JOINT UTILITIES OF NEW YORK

DISTRIBUTED SYSTEM PLATFORM (DSP) UPDATE NEWSLETTER

WHAT'S INSIDE

Updating the DSIP

As noted in the previous Update, the Joint Utilities received an extension of the 2022 DSIP Updates to June 30, 2023 based on continuing consultation with Department of Public Service (DPS) Staff and the need to align the DSIP process with the local transmission and distribution planning process initiated in the *Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act in Case 20-E-0197*.

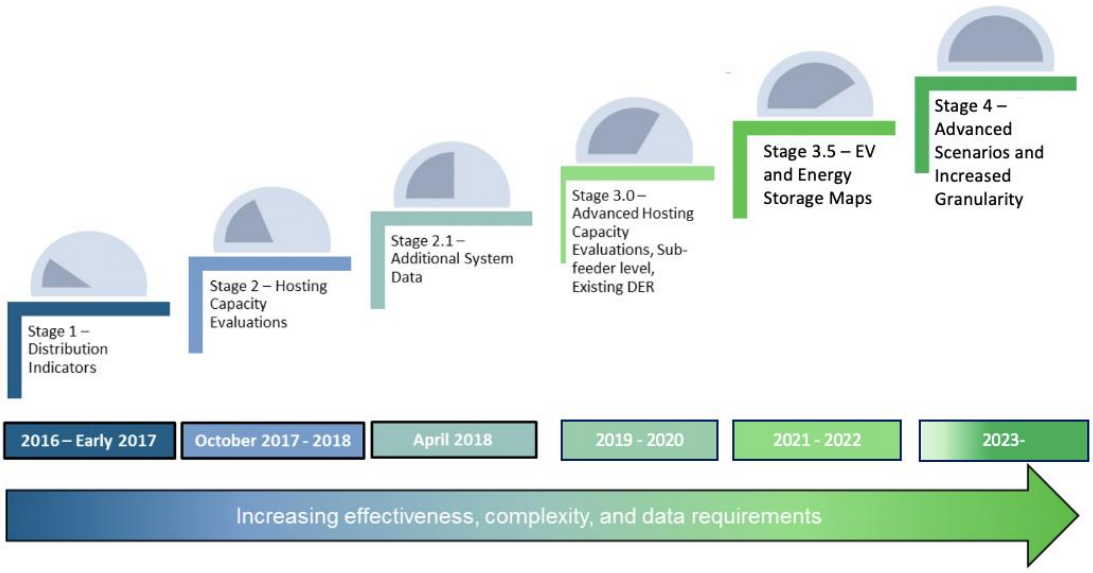
As stakeholders know, every two years, each of the companies among the Joint Utilities of New York (JU) files Distributed System Implementation Plans ("DSIPs"). The DSIPs provide updates regarding the implementation of Distributed System Platform ("DSP") functions and the utilities' overall approach to advancing the objectives of the Reforming the Energy Vision ("REV") Proceeding and other state goals including the Climate Leadership and Community Protection Act ("CLCPA"). The 2020 DSIPs are available on the Joint Utilities website here.

DPS Staff is expected to provide updated Guidance for DSIP preparation. As we prepare for the upcoming filing, we continue to encourage stakeholders to send us ongoing feedback at info@jointutilities.org.

Stakeholder Collaboration Leads to Updates in the Hosting Capacity Maps

Overview

Hosting capacity is an estimate of the amount of DER that may be accommodated without adversely impacting power quality or reliability under current configurations and without requiring infrastructure upgrades. Each of the Joint Utilities (JU) currently shares a PV Hosting Capacity Map and a Storage Hosting Capacity (HC) Map. In fall 2022, the JU completed an analysis refresh of the current iteration of the HC Maps. The JU also continue to progress the overall HC roadmap shown below.



Stage 3.5 of the HC Roadmap: Stage 1 of the Storage HC Maps

As part of stage 3.5 of the Roadmap, the JU published Stage 1 of Storage HC Maps in spring 2022. The Storage HC Map 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. The storage HC Maps have separate displays for load and generation and are color-coded based on the minimum level of the maximum HC calculated for the feeder. The minimum level of the minimum HC calculated appears on the draw-down pop-up, along with the following information.

- Date
- Local Hosting Capacity (MW)
- Substation/Bank Name
- Feeder
- Substation/Bank Rating (MW)
- Feeder Voltage (kV)

Next Steps

Integral to the roadmap is regular consultations with stakeholders to get feedback and ideas for new enhancements. The JU met with stakeholders on November 2, 2022 to get feedback on current Storage HC Map capabilities and next steps as follows.

Immediate	Interim Step	Next Steps
April 1, 2023	**Late 2023–2024**	**TBD**
▪ Sub Feeder Level for Storage HC Map ▪ Nodal Constraints (Criteria Violations) on PV and Storage HC Maps ▪ Six-month Update for Circuits that Increase in DG > 500kW ▪ Cost Share 2.0 Items ▪ DG Connected Since Last HCA Refresh	▪ Additional 'scenarios' based on Interconnection WG Collaboration with Stakeholders	▪ Continued granularity

To better link the HC Maps to the CESIR and SIR, the JU invites stakeholders to collaborate with the Interconnection Technical Working Group (ITWG). The ITWG will consider developer use cases for interconnection and some of these use cases will be reviewed for inclusion in future Storage capacity map updates.

The JU also commits to providing the following information by April 2023:

- Links and/or instruction to access 8760 data,;A user-guidance document; and
- Storage HC data made available via the API.

To stay updated on all things related to Hosting Capacity and access the individual utility map portals, click here. Your feedback and participation enables the JU to deliver more useful system data outputs and to develop the DER marketplace more rapidly.

Data Sharing Collaboration Advances IEDR Platform

The Joint Utilities of New York continue to support efforts to increase access to energy data by collaborating with NYSERDA and DPS Staff on the statewide Integrated Energy Data Resource (IEDR) Platform.

In October 2022, the IEDR Development Team was introduced, led by E Source Companies LLC, and includes of UtilityAPI,

Flux Tailor, TRC Companies, and HumanLogic. The IEDR Development Team will be responsible for designing, building, and operating the IEDR platform to accomplish the policy goals and program outcomes described in the Commission's IEDR Order. The initial public version (IPV) use cases are currently projected to be released by Q1 2023, and include:

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

The Joint Utilities sent a second round of IPV Test Data for Hosting Capacity Maps and DER use cases in November/December 2022. This will assist the IEDR Development Team in understanding the structure and format of utility data, which will aid implementation of the IPV use cases and overall development of the IEDR platform. Topics discussed during Utility Coordination Group (UCG) meetings include:

- Utility to IEDR data transfer methodology
- Customer consent considerations and the impact of policy and statutory requirements on the IEDR Platform, including but not limited to indemnity and liability issues, state legislation indicating opt-in approaches may be required, federal legislation on data sharing requirements, and other regulatory requirements governing privacy policies and data sharing responsibilities
- Data availability of a small subset of requested data elements
- Consistency of data element nomenclature across all utilities
- Sensitivity of certain requested data elements

The Joint Utilities also focused on developing legal agreements necessary to work with and transmit data to the IEDR Program Team and its vendors. In parallel, the Joint Utilities continue to coordinate discussions with DPS Staff and NYSERDA to guarantee the protection of customer privacy and mitigate cybersecurity risks. On December 1, 2022, the Joint Utilities filed a petition for clarification seeking Commission direction regarding the direct sharing of protected customer data with the IEDR administrator.

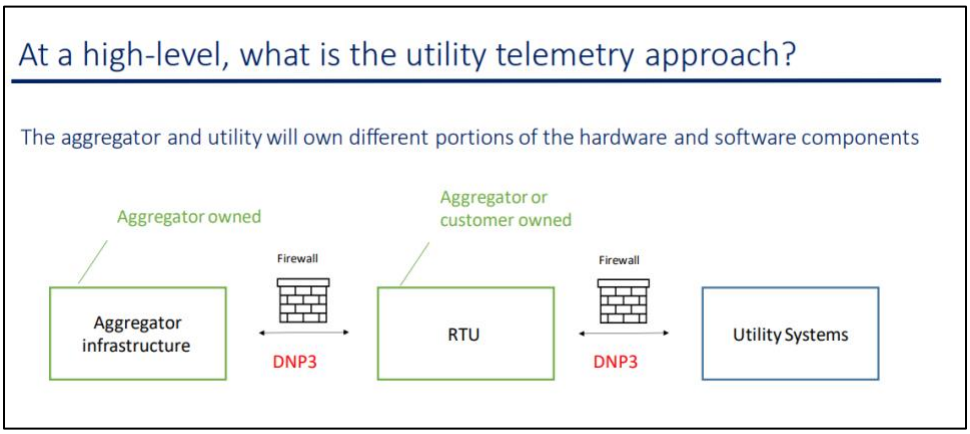
Each utility also individually filed its IEDR Q3 2022 report by November 1, 2022. The Joint Utilities' filings can be found under Case-20-M-0082 *Proceeding on Motion of the Public Service Commission Regarding Strategic Use of Energy Related Data*.

Joint Utilities Progress Toward DER Participation and FERC 2222 Implementation

FERC Order No. 2022 (FERC 2222) and the 2020 tariff enables distributed energy resource (DER) aggregations into the wholesale electricity markets. These tariffs allow several DERs to aggregate in order to satisfy minimum size and/or performance requirements that resources may not meet individually. The Joint Utilities have been working closely with the NYISO and DPS Staff to implement the NYISO's DER Participation Model, whose market launch is targeted for Q2 2023, and preparing for the full implementation of FERC 2222 in New York.

The Joint Utilities held conversations with DPS Staff to clarify tariff changes necessary for the market launch. Accordingly, the utilities have filed changes to their retail and wholesale tariff models to enable participation.

The Joint Utilities also host on-going conversations with the stakeholder community as part of their preparations. The latest stakeholder session was held on August 30th to discuss the telemetry requirements necessary for market participation. Over 80 participants joined the call – for more information, you can view the recording or presentation.



Furthermore, the Joint Utilities published a whitepaper examining why DER granular dispatch data is necessary for the safety and reliability of the distribution grid. The whitepaper was introduced to stakeholders at a November NYISO Installed Capacity Working Group meeting and provides additional background on day-ahead information sharing requirements between DERs participating in the wholesale market and utilities. The Joint Utilities look forward to continued collaboration with all stakeholders ahead of the market launch.

Joint Utilities Prepare for the Roll-Out of UL 1741-SB and IEEE 1547-2018 Compliant Inverters

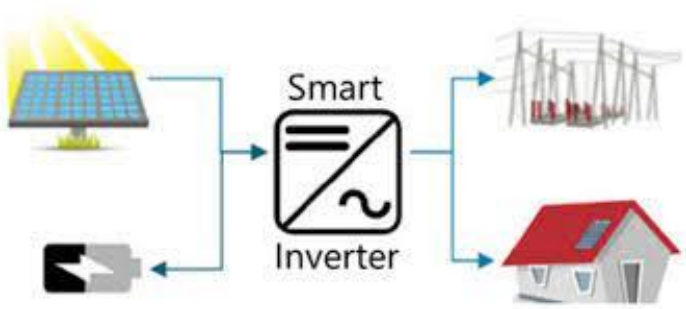
The JU have been collaborating with stakeholders and Staff to prepare for the rollout of UL 1741-Supplement B (SB) certified and IEEE Standard 1547-2018 (IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces) compliant inverters and have undertaken a number of activities in this regard. These inverters will be allowed in New York starting January 1, 2023.

The JU made edits to the New York Standardized Interconnection Requirements (SIR) to incorporate language related to both UL 1741-SB and IEEE 1547-2018. 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. In addition, each company is making updates to its respective interconnection technical documentation to include the new bulk power support and voltage support settings introduced by the implementation of IEEE 1547-2018.

The JU continue to collaborate with stakeholders and members of industry on other activities in this regard as well. The JU have responded to several detailed questions from members of industry with regard to the companies' implementation of IEEE 1547-2018. The companies provided industry members with information related to standardization of inverter settings across the companies, how the settings will be verified for compliance, and cases where settings and setpoints may differ from the JU's default values. The JU also provided guidance that they expect the new smart inverter settings (by themselves) to result in negligible curtailment of project output, as the companies will only require the Voltage – Reactive Power (Volt – Var) setting to be enabled by default, and the Voltage – Active Power (Volt – Watt) function will be disabled by default. An NREL study has shown that curtailment is more noticeable when both Volt – Var and Volt – Watt settings are enabled. The JU are open to discussions on curtailment analyses for projects, recognizing that such analyses would require a mechanism outside of the existing CESIR process.

Utilities Finalize Monitoring Requirements for Inverter – Based Resources

Advancements in inverter technology have resulted in the development of "smart" inverters. Smart inverters enable two-way communication between distributed resources and utility control centers and can enable utilities to remotely read data from distributed resources, among other functions. The usage of smart inverters also contributes to the Joint Utilities' commitment to providing low-cost monitoring requirements for developers.



Building off the first phase of their Smart Inverter Roadmap, the Joint Utilities aligned on monitoring requirements for inverter – based resources. The companies worked on identifying the appropriate data points and field measurements distributed resources will be required to provide. The utilities have summarized the list of monitoring points in a document they expect to release publicly in the coming months. Within this document, the utilities are also describing the applications and use cases that the monitoring data points will help inform. Through subsequent phases of the Smart Inverter Roadmap, the JU will work on identifying the appropriate control parameters for DER.

The monitoring 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 diverse distributed resources and ensure the efficiency of the interconnection process.

Joint Utilities Continue to Support the Adoption of Electric Vehicles

Managed Charging Technical Standards Working Group

As part of the Residential Managed Charging Order, the Joint Utilities, along with the Technical Standards Working Group, are required to make a proposal regarding the use of EV charging equipment and vehicle telematics devices as submeters and the testing of the accuracy of those devices. The Technical Standards Working Group met on December 9,

2022 to discuss the requirement. The Joint Utilities are expected to submit a testing accuracy proposal by January 10, 2023.

EV Rate Design

The Joint Utilities have been actively participating in a proceeding to develop EV rate design solutions in compliance with legislation adopted by New York State in 2021. This law recognizes that while the public desires fast chargers (Direct Current Fast Chargers), commercial customers owning electric vehicle charging equipment require relief from demand charges. The legislation requires that any solution(s) by the Commission must: (1) consider alternatives to demand-based rates for light duty, medium/heavy duty, and fleet customers; (2) be technology agnostic; (3) be available to both existing and new customers in a timely manner; (4) provide cost relief to customers in all billing periods; and (5) allow for the specific needs of individual utility service territories. On December 5, 2022, the Joint Utilities submitted written reply comments to the previously released Staff whitepaper on the topic. The Commission is expected to act on these recommendations by December 31, 2022.

Make-Ready Program Midpoint Review Stakeholder Sessions

As part of the Make-Ready Program Mid-Point Review, DPS Staff hosted a series of Technical Conferences to gather feedback from stakeholders about how the next half of the program should proceed. The four technical conferences addressed the following topics: Make-Ready Incentive levels, NYSERDA and NREL's charging infrastructure needs study, data reporting, vehicle-grid integration, medium- and heavy-duty vehicles, and disadvantaged communities. The Joint Utilities made presentations during these meetings and also participated in roundtable discussions along with representatives from a diverse range of stakeholder groups including environmental and social justice organizations, charging technology providers, developers, transit authorities, and EV industry groups. Following the Technical Conferences, DPS Staff will synthesize stakeholder comments and produce a whitepaper with recommended modifications to the program in January 2023. Public comments in response to the Staff whitepaper will be due in March 2023, followed by Commission action by June or July 2023. More information about the Mid-Point Review and presentations and meeting recordings can be found on the DPS website.

Upcoming Approved Contractor List Changes

With the introduction of the utilities' Residential Managed Charging Programs, the Joint Utilities will be expanding the existing Approved Contractor List. The list currently includes contractors who are approved to perform commercial-scale installations of EV charging infrastructure under the existing EV Make-Ready Program. Starting in 2023, the Joint

Utilities will also be accepting applications from contractors who can perform residential EV charger installations for customers interested in taking advantage of their utility's managed charging program. These contractors will be added to the existing list, and users searching for a contractor for either Joint Utilities program will be able to filter the list to display the contractors that meet their needs. Stay tuned for more information about these forthcoming changes.

Tools and Informational Sources

Advanced Forecast	**Joint Utilities** Joint Utilities: Overview of Currently Accessible System Data Joint Utilities: Load Forecasts Joint Utilities: Historical Load Data				
Beneficial Locations	**Joint Utilities** Joint Utilities: Beneficial Locations				
Customer Data	**Central Hudson** Central Hudson: Privacy Policy	**Con Edison** Con Edison: Customer Energy Data	**National Grid** National Grid: NY System Data Portal	**NYSEG RG&E** NYSEG: Your Energy Data	**O&R** O&R Information on Requesting Aggregate Whole Building Data O&R Energy Service Company EDI O&R New York Rates and Tariffs O&R Share My Data
DER Integration & Inter-connection	**Joint Utilities** Joint Utilities: Distributed Generation Joint Utilities: Interconnection Joint Utilities: SIR Pre-Application Information				
	Central Hudson Central Hudson: Distributed Generation Homepage Central Hudson: Interconnection Queue	**Con Edison** Con Edison: Private Generation Energy Sources	**National Grid** National Grid: Systems Data Portal National Grid: Interconnection	**NYSEG RG&E** A Developer's Guide to the NYSEG/RG&E Interconnection On-line Application Portal NYSEG - Online Portal RG&E - Online Portal NYSEG - Queue RG&E – Queue *SIR Inventory requests:* NYRegAdmin@avangrid.com	**O&R** O&R: Distributed System Platform O&R Private Generation Energy Sources

Energy Efficiency	**Central Hudson** Central Hudson: Energy Efficiency	**Con Edison** Con Edison: Energy Star	**National Grid** National Grid: Energy Savings Programs	**NYSEG RG&E** NYSEG: Smart Energy RG&E: Energy Efficiency Incentives	**O&R** O&R: Energy Efficiency Rebates
Energy Storage	**Central Hudson** Central Hudson: Projects	**Con Edison** Con Edison: Energy Storage	**National Grid** National Grid: Battery Programs	**NYSEG RG&E** NYSEG RG&E: Energy Storage Service Agreement	**O&R** O&R Private Generation Tariffs
EV Integration	**Joint Utilities** Joint Utilities: EV Programs Joint Utilities: Approved Contractor List with New Filter Capabilities				
	Central Hudson Central Hudson: EV Homepage	**Con Edison** Con Edison: Electric Vehicles	**National Grid** National Grid: Upstate NY Electric Vehicles Hub	**NYSEG RG&E** NYSEG: Electric Vehicles RG&E: Electric Vehicles	**O&R** O&R Electric Vehicles Information O&R Electric Vehicle Guest Drive Event Video
Hosting Capacity	**Joint Utilities** JU Utility Specific Hosting Capacity				
	Central Hudson Central Hudson: Hosting Capacity Maps	**Con Edison** Con Edison: Hosting Capacity	**National Grid** National Grid: ESRI Portal	**NYSEG RG&E** NYSEG/RGE Hosting Capacity Map	**O&R** O&R Hosting Capacity and System Data
NWAs	**Joint Utilities** Joint Utilities: Utility-Specific NWA Opportunities				
	Central Hudson Central Hudson: NWAs	**Con Edison** Con Edison: Non-Wires Solutions	**National Grid** National Grid: NWA	**NYSEG RG&E** NYSEG - Non-Wires Alternatives RG&E - Non-Wires Alternatives	**O&R** O&R NWA Opportunities Non-Wires Alternatives Opportunities Portal

Progressing the DSP	**Joint Utilities** Joint Utilities: Utility DSIPs Joint Utilities: Capital Investment Plans Joint Utilities: Electric Reliability Reports