

JOINT UTILITIES OF NEW YORK

DISTRIBUTED SYSTEM PLATFORM (DSP) ENABLEMENT QUARTERLY NEWSLETTER

WHAT'S INSIDE

Updating the DSIPs.....2

Stakeholders Continue to Help Enhance the Hosting
Capacity Maps.....2-4

Data Sharing Collaboration Advances IEDR Platform.....4-5

Utilities and Stakeholders Engage in Midpoint Review
Process for Electric Vehicle Programs.....5-7

Joint Utilities Progress Toward FERC 2222
Implementation.....7-8

New York Standardized Interconnection
Requirements (SIR) Updated to Reflect Utility Plans
for Smart Inverter Technology.....8-9

Utilities Discuss Monitoring Requirements for
Inverter-Based Resources.....9-10

Tools and Informational Resources11-13

Updating the DSIP

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 Protection Act (“CLCPA”). The 2020 DSIPs are available on the Joint Utilities website [here](#).

The Joint Utilities have filed a request for 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*.

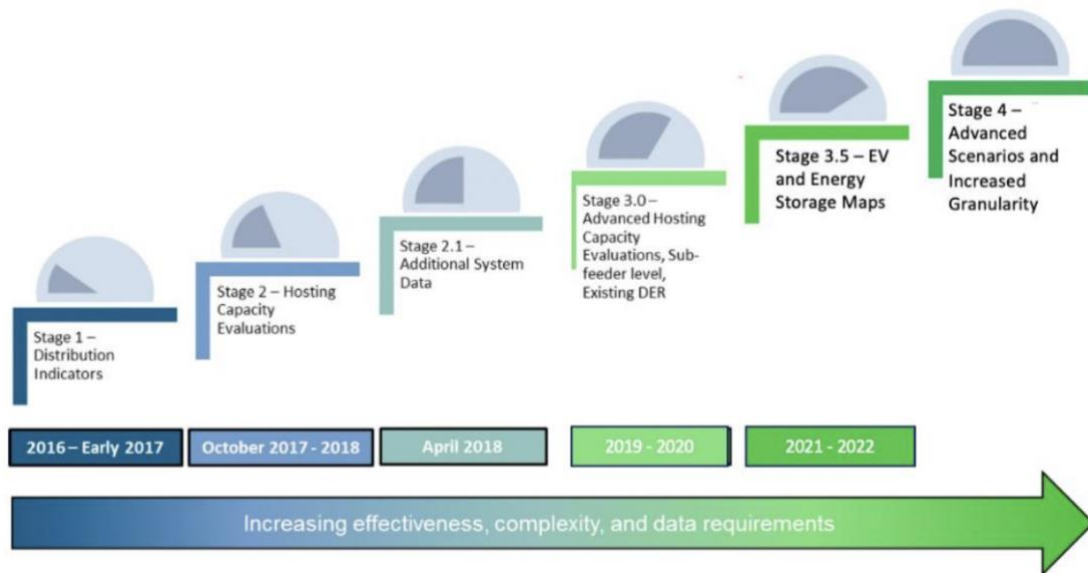
We want to make sure that the DSIP filings are just one part of an interactive, ongoing conversation among utilities, stakeholders, and regulators about how we can work together to achieve state policy goals. We encourage stakeholders to send us ongoing feedback at info@jointutilities.org.

Stakeholders Continue to Help Enhance 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 currently shares a PV Hosting Capacity map and a Storage Hosting Capacity map.

While working to refresh the current iteration of Hosting Capacity (HC) Maps by fall 2022, the JU also continues to progress the overall Hosting Capacity roadmap shown below. Integral to this roadmap is regular consultations with stakeholders to get feedback and ideas for new enhancements. To stay updated on all things related to Hosting Capacity and access the individual utility map portals, click [here](#).



Stage 3.5 of the HC Roadmap / Stage 1 of the Storage HC Roadmap Published

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 min of the maxes. The min of the mins appears on the draw-down pop-up, along with the following information.

All Utilities

Date.

Local hosting capacity (MW). Depending on the map view, the popup will either show the min/max hosting capacity for charging or the min/max hosting capacity for discharging.

Substation/bank name. The substation that the selected feeder is connected to.

Feeder. The selected circuit's name/number.

Substation/bank rating (MW). The substation / transformer bank design rating in MW.

Feeder voltage (kV). Voltage level of the selected feeder.

Most Utilities

Anti-islanding HC limit (MW). Except for National Grid, all utilities will also show anti-islanding HC value (it will not be used to color the feeder range for hosting capacity).

Next Steps

Based on stakeholder recommendations, the JU continue to develop plans to enhance Storage HC Maps. For example, utilities will share criteria violations on HC Storage maps by April 2023, with some utilities able to share criteria violations as early as October 2022. In addition to the feeder level pop-up, the utilities will share a pop-up at the nodal level appearing as shown below. (Values are illustrative only).

(1 of 4)	
Primary Level Hosting Capacity:	
Section ID	325,846,712.00
Feeder	36_25_92451
Base Voltage (kVLL)	13.200000
Section Hosting Capacity (MW)	4.900000
Bank Rating (MW)	5.880000
Feeder Rating (MVA)	7.540000
Flicker Value (MW)	4.900000
Primary Over-Voltage (MW)	10.000000
Primary Voltage Deviation (MW)	10.000000
Regulator Deviation (MW)	10.000000
Thermal from Generation (MW)	10.000000
Anti-Islanding	10.000000

The JU will host a stakeholder session this November to share plans regarding nodal analysis, seasonal analysis, and continued enhancement to granularity. The JU are grateful for the many stakeholders who continue to work with us. This collaboration 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 stakeholder access to energy data. On February 11, 2021, the Commission issued an Order approving the design and implementation of a statewide Integrated Energy Data Resource (IEDR) Platform.

Presently, the Joint Utilities are working with the IEDR Program Team, which includes NYSERDA and DPS Staff, to refine and define the data fields that would feed into Initial Public Version (IPV) use cases for the platform. The IPV use cases are currently projected to be published by Q4 2022. IPV use cases include:

- Large installed DERs
- Large Planned DERs (Interconnection Queue)
- Consolidated Hosting Capacity Maps

- Machine Readable Rate and Tariffs

The Joint Utilities have been focusing on preparing the necessary agreements to work with the IEDR Program Team, and its vendors, including the new developer that will build and operate the IEDR. The Utilities submitted their first round of test data on June 17, 2022, to help the IEDR Program Team build out the platform. In parallel, the Joint Utilities continue to coordinate discussions with DPS Staff and NYSERDA to guarantee protection of customer privacy and mitigate cybersecurity risks.

Moreover, the Joint Utilities filed a [Petition to Modify Cybersecurity Requirements](#) on May 4, 2022, recommending enhancements to existing cyber protections and proposing a governance committee. Five parties filed comments or petitions in response to the cybersecurity petition by July 25, 2022. The utilities filed [reply comments](#) on August 19, 2022.

Each utility also individually filed its IEDR Q2 2022 report by August 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.

Utilities and Stakeholders Engage in Midpoint Review Process for Electric Vehicle Programs

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



Approved Contractor List Updates

Per the July 2020 Make-Ready Order, the Joint Utilities maintain the [Approved Contractors List on the Joint Utilities website](#). This list provides utility customers with a directory of

businesses that have the appropriate licenses and certifications to perform EVSE installation work under the Make-Ready Program. The full list currently includes almost 700 businesses, with new contractors being added every week. Recent improvements to the website have included the addition of a new filter that allows users to sort the list based on whether a contractor has worked on Make-Ready projects before, which, when used in combination with the existing Service Area and Services Provided filters, results in a more manageable and customizable list for customers to navigate.

DCFC PER-PLUG INCENTIVE PROGRAM

MAKE-READY PROGRAM

Fleet Assessment Services

Approved Contractors and Application

Medium- and Heavy-Duty EV Make-Ready Pilot

Make-Ready Program Approved Contractors

Entities wishing to install electric vehicle chargers under the EV Make-Ready Program must do so using one of the Approved Contractors in their service territory listed in the table below. If you are seeking to become an Approved Contractor through the Make-Ready Program, please fill out the application linked below.

Apply Here or Edit an Existing Application

Service Areas	Services Provided	Previously performed work under the Make-Ready Program
<input type="checkbox"/> Central Hudson	<input type="checkbox"/> Engineering	<input type="radio"/> - Any -
<input type="checkbox"/> Con Edison	<input type="checkbox"/> Electrical	<input checked="" type="radio"/> Yes
<input type="checkbox"/> National Grid	<input type="checkbox"/> Construction	<input type="radio"/> No
<input type="checkbox"/> NYSEG	<input type="checkbox"/> Turnkey EVSE Developer	
<input type="checkbox"/> RG&E	<input type="checkbox"/> Owner/Operator	
<input type="checkbox"/> Orange & Rockland	<input type="checkbox"/> Other	

Managed Charging Order

In December 2020, in compliance with the Make-Ready Program, the Joint Utilities filed proposals for EV managed charging mass-market customer programs. On July 14, the Public Service Commission issued an [order](#) approving, with modifications, the utilities' proposals. The approved programs will provide customers with alternatives to the current whole home Time-of-Use rates, incentivizing EV charging at off-peak times when rates are lower. On September 26, the utilities filed implementation plans for the programs.

Midpoint Review Kickoff

On August 30, the Public Service Commission released a [Notice of Meeting and Commencement of the Make-Ready Program Mid-Point Review](#). This process will assess the utilities' progress toward budget use and charger deployment and consider revisions to program design, including possible redirection of unused funds, recalibration of incentive levels, and expansion of the program. The Joint Utilities hosted a stakeholder presentation with Department of Public Service Staff on September 20 to kick off the Midpoint Review process. The meeting slides can be found on the JU website and on the DPS Case Matters website. Stakeholders interested in the Electric Vehicle Infrastructure Make-Ready Programs are invited to submit comments. Specific questions that the Commission is soliciting comments on are attached to the Notice, but commenters are encouraged to submit feedback on any area of the Make-Ready Order and Programs. Comments should be filed by October 3, 2022 in Case 18-E-0138 by e-filing or by mail.



Joint Utilities Progress Toward FERC 2222 Implementation

FERC Order No. 2222 (FERC 2222) opens regional wholesale electricity markets to distributed energy resource (DER) aggregations. FERC 2222 allows several sources of distributed electricity to aggregate in order to satisfy minimum size and performance requirements that each may not be able to meet individually. FERC 2222 will help provide a variety of benefits including: lower costs for consumers through enhanced competition, more grid flexibility and resilience, and more innovation within the electric power industry. The Joint Utilities are preparing for market launch by collaborating with the NYISO, working with DPS Staff, and hosting discussions with stakeholders. Project plans are currently projecting a June 2023 go-live.

The Joint Utilities continue to collaborate with the NYISO to implement the NYISO DER Participation Model. The NYISO will determine the processes for DER enrollment and participation in the market. The NYISO and Joint Utilities are advancing market readiness by resolving topics pertaining to DER participation in bi-weekly workshops. The Joint Utilities are also providing input into NYISO proposed tariff language associated with the compliance filing targeted for submittal in November.

The Joint Utilities have continued discussions with Staff to clarify tariff changes necessary for participation. These discussions will continue to resolve outstanding concerns prior to

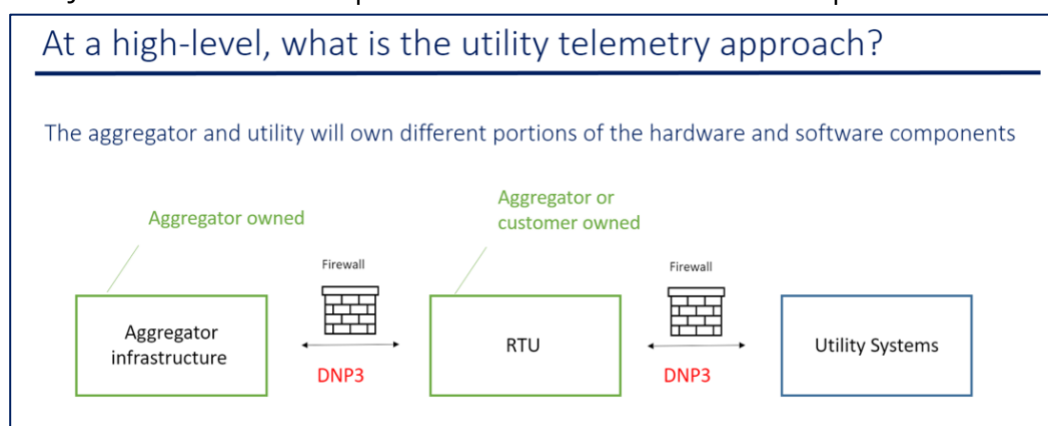
the NYISO DER Participation Model launch. Utilities are also evaluating potential retail tariff changes to facilitate DER participation in the wholesale market.

The Joint Utilities continue to host workshops with the DER community to examine the telemetry requirements necessary for market participation. On August 30th the second of these workshops was held with representatives from the aggregator community, NYISO, NYPA, LIPA and DPS Staff. The Joint Utilities will continue to review feedback from that session and provide information on potential subsequent discussions with the DER community.

New York Standardized Interconnection Requirements (SIR) Updated to Reflect Utility Plans for Smart Inverter Technology

The Joint Utilities have made additional edits to the New York Standardized Interconnection Requirements (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 work 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 also responded to a recent stakeholder request for additional information on utility



infrastructure upgrades required to interconnect DER, to build on the existing public-facing Technical Guidance [Matrix](#) for DER. As part of the response to the request, the JU updated

the costs in the matrix, and also provided information on 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.

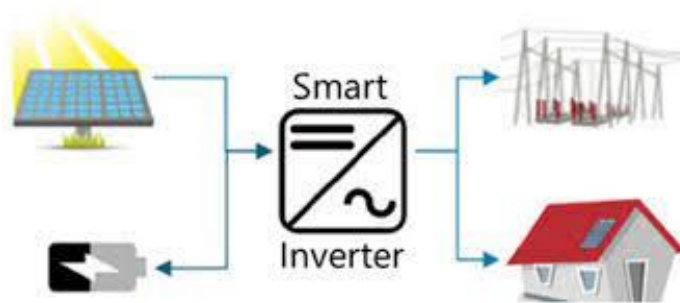


There has been interest recently from developers in using flexible interconnection schemes for solar PV sites where possible to avoid or defer the need for costly distribution system upgrades. Accordingly, in recent discussions, the Joint Utilities provided

stakeholders with detailed information on each of their respective companies' initiatives regarding flexible interconnection. National Grid and Avangrid also provided presentations to stakeholders on their respective flexible interconnection pilots earlier this year.

Utilities Discuss Monitoring Requirements for Inverter-Based Resources

Advancements in inverter technology have resulted in the development of "smart" inverters. Smart inverters can 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 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 are now discussing monitoring requirements for inverter-based resources. The companies are working on identifying the appropriate data points and field measurements distributed resources will be required to provide. The utilities are also

describing the applications and use cases that these monitoring data points will help inform. As part of activities of subsequent phases of the Smart Inverter Roadmap, the JU will work on identifying the appropriate control parameters for DER.



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.

Tools and Informational Sources

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

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](#)