JOINT UTILITIES OF NEW YORK

DISTRIBUTED SYSTEM PLATFORM (DSP) ENABLEMENT QUARTERLY NEWSLETTER

WHAT'S INSIDE

After Publishing Storage Hosting Capacity Maps, the Joint Utilities Collaborate with Stakeholders to Evaluate Next Steps

The Joint Utilities have been collaborating with stakeholders since 2016 to identify valuable enhancements to hosting capacity map capabilities and implement those upgrades. They have been following a planned Hosting Capacity Roadmap that proceeds in stages. A feature of this roadmap is regular consultations with stakeholders to get feedback and ideas for new enhancements.
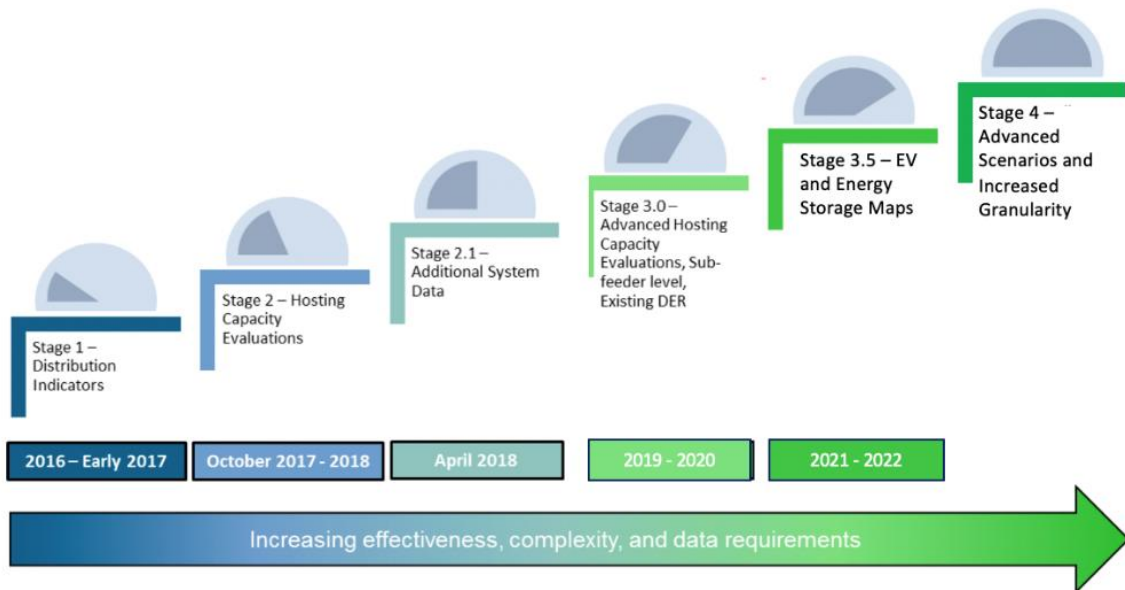
As part of stage 3.5 of the Roadmap, the Joint Utilities published Stage 1 of their Storage Hosting Capacity Maps this spring. Stage 1 shows feeder-level hosting capacity (min/max), additional system data, downloadable feeder-level summary data, sub-transmission lines available for interconnection, and reflects existing DER in circuit load curves and allocations.

On May 18, 2022, the Joint Utilities met with stakeholders to review key features and functionality of the Stage 1 Storage Hosting Capacity Maps and to garner feedback regarding the Storage Hosting Capacity Roadmap shown below.

Immediate	Interim Step	Next Steps
2022 – 2023	**Late 2023–2024**	**TBD**
▪ Sub Feeder Level HC ▪ Incremental Feeder Level Installed Since HCA Refresh ▪ Six-month Update for Circuits that Increase in DG > 500kW ▪ Continue to implement Cost Sharing 2.0	▪ Seasonal load profiles ▪ Additional 'scenarios' based on stakeholder input	▪ Continued granularity

At the stakeholder session, developers agreed to further collaboration. Stakeholders will choose different 'scenarios' in a year, beyond peak and minimum load, for the Joint Utilities to include on Storage Hosting Capacity Maps. This will enable the Joint Utilities to share a seasonal, granular look at load profiles and data outside of the most restrictive interconnection points throughout the year.

Other feedback from the Stakeholder Session provided valuable insights into how the Joint Utilities can prioritize plans and enhance the Storage Hosting Capacity Roadmap. The Joint Utilities are reviewing these requests and will revise the roadmap soon. Updates can be found HERE.

The Joint Utilities are grateful for the many stakeholders who continue to work with us. This collaboration enables the Joint Utilities to deliver more useful system data outputs and to develop the DER marketplace more rapidly.

The Joint Utilities Update the Standardized Interconnection Requirements Document

In 2021, the Joint Utilities worked with stakeholders and DPS Staff to make edits to the New York Standardized Interconnection Requirements (SIR) document, which were filed with the Public Service Commission in May 2022. The SIR contains an extensive framework that governs the interconnection application requirements and process for distributed generators and energy storage systems sized 5 MW or less. As the primary guide for project developers seeking to interconnect distributed generation in parallel with the Joint Utilities' electric distribution systems, periodic updates to the SIR by the companies in

accordance with broader industry trends can maintain and improve the efficiency of the interconnection process.

For example, the Joint Utilities have adjusted language in the SIR to clarify and eliminate potential delays in receiving, processing, and marking payments as "paid". As another point of clarification, the updated SIR added to the definition of Battery Energy Storage System (BESS), stating that such systems will comply with all rules and requirements of Energy Storage Systems (ESS). These edits, amongst others, will help bring greater clarity for developers.

Separately, the Joint Utilities have been discussing additional edits to the SIR to incorporate language related to the adoption of UL1741 – Supplement B (SB) and IEEE Standard 1547 – 2018 (IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces). This activity is directly linked to the Joint Utilities' smart inverter roadmap and the companies' plans to utilize smart inverter technologies. As UL1741- SB certified and IEEE 1547-2018 compliant inverters start to become available in 2023, the Joint Utilities are working to ensure that they have the right tools and capabilities in place to fully realize the benefits (grid resiliency and reliability, improved situational awareness) of this technology. Providing guidance for developers in the SIR ensures that only compliant devices are installed in New York, making sure that the benefits of those systems are realized both for system operators and for customers.

The Joint Utilities are also examining potential updates to the public-facing Technical Guidance Matrix for DER. The JU are examining the need for updating the costs in the document, as well as adding new cost categories. The Technical Guidance Matrix helps provide developers with greater visibility into the interconnection costs they may incur for projects, which in turn can help them better assess project economics.
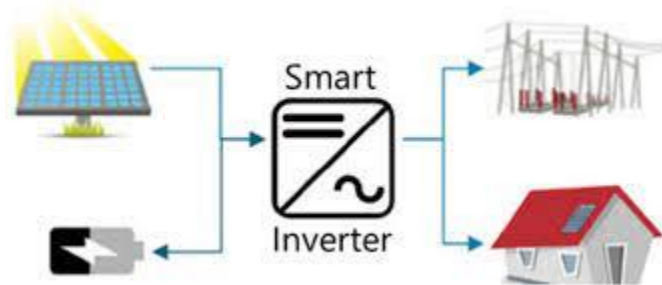
Advancing Discussions on Monitoring and Controlling DERs via Smart Inverters

Advancements in inverter technology have resulted in the development of "smart" inverters. Smart inverters enable two-way communication between the grid and utility

control centers and can enable utilities to remotely read data from distributed resources, among other functions.

The Joint Utilities continue to test and evaluate effective ways to utilize this technology via their Smart Inverter Roadmap. As part of their first phase of the Roadmap, the companies determined bulk power system (BPS) and voltage support settings for smart inverters and developed a timeline to implement these unattended smart inverter settings in their service territories. To do so, the utilities coordinated with the NYISO, equipment manufacturers, and other stakeholders.

In recent months, the Joint Utilities have discussed subsequent phases of the Roadmap related to the monitoring and control of inverter-based DERs. The companies are working on identifying the appropriate data points and field measurements distributed resources will be required to provide. The companies are also identifying the appropriate control points and functionality for these resources; this will aid in maintaining grid resiliency and reliability, and will provide better continuity of service for customers. The monitoring and control parameters identified by the Joint Utilities are aligned with the interoperability requirements and communications protocols presented in IEEE Standard 1547 – 2018. Adopting the parameters published by the standard will help ensure interoperability with distributed resources and ensure the efficiency of the interconnection process. The Joint Utilities are also discussing the appropriate system architectures to illustrate the communications links between the companies and individual resources.

Following these ongoing discussions, the Joint Utilties anticipate releasing the monitoring and control parameters publicly to stakeholders.

A Three-Pronged Approach for FERC 222 Implementation

FERC Order No. 2222 (FERC 2222) opens regional wholesale electricity markets to distributed energy resource (DER) aggregations. The Joint Utilities are preparing for market launch and continuing with their three-pronged approach to working with stakeholders on FERC 2222 Implementation.

First, the Joint Utilities continue to collaborate with the NYISO to implement the NYISO participation model for DERs. Together, the Joint Utilities have hosted workshops with the NYISO, NYTO, and DPS Staff to document the processes and procedures to address FERC 2222 implementation topics, which have included operational coordination, registration

and enrollment, telemetry, and metering and settlement. These sessions have also enabled the Joint Utilities to provide comments on NYISO manuals with updated processes and procedures (including edits on Emergency Operations Manual/Transmission & Dispatch Operations Manual, and a new Aggregation Manual).

Second, the Joint Utilities have initiated discussions with Staff to clarify processes, responsibilities, and mechanisms for handling potential concerns related to tariffs and interconnections. These conversations will continue to resolve outstanding concerns prior to the NYISO DER Participation Model launch.

Third, the Joint Utilities will host additional workshops with the DER community to foster productive dialogue on the utility processes and procedures related to DER integration in the NYISO's wholesale markets. On April 29th the first of these workshops was held with representatives of the aggregator community, NYISO, NYPA, LIPA, and the DPS. The agenda included requested topics such as telemetry, communications, safety and reliability studies, and additional topic areas for future workshops. The Joint Utilities will continue to review feedback from that session and will provide information on subsequent discussions with the DER community.

Data Sharing Continues

The Joint Utilities continue their commitment to sharing relevant energy data with customers and stakeholders in New York. The Joint Utilities also continue to collaborate with NYSERDA, DPS Staff, and stakeholders to define and develop use cases with a focus on adding value. In the spirit of increased collaboration, the Joint Utilities have proposed additional touchpoints with the Integrated Energy Data Resource (IEDR) Program Team.

The IEDR Program Team selected the following four use cases for the IEDR Initial Public Version (IPV) to be released by Q4 2022.

- Large Installed DERs
- Large Planned DERs (Interconnection Queue)
- Consolidated Hosting Capacity Maps
- Machine Readable Rate and Tariffs

The Joint Utilities are currently focused on setting up internal processes to collect and process the data, and ultimately transfer it to a secure, central location in accordance with

appropriate legal and privacy considerations. The utilities continue to coordinate discussions with DPS Staff and NYSERDA to protect customer privacy and mitigate cybersecurity concerns. Accordingly, the Joint Utilities filed a cybersecurity petition on May 4, 2022, recommending enhancements to the existing cyber protections and proposing a governance committee. Each utility also individually filed its IEDR Q1 2022 report on April 29, 2022. The Joint Utilities' filings can be found under Case-20-M-0082 Proceeding on Motion of the Public Service Commission Regarding Strategic Use of Energy Related Data.

The next IEDR implementation phase will cover the Minimum Viable Product (MVP) use cases, which may include:

- Circuit / Distribution details per building
- Aggregated consumptions energy data for CCA
- Consent for already identified customers
- Increased timelines of hosting capacity maps
- Utility updates project information
- Interconnection approval times
- Interconnection collaboration
- Non-Utility data for DER siting (solar)
- Aggregate building energy consumption – building manager
- Aggregate building energy consumption – government agency

Electric Vehicles WG

The goal of the Electric Vehicle ("EV") Make-Ready Program ("EV Make-Ready Program") is to support the deployment of electric infrastructure and equipment necessary to accommodate increased adoption of EVs within New York State by reducing the upfront costs of building charging stations for EVs.

Make-Ready Program 2021 Annual Reports

The July 2020 Make-Ready Order requires the Joint Utilities to file an annual report. With a deadline extension granted by the Public Service Commission, the Joint Utilities filed their 2021 annual reports on April 15, 2022. Annual reports and related program filings can be found on the DPS website under Case Number: 18-E-0138.

Joint Utilities and Stakeholders Comment on EV Rate Design

The Joint Utilities were among the many stakeholders who submitted comments on May 23 in response to the Public Service Commission's request for public comments on a new EV rate design proceeding to consider cost relief solutions for Direct Current fast charging (DCFC) customers. Reply comments from stakeholders were due June 3. Filed comments and more information on the EV rate design proceeding can be found on the DPS website under Case Number: 18-E-0138 and 22-E-0236.

Approved Contractor and Customer Resources

The Joint Utilities make resources available that help customers and contractors get useful information faster and participate in the Make-Ready Program more easily. Customers looking to install EV charging stations through the MRP can find information on the Joint Utilities website regarding program eligibility and find an Approved Contractor. Contractors looking to perform EV charging equipment installations under the MRP can apply to become an Approved Contractor and have their business information listed on the Joint Utilities website. For more information on how to participate in the MRP, contact info@jointutilitiesofny.org or visit your utility's MRP landing page listed below.

Are you a fleet operator in New York interested in electrifying your vehicles?

If you are an owner or operator of a vehicle fleet registered in New York State and you are considering converting your fleet to plug-in electric vehicles, you are eligible to apply for assistance from your utility service provider to help prepare your fleet for electric vehicle charging. Visit the Joint Utilities website to apply for a Fleet Assessment and learn more about eligibility for Make-Ready Program incentives.

Upcoming Make-Ready Webinars for Contractors and Customers

Central Hudson, Con Edison, National Grid and NYSEG and RG&E offer regular webinars and office hours for customers and contractors participating in the Make-Ready Program to learn about available incentives, share best practices, to speak directly with your utility's EV charging experts. If you are interested in attending an upcoming utility program webinar, please email the utilities using the contact information provided in the table below for more information.

Utility	Email	Website
Central Hudson	**EVMakeready@cenhud.com**	**Electric Vehicle Make-Ready Infrastructure Program**
Con Edison	**EVMRP@coned.com**	**Electric Vehicle PowerReady Program**
National Grid	**EVNationalGridUNY@nationalgrid.com**	**Electric Vehicle Charging Station Programs**
NYSEG	**EVPrograms@nyseg.com**	**Electric Vehicle Charger Make-Ready Program**
RG&E	**EVPrograms@rge.com**	**Electric Vehicle Charger Make-Ready Program**
Orange and Rockland	**ev@oru.com**	**Electric Vehicle Make-Ready Program**