JOINT UTILITIES OF NEW YORK

DISTRIBUTED SYSTEM PLATFORM (DSP) ENABLEMENT QUARTERLY NEWSLETTER

WHAT'S INSIDE

Charting the path of New York's Grid of the Future: A Work in Progress

On April 18, 2024, the Public Service Commission (Commission) issued an Order (CASE 24-E-0165) instituting a Proceeding Regarding the Grid of the Future. The Order stated, "To support the State's clean energy goals, the amount of energy generated by intermittent solar and wind resources at all grid levels will need to increase significantly between now and 2040. Similarly, meeting the State's climate targets will require a rapid increase in the scale, distribution, and impact of electrification between now and 2050. Both the changing generation resources and increasing electricity needs will drive the need to deploy more flexible resources throughout the electric system."

To determine the potential scale and to identify possible future actions to promote the evolution of the electric grid, the Commission outlined in the Order that a Grid Flexibility Potential Study (Study), published on January 31st, would be conducted as a framework for implementation (Refer to Grid Flexibility Potential Study, Phase 1 Final Report Volume 1: Summary Report and Volume 2: Technical Appendix). The Study found that New York could have over 8 GW of grid flexibility potential by 2040 and 3 GW by 2030 but noted that there are significant barriers that all stakeholders will have to work through collaboratively in the coming years to achieve more of that potential. The Study identifies five key barrier categories for grid flexibility deployment (compensation mechanisms, regulatory barriers, customer experience and enrollment, technical barriers, and wholesale market barriers) and suggests potential solutions to address these barriers to prompt actions for better deployment of flexibility resources.

Leveraging insights from the Study, the Commission will file the first iteration of the New York Grid of the Future Plan (Plan), with the deadline extended to March 31, 2025, from December 31, 2024. This plan will be a starting point for establishing a comprehensive

strategy and for ongoing work. Following the completion of the first Plan, Department of Public Service (DPS) Staff will review and solicit input from stakeholders to develop an updated Plan (the second iteration of the Grid of the Future Plan), which is to be filed by December 31, 2025. The Second Plan will describe a workable and actionable path for evolving the electric grid/industry in response to changing grid needs in New York State between now, 2030, and 2040.

Additionally, the Order requires that as part of the first iteration of the Plan, DPS Staff develop a more expansive Distributed System Implementation Plan (DSIP) process that is aligned with the goals of the Grid of the Future proceeding. Since the first utility filing for their initial DSIP in 2016, followed by updates in 2018, 2020, and 2023, the updates have endeavored to describe in detail how utilities are enabling distributed system platform (DSP) functions that integrate DER, provide robust information to stakeholders, and provide market services. The Plan is expected to recommend new and/or revised requirements for future DSIP content and processes.

Make Ready Program Milestones and Infrastructure Interconnection Working Group Updates

Annual Make-Ready Program Report

The Midpoint Review Order from November 2023 mandated new annual reporting requirements for the Make-Ready Program. The first reporting deadline where these new requirements applied was March 1st, 2025. The Utilities submitted reports that detailed program participation data, including number of plugs installed, incentives paid out, aggregated kW nameplate capacity, and Disadvantaged communities (DAC) status of participating sites; as well as plug and session charging data, including the number of daily charging sessions, the energy use at each site, percent utilization per site, and plug outage information.

The utilities also reported on data from the DCFC Per Plug Incentive Programs and the Load Management Technology Incentive Program (LMTIP). All public report filings can be found on DMM under Case 18-E-0138 and Case 22-E-0236.

Make-Ready and Load Management Technology Incentive Program Reviews Launched

DPS Staff posted notices of the commencement of the Make-Ready Program Review and LMTIP Review. There will be a Stakeholder Webinar Session on Tuesday, March 25, 2025 to inform stakeholders of the status of the two programs. In the context of the upcoming end of the program at the end of 2025, and as mandated by the Midpoint Review Order, the Make-Ready Program Review will evaluate 1) the Make-Ready Program's effectiveness; 2) progress towards plug goals; 3) budget modifications; 4) the impact of proprietary technologies; 5) the ramping down of incentive allocations and 6) should include a proposal

regarding cost containment. Stakeholders are invited to submit comments responding to questions about the program prepared by Staff by April 11, 2025. Comments should be submitted via DMM under Case 18-E-0138.

The LMTIP Review will evaluate outcomes of the utilities' LMTIP implementations to date, and whether LMTIP programs should be reauthorized. The Commission will accept comments Stakeholders are invited to submit comments responding to questions about the program prepared by Staff by March 28, 2025. Comments should be submitted via DMM under Case 22-E-0236.

EV Infrastructure Interconnection Working Group

DPS Staff filed the Modified Proposal for Streamlined V1G Queue Management in December. This document, started by Con Edison and edited collaboratively with the Joint Utilities, considered comments that Staff and stakeholders shared through the Electric Vehicle Infrastructure Interconnection Working Group (EVIIWG) monthly meetings throughout 2024. After filing late last year, industry stakeholders provided comments in the proceeding and during the monthly EVIIWG meetings and the document continued to be edited. DPS is now responsible for the final document, which will outline a standard process and guidelines for the utilities to streamline the EV charger connection process, increase transparency, and address situations of Make-Ready Program application queue backlog. Once the EVIIWG finalizes the document, it will be re-filed and undergo the SAPA process. EVIIWG meetings and versions of the modified proposal can be found on the DPS EVIIWG website and under Matter 24-00339.

ISWG Ramps Up Engagement on Phase 2 of the IEDR

The first few months of 2025 saw the JU expand its efforts in support of the Integrated Energy Date Resource (IEDR) Program. In monthly meetings and in one-on-one collaborations with the IEDR Team, the JU advanced action on several important Phase 2 milestones, including Green Button Connect (GBC), the rate plan data use case, and data transfers of customer and network, as well as emerging issues related to customer privacy.

The JU and IEDR Team are continuing the testing and coordination steps necessary for GBC implementation. The final step in the plan, Production Go-Live, is currently scheduled for August and September 2025. For the rate plan data use case, the JU are advancing conversations with the IEDR Team on various aspects of the rate plan data schema. This work will enable the development of cost estimating tools for customer participation in utility programs across New York State. The JU also continued collaboration with the IEDR Team on deposit feedback processes for customer and network data. Activities focused on timely updates to utility DER data uploads to the IEDR Platform and improvements to underlying protocols necessary for high-quality, high-volume transfers of utility data. Finally, the JU led engagement during the quarter in discussions related to customer privacy considerations and opt-out procedures for data on the IEDR Platform.

Through all these activities, the JU remains committed to working with the IEDR Team and New York State Energy Research and Development Authority (NYSERDA) to ensure that the IEDR Platform best serves customers across New York State with consistent cost-estimating tools and timely data to make informed energy-related decisions.

Integrated Planning: Completed Phases, Continued Progress, and Upcoming Stakeholder Opportunities

The JU have continuously developed and refined their Hosting Capacity (HC) Maps to improve transparency, support grid planning, and enable better decision-making for Distributed Energy Resources (DERs), Battery Energy Storage (BES), and electrification-related load growth. Over the past decade, these maps have evolved from high-level circuit indicators to detailed, data-rich tools with sub-feeder granularity, nodal constraint visibility, and expanded data accessibility via APIs. This evolution has been guided by your stakeholder input.

Completed Phases

PV HC Maps	BES HC Maps	Electrification Maps
Initial Feeder-Level Hosting Capacity (2016–2017) • Launched the first Stage 1 Hosting Capacity Maps, providing basic feeder-level indicators showing general circuit availability for DER interconnections. • Maps displayed high-level traffic light indicators (red/yellow/green ratings) to show where DERs could likely interconnect without major system upgrades. **Feeder-Level Hosting Capacity & Standardized Methodology (2017–2018)** • Released the first feeder-level hosting capacity values using EPRI's DRIVE tool.	**Initial Storage Hosting Capacity Map (2022)** • First storage-specific hosting capacity maps released, modeled after PV hosting capacity methodology. • Displayed feeder-level hosting capacity for both charging (load) and discharging (generation). • Toggle feature implemented to switch between storage as generation vs. storage as load. • Included sub-transmission lines to highlight additional interconnection opportunities beyond feeders. • Additional System Data • Downloadable Feeder-Level Summary Data • Reflect Existing DER in Circuit Load Curves and Allocations	**EV Load Hosting Capacity Map Development (2020)** • First EV Load Hosting Capacity Maps released in response to the EV Make-Ready Order (July 2020). • Provided feeder-level hosting capacity values for EV charging loads, mirroring the PV hosting capacity approach. • Incorporated color-coded circuit indicators to display remaining capacity for new electric load. **Electrification Hosting Capacity Expansion (2023–2024)** • Expanded EV Load Hosting Capacity Maps into full Electrification Hosting Capacity Maps per regulatory orders.

PV HC Maps	BES HC Maps	Electrification Maps
• Provided standardized methodologies across all utilities, ensuring consistency. • Introduced additional system data fields based on stakeholder input. • Began updating maps annually through utility DSP portals. **Sub-Feeder Granularity & Existing DER Integration (2019)** • Introduced sub-feeder (nodal) granularity, allowing hosting capacity to be displayed at different points along a circuit rather than a single feeder-wide value. • Existing DER capacity included in calculations to reflect remaining capacity more accurately. • New "Local Hosting Capacity for PV" pop-up tab added, showing minimum and maximum hosting capacity per section. • Included a field tracking DG Installed Since Last Refresh, giving stakeholders insight into circuit changes over time. **Data Transparency & Enhanced Pop-ups (2020)** • Provided downloadable feeder summary tables (CSV/XLS format) with all map details. • Added substation equipment information, including substation transformer bank	**Sub-Feeder Granularity & Nodal Constraints (2023-2024)** • Added sub-feeder level hosting capacity analysis, increasing locational accuracy. • Introduced color-coded nodal views, showing variations in hosting capacity across feeder sections. • Shared DG connected since last HCA refresh • Published PTID Nodes in alignment with NYISO's go live of their DER participation market • Pop-ups enhanced to show criteria violations at specific nodes (voltage, thermal, or Backfeed limits). • Integrated Cost Share 2.0 project indicators for storage hosting capacity. • Enabled REST API access for automated data retrieval. • Shared HC analysis and criteria assumptions	• Added dual seasonal hosting capacity values, allowing users to toggle between summer and winter peak conditions. • Integrated Environmental Justice (EJ) area overlays to support equitable electrification planning. • Maintained feeder-level color-coding and breakpoints, ensuring continuity with previous EV maps.

PV HC Maps	BES HC Maps	Electrification Maps
thermal capacity (MVA rating) and 3V0 protection limits. • Enabled annotated notes on circuit-specific situations. **Increased Update Frequency & API Access (2021)** • Implemented a targeted 6-month refresh cycle for circuits experiencing rapid DER growth (>500 kW of new DG added in 6 months). • Launched REST API access for third-party developers to programmatically retrieve hosting capacity data. **Advanced Map Functionality & Cost Share Integration (2023–2024)** • Introduced "Nodal Constraints" visualization, detailing whether hosting capacity is limited by voltage, thermal, or protection constraints. • Incorporated Cost Share 2.0 indicators, identifying where utility-driven upgrades increase hosting capacity. • Provided links to 8760-hour feeder load profiles, enabling developers to analyze detailed hourly load curves.		

Continued Progress

The **Electrification Hosting Capacity Maps** are scheduled for an update by April 1, 2025, with key enhancements aimed at improving data granularity and transparency. This update will include the addition of voltage information for each circuit, providing stakeholders with

more precise electrical details to better assess grid capacity. Additionally, notes identifying upstream constraints will be incorporated to highlight potential limitations at substations that could impact hosting capacity, ensuring a clearer understanding of grid constraints for electrification planning.

The JU are also considering expanding the use cases for Electrification Hosting Capacity Maps to better support the strategic siting of electrification projects. This potential enhancement could focus on identifying suitable locations for school bus charging infrastructure and public EV charging stations, ensuring that these projects are deployed in areas with sufficient hosting capacity. By incorporating these specific use cases, the maps could provide targeted insights for fleet operators, municipalities, and charging providers, helping them align electrification efforts with grid readiness.

The Integrated Planning Working Group (IPWG) and the Interconnection Technical Working Group (ITWG) are continuing to explore potential updates to the **Battery Energy Storage (BES) Hosting Capacity Maps**, specifically regarding the possible incorporation of Energy Storage System (ESS) schedules. The goal is to add additional granularity while still considering alignment with the Standardized Interconnection Requirements (SIR), the Coordinated Electric System Interconnection Review (CESIR), and other interconnection processes, making the maps more useful for developers navigating the interconnection process.

The utilities will also complete their annual update of the PV and BES maps this April.

Upcoming Stakeholder Opportunity

In response to numerous inquiries and valuable feedback, the JU is planning a training opportunity as part of their ongoing efforts to improve the usability and understanding of their Hosting Capacity Maps. The initiative aims to enhance understanding and ability to utilize these important resources. The training will occur in the fall 2025 and will cover what's included in the maps, how to navigate the maps, and practical applications of the data.

To ensure the training meets stakeholder needs, the JU has requested the stakeholders to complete this survey. The survey allows participants to specify topics they'd most like to see covered, indicate their preferred training format, and share any specific questions they have about the HC maps.

We appreciate your continued engagement and look forward to your participation in this important initiative. If you have any immediate questions or concerns, please don't hesitate to reach out to us at info@jointutilitiesofny.org

JU Continue Efforts to Enhance Interconnection Process Efficiency

The JU have taken a number of important steps already in 2025 to continue making improvements to the efficiency of the DER interconnection process.

For example, the JU will be providing updated versions of the SIR technical cost matrix by the end of March in response to requests from Industry and DPS. In prior years, the JU have typically provided the annual update in the summer. The JU are also including costs relevant to underground distribution system upgrades in the revised cost matrices. The JU also provided DPS and Industry with details on the utilities' cost reconciliation methods, with Industry seeking greater granularity and detail on cost line items. The JU aligned on their approaches to providing labor, material, and overhead costs but noted they could not provide detailed breakdowns for individual upgrades. This approach is expected to provide developers with more context and information on the breakdown of CESIR reconciliation costs.

Following discussions with Industry, the JU are also proactively reaching out to inverter manufacturers to encourage adoption of the EPRI Common File Format (CFF) for sharing inverter settings between developers and utilities. The usage of a common format is expected to help make the process of sharing settings between developers and utilities more efficient and is also expected to help utility engineers verify inverter settings quickly. As a result, the JU expect reductions in the amount of time taken to review interconnection applications and also review greater volumes of applications more easily.

After several collaborative discussions, the JU and Industry have also aligned on an adoption date of June 30, 2025, for the UL 1741 CRD for Multimode. The JU are putting this requirement in place due to the rising penetration of PV+storage and EV interconnection

applications. The testing requirements of the CRD verify that these systems will not backfeed into a downed utility power system in case of an outage, hence ensuring system safety and reliability and reducing risks to utility lineworkers.

JU Continue with Implementation Activities for NYISO's 2019 DER Participation Model and FO Order 2222 Implementation

Most recently, each individual company has been heavily engaged in working with aggregators to facilitate their participation in NYISO's wholesale markets. For example, the JU are working to establish telemetry with DER aggregators. Accurate and timely sharing of information between Aggregators and the JU will help provide the JU visibility into DER operations, in turn maintaining system safety and reliability.

The JU are also preparing a duplicative compensation matrix, which will serve as an important resource for aggregators to ascertain what retail and wholesale programs DERs can participate in simultaneously. The JU will release this matrix and make it publicly available to stakeholders shortly.

The JU have also had discussions regarding unique cases where municipal customers are served by New York Power Authority (NYPA) but connected to a utility's distribution system and are mapped to a utility transmission node. In such a case, the utility typically has no operational control over the customer, no telemetry and metering connections, and no customer relationships. It is the JU's position that the customer relationship should guide a resource's mapping to a transmission node, and hence, in this instance, NYPA should establish additional transmission nodes for municipal customers. However, it is the JU's understanding that NYPA hasn't yet rolled out transmission nodes that map to municipalities. Discussions on this topic between JU and NYISO are ongoing.

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	**O&R** O&R: Distributed System Platform O&R Private Generation Energy Sources

				SIR Inventory requests: NYRegAdmin@avangrid.com	
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: Efficiency Resources RG&E: Efficiency Resources	**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: System Data 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	Con Edison	National Grid	NYSEG RG&E	O&R
	Central Hudson: NWAs	Con Edison: Non-Wires Solutions	National Grid: NWA	NYSEG - Non-Wires Alternatives RG&E - Non-Wires Alternatives	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				