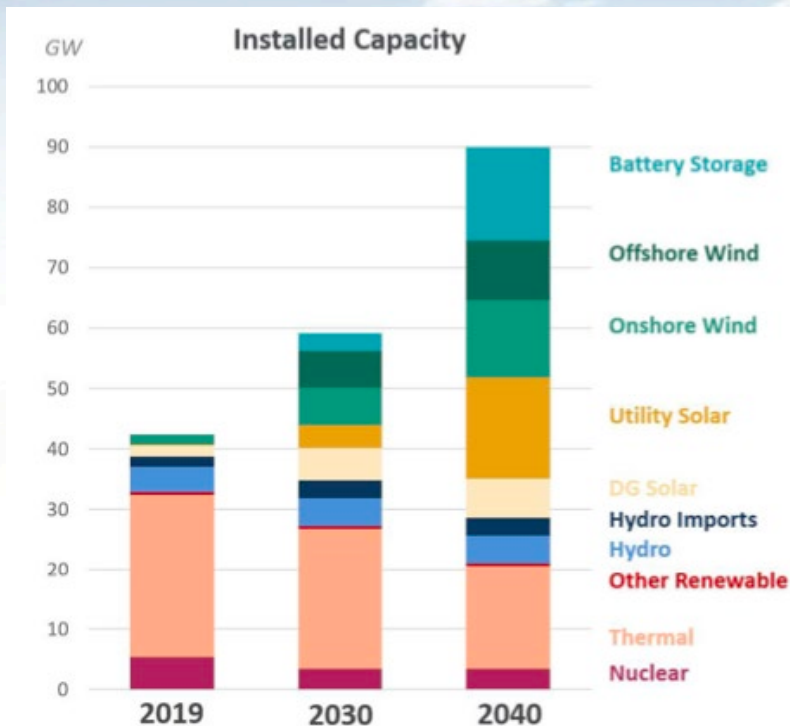
To catalyze and grow the energy storage industry and establish New York State as a global leader in advancing energy storage as a key solution for a clean energy future.

We do this by:

1. *Communicating information and facilitating connections*
2. *Accelerating commercialization*
3. *Educating policymakers and stakeholders*
4. *Promoting New York's intellectual and manufacturing capabilities and providing access to markets*

More information at www.ny-best.org

New York Generation Growth



Hourly storage



Long duration
storage and clean
dispatchable
technologies

New York Energy Storage Roadmap



New York Climate Action Council identified need for substantially more energy storage deployment

- ❖ January 2022 Gov. Hochul increase storage deployment goal for 2030 to at least 6 GW
- ❖ NYSERDA and DPS worked with stakeholders to develop plan and program
- ❖ December 2022 released Roadmap

New York Energy Storage Roadmap



| Program | MW | Funding Mechanism Recommended | Estimated Costs (000's) |
|---|-----------------|--|------------------------------|
| Current/In development (awarded or contracted or installed) | 1,300 MW | Original Roadmap funding | |
| Bulk | 3,000 MW | NYSERDA procurements Index Storage Credit 15 year contract | \$474,000-1,186,000 |
| Retail | 1500 MW | Declining Block incentives Region-Specific | \$438,000 |
| Residential | 200 MW | Declining Block incentives | \$72,000 |
| Total | 6,000 MW | | \$984,000-\$1,696,000 |

Proposed Bulk Program (> 5MW)

Innovative Index Storage Credit (ISC)

- ❖ NYSERDA Procurements similar to large scale renewables
- ❖ Developers bid a “Strike Price”
- ❖ Payments over 15 year contract is difference between the Strike Price and a “Reference Price”
- ❖ Structure reduces developer risk but developer still motivated to optimize project performance

Proposed Bulk Program (> 5MW)

Deployment

- ❖ Geographic distribution of procurements
- ❖ 4 hour and 8 hour procurements
- ❖ 1GW per year of procurement starting in 2024

Proposed Retail and Residential Programs



NY-SUN style declining block grant

- ❖ Retail: 375 MW of project each year 2024 - 2027
- ❖ Residential: 13 MW in 2023, 27 MW each year 2024 - 2030

Roadmap

Other important components

- ❖ Long Duration Storage
- ❖ Storage-As-Transmission-Asset (SATA)
- ❖ Disadvantaged Communities and Environmental Justice

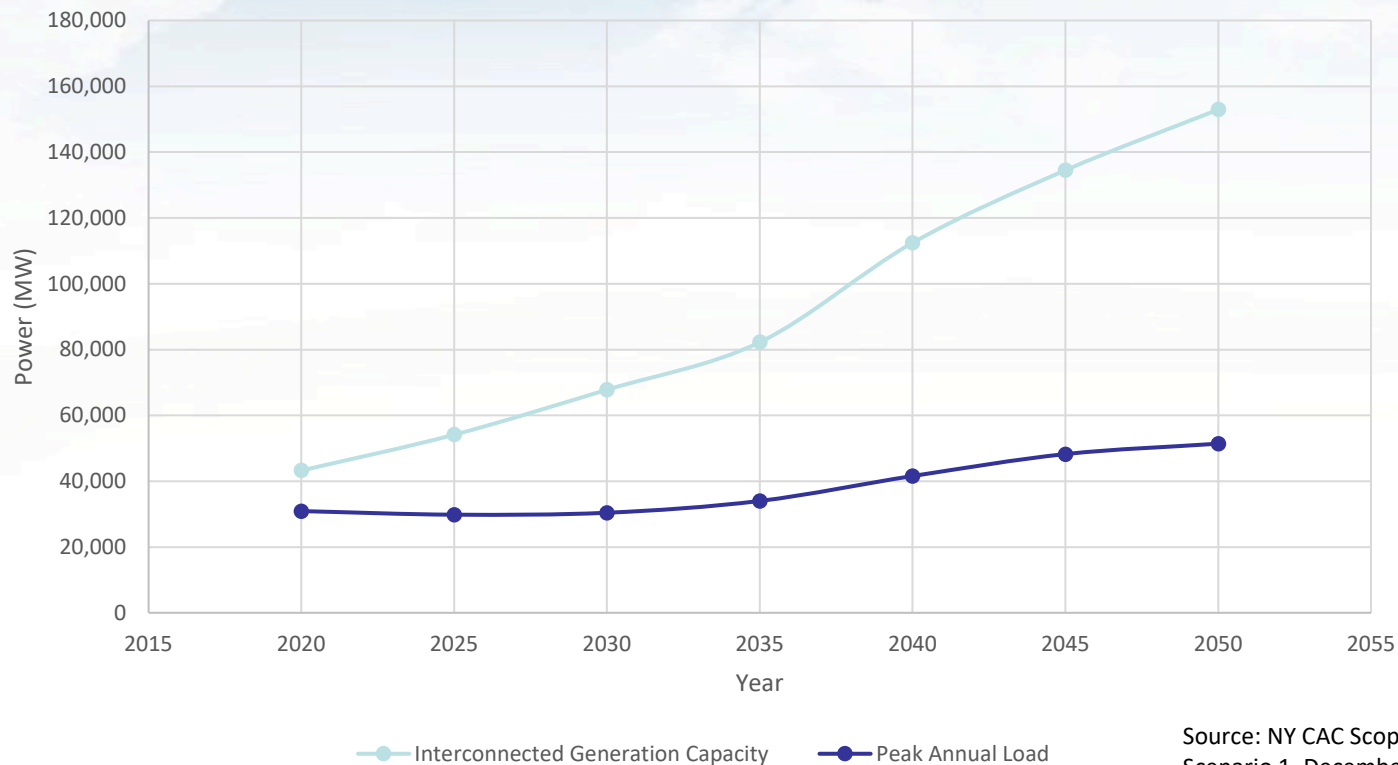
Interconnection

Present

- ❖ Hosting capacity maps have been extended to Energy Storage
- ❖ SIR allows unconstrained operation or operational constraints (Appendix K)
- ❖ ITWG discussions occurring on path forward
- ❖ ITWG/IPWG starting to consider flexible interconnections

Interconnection

Total Generation Capacity and Load for New York State



Future

- ❖ IX Generation Capacity to Peak Load ratio going from 1.4 to 3
- ❖ Future Capacity not used simultaneously
- ❖ Need to change how we address Interconnection and Grid Planning

Questions
and
Thank You

Capture the Energy 2023
Albany, NY
May 16th – 18th



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