NEW YORK STATE | Department of Public Service

Coordination Between Interconnection and Grid Planning

August 21, 2025 – i2X Webinar Series

Overview of CLCPA Targets

Net-Zero Goal

- Overarching goal of 100% reduction of GHG emissions over 1990 levels by 2050
- Incremental target of at least a 40% reduction by 2030

GHG Emissions Limits (ECL Article 75)

- 2030 limit of 60% of 1990 emissions (245.87 $MMTCO_2e$)
- 2050 limit of 15% of 1990 emissions (61.47 $MMTCO_2e$)
- Remaining 15% reduction to be achieved through sequestration

Electricity System Requirements (PSL § 66-p) – Why focus on electricity?

- 70% renewable electricity by 2030 (accounting)
- 100% zero-emissions electricity by 2040 (no offsets or CCS)
- 6 GW solar by 2025; 3 GW energy storage by 2030*; 9 GW offshore wind by 2035

Energy Planning Ecosystem in NY

- **Coordinated Grid Planning Process**: Analysis to uncover T&D&G needs for zero carbon system in 2040
- **Public Policy Transmission Process**: Identifies urgent system upgrades to enable electrification or generation
- **Zero by '40 Proceeding**: Setting key definitions and policy around target, evaluation of emerging technologies
- **Proactive Planning Proceeding**: Specific analyses to get ahead of lumpy electrification and economic development loads and DER hot spots
- **Future of Gas Proceeding**: Evaluates phase-out of fossil-fuels in gas pipelines, future heating and generation options
- **Clean Energy Standard**: NYSERDA procurements of RECs to support construction of renewables

Interconnection Ecosystem in NY

- **Interconnection Policy Working Group**: Considers policy changes for distribution interconnections (i.e. whether to allow flexible interconnection)
- **Interconnection Technical Working Group**: Considers technical requirements of interconnection studies (such as data requirements for storage interconnection)
- **Standardized Interconnection Requirements**: Regulatory requirements for managing distribution interconnection
- **Hosting Capacity Studies**: Published maps showing grid capability statewide
- **NYISO Interconnection Queue Process**: Process covering interconnection of resources in wholesale markets

IX and Planning Feedback Loops

- The primary overlap between these processes is the utilization of Queue data in planning exercises – Prepare the grid!
- Existing and forecasted DER are built into load forecasts and grid planning simulations
  - DERs as load modifier in forecasts used in CGPP
  - Granular interconnection forecasts used in Proactive Planning
- DER performance from operational and interconnection data supports distribution planning efforts

Planning Outcomes – Impact on IX

- Distribution planning process and hosting capacity studies provide valuable insights
  - Identifies where headroom exists for future IX's
  - Identifies areas where existing or new IX's will require system upgrades
- Proactive Planning will provide insight regarding DER hotspots and potential for pre-emptive grid investment to minimize total system integration costs – cost allocation TBD
- In some cases, study results point to new options for increasing DER deployment

IX Innovation

- SIR already allows customization of injection/load studies to manage IX costs, enforced through IA, plus Cost Sharing 2.0
- Flexible Interconnection is under development in NY
  - IA-enforced limits or redispatch/curtailment agreement
  - Will allow lower-cost IX and higher deployment
- Hope to also move towards Utility innovation, allowing utilities to consider shared upgrades and potentially utility-developed solutions
  - Storage with grid-forming inverter at substation utilized by multiple solar projects

Key Message

- Planning is great, but plans won't work unless real projects get interconnected
- New York is on its way to 10+ GW of distributed solar and ~2,000 MW of distributed storage
- GWs of new loads from EVs and heat pumps
- Coordination of DERs, loads, and grid upgrades is essential for managing ratepayer impacts
- Smart policy (proactive planning, flexible IX, etc.) can help maximize speed and efficiency while minimizing costs