

# **JOINT UTILITIES** OF NEW YORK

Distributed System Platform (DSP) Stakeholder Webinar

December 10, 2024











## **Welcome and Logistics**

Welcome and thank you for joining!

Webinars are open to the public and recordings will be posted following the webinar on the Joint Utilities website: www.jointutilitiesofny.org

Please contact info@jointutilitiesofny.org if you have any additional questions following the webinar











## Agenda

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Agenda Item	Presenters
ISO-DSP	Trevor Brudz (Natio
Grid of the Future Proceeding	David Lovelady (Na Akash Gupta (Natic
Interconnection	Rick Abraham (Nati
Integrated Planning	Alex Young (Nation
Information Sharing	Shawn Ras (NYSEG)
Electric Vehicles	Katie Zellner (Con E









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## **ISO–DSP** Presented by: Trevor Brudz, National Grid











### Undertaking for Post Go-Live Activities

- FERC approved NYISO's 2019 DER Market Participation Model in April 2024. Accordingly, the JU have been working with the NYISO to understand our respective processes and how they will need to interact as well as create requisite new processes and ascertain what new utility systems will be needed to effectively support enrollment, safety & reliability reviews, and operational coordination of DER aggregations participating in this new NYISO market.
- The JU have been working on finalizing a duplicative compensation matrix that illustrates what retail and wholesale markets a DER aggregation can simultaneously participate in.
- The JU have also been discussing the documentation that would be required from aggregators and customers enrolling in DER aggregations. Documents being considered include non-disclosure agreements (NDAs), 3rd party risk agreements, interconnection data security riders, aggregator operating agreements, a DERA letter of authorization, and a wholesale distribution service agreement.

### Next: Continue to Coordinate with NYISO's Development of a Fully Compliant FERC Order 2222 Market

Utilities will continue to coordinate with the NYISO as it develops its fully compliant FERC Order 2222 market for DER and Aggregations, launch expected by Q4 2026.













# **Q&A Session for ISO-DSP**

Moderated by: Matt Robison, ICF













## **Grid of the Future Proceeding** Presented by: David Lovelady, National Grid & Akash Gupta, National Grid



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## Grid of the Future Proceeding: Advancing Clean Energy & Electrification

### April 18 Order

- Focuses on the role of utilities as DSPs to make investments, planning, & operational changes to enhance grid flexibility, and help achieve state policy goals.
- Distributed System Implementation Plans (DSIP) filing is the means for utilities to report on and engage with stakeholders about these investments and changes.
- **Nine Plan Elements** 1) Clear resource deployment goals 2) Key DSP elements/DSIPs 3) New compensation structures 4) Customer benefits through customer-friendly price-signals 5) changing roles and responsibilities of market participants 6) Digital technology 7) Physical- and cyber-security protocols 8) Grid-specific characteristics (e.g. temporal, geographic, etc) 9) Equitable allocation of necessary costs and benefits among customers.

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At a session of the Public Service Commission held in the City of Albany on April 18, 2024

### COMMISSIONERS PRESENT:

Rory M. Christian, Chair James S. Alesi David J. Valesky John B. Maggiore Uchenna S. Bright Denise M. Sheehan

CASE 24-E-0165 - Proceeding on Motion of the Commission Regarding the Grid of the Future.

ORDER INSTITUTING PROCEEDING

(Issued and Effective April 18, 2024)

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NEW YORK E COMMISSION



## Joint Utilities Strongly Support the Goals of This Initiative

- **Builds on Existing Progress** Working collaboratively with DPS, developers, NYSERDA, and market participants, utilities have been active in driving major progress in REV followed by CLCPA goals:
  - Distributed solar growth 325 MW installed capacity in 2014 to 4.3GW in 2024
  - Storage 1.0 GW of deployments, awards, and contracts as of March 2024
  - Clean heat: from 2020 through 2023, 59,000 heat pump installations
  - 210,000 EVs registered in New York as of March 2024. EV Make-Ready program has supported 0 approximately 20,000 level 2 charging stations and approximately 1,500 direct current fast charging stations.
  - 1,375 MW of demand response capability were enrolled in utility programs in 2023
- Utilities have been building foundational DSP capabilities to support flexibility
  - EV make-ready, hosting capacity, integrated planning, monitoring and control capability, NWA
- Working to expand flexibility while maintaining safety and reliability











## Grid of the Future Proceeding: Key Dates

- The overall process of developing the Study was described in a September 27 technical conference, while the process for assessing future needs of the DSIP filings was described in a November 15 technical conference.
  - Just-concluded December 10 technical conference provided an overview of qualitative insights from the Grid Flexibility Study.
- Grid Flexibility Study to produce, assess, and report on the present status and future potential for flexible resources in New York's electric system by January 31, 2025
- First iteration of the New York Grid of the Future Plan by February 28, 2025.
- Second Iteration of the Grid of the Future Plan, to be filed by December 31, 2025 (extension likely)

### The path to achieving New York's grid flexibility potential



New York's Achievable Grid Flexibility Potential (Illustrative)

### **Key Elements Framework Example**





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### Contributors to the Potential

Improve customer engagement: Innovation in customer engagement and coordination with third-party providers increases participation in demand flex programs

Reduce program costs: Cost of implementing demand flex programs (e.g., incremental technology cost, DERMS and OEM fees) declines through efficiency and scale improvements

Monetize full value stack: Expand monetizable value of programs to include the full value stack, e.g., VDER tariff is available to all grid flexibility resources

Introduce new programs: Scale offerings such as EV managed charging and BTM battery VPPs beyond the pilot phase; potentially transition to default TOU

Business as usual: Continue with current full-scale programs; some modest increase in participation due to growth in customer base, tech adoption, and program experience

**Existing capability** 

Key Flement	Key Element	Key Element	
Capabilities &	Capabilities &	Capabilities &	
Mechanisms	Mechanisms	Mechanisms	
Capabilities &	Capabilities &	Capabilities &	
Mechanisms	Mechanisms	Mechanisms	
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Capabilities &	Capabilities & Capabilitie		
Mechanisms	Mechanisms Mechanis		
Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	





## Interconnection Presented by: Rick Abraham, National Grid











### **Collaboration with Industry**

- The JU have been actively collaborating with members of Industry on the below topics over the last few months.
  - The JU are updating the Standardized Interconnection Requirements (SIR) document by making edits to Appendix K, and changes to Screens E and G in the interconnection process.
  - The JU also worked on updating the interconnection technical cost matrix to reflect recent changes in material and equipment prices and presented the changes to DPS and Industry.
  - The JU discussed amendments to the waiver for EV chargers to be certified to UL 1741 SB and evaluated a proposal to advance the waiver compliance date and noting considerations for EVSE systems to prevent power export to the grid. Based on discussions with DPS and Industry, the waiver expiry date was extended to July 1, 2025.
  - Based on discussions with Industry and DPS, the JU also aligned on changes to SIR inventory template. The SIR inventory template spreadsheet documents various details on DER projects in each utility's service territory. The group aligned on changes to spreadsheet headers regarding information collection on CESIR study costs and upgrade costs identified by the utility and paid by applicants. The changes are anticipated to result in greater clarity for developers.
  - The JU, DPS, and Industry are also discussing a self-build solutions proposal by Industry. As part of this proposal, a developer would take on some of the responsibilities of building system equipment for new DER interconnections. Industry is seeking utility feedback on whether such an approach could be piloted in the JU's service territories.













## Integrated Planning Presented by: Alex Young (National Grid)











## Hosting Capacity (HC)

Estimates the amount of Distributed Energy Resources (DER) that can be accommodated on a distribution circuit without negatively impacting power quality or reliability under current system configurations and without requiring infrastructure upgrades.

### The JU HC Maps provide insights into three primary areas

- Photovoltaic Hosting Capacity
- Energy Storage System (ESS) Hosting Capacity
- **Electrification Load Serving Capacity**











## **Continued Evolution**

Stage	Description
Stage 1 (2016-2017)	Introduction of basic distribution indicators.
Stage 2 (2017–2018)	Hosting Capacity evaluations with utility-specific methodologies.
Stage 3 (2019–2020)	Advanced evaluations, including sub-feeder level data and existing [
Stage 3.5 (2021–2022)	Launch of ESS Hosting Capacity Maps.
Stage 4.1 (2023)	Sub-feeder level storage HC maps with expanded functionality.
Stage 4.1+ (2024)	<ul> <li>Addition of Electrification Load Serving Capacity Maps.</li> <li>Sub-feeder level information for storage HC maps</li> <li>DG connections since the last HC refresh</li> <li>Nodal constraints (criteria violations on PV and storage maps)</li> <li>Cost Share 2.0 items on PV and storage maps</li> <li>Additionally, the JU provided six-month updates for circuits with than 500kW on PV maps, links to access 8760 data, and made st available via API.</li> <li>1) Publication of PTID nodes, 2) Synchronization of PV and ESS HC Launch of new Electrification Load Serving Capacity Maps, 4) Program, 5) Ongoing collaboration with the Interconnection Techn (ITWG)</li> </ul>







### DER integration.

DG increases greater torage HC data

map updates, 3) gress on the IEDR nical Working Group



### **Key Details**

- Training Delivery: Fall 2025
- Format: To be determined (possibilities include live webinars, pre-recorded sessions, or a combination)
- Topics: The training will cover what's included in the maps, how to navigate the maps, and practical applications of the data.

### Your Input is Crucial

- To ensure that this training meets your needs, we will be conducting a survey in the coming months. This survey will allow you to:
  - Specify the topics you'd most like to see covered 1.
  - Indicate your preferred training format 2.
  - Share any specific questions you have about the Hosting Capacity Maps 3.













## Information Sharing Presented by: Shawn Ras (NYSEG)













## Information Sharing – Supporting Access to Useful Data

- The Joint Utilities are supporting customer access to information in several ways, including through the Integrated Energy Data Resource ("IEDR") Program.
- The IEDR is NYSERDA'S centralized, state-wide platform that provides access to energy data and information from New York's electric, gas, and steam utilities, and other sources.
- The Joint Utilities continue to support the data delivery requirements for Phase 2 of the IEDR use cases focusing on security, data quality, and increasing automation
- Provide data sets, single sign on (SSO) validation, and other needed input to support the • Green Button Connect certification set for Q1, 2025
- Continue to develop and improve the Rate Plan use case
- Share best practices and prior lessons learned on reporting aggregated, anonymized, energy-related data to support migration of the Utility Energy Registry (UER) to the IEDR



For more information, visit **https://iedr.nyserda.ny.gov/** 











## Information Sharing – Current Focus

Work continues to improve data sets and bulk data exchanges between IEDR Team and JU, support GBC certification (Q1, 25), GBC Launch (Q2, 25) and other use cases

- Continue providing data and working on SSO validation
- Focus on data consistency and quality

## Phase 2 use case development

- Work with the IEDR team on use case development to recontextualize proposed use cases and maximize impact
- Utility experience from prior data use cases, like hosting capacity and the UER, help inform current IEDR efforts

### JU and IEDR Team populating Rate Plan use case

- Utility Coordination Group (UCG) meetings help to identify best practices and data need timelines
- One on one meetings with utilities address the different data sets available & starting points













## **Electric Vehicles** *Presented by: Katie Zellner (Con Ed)*













## Make-Ready Program Updates

## **Eligible Equipment**

- New communication standards for equipment installed through the Make-Ready Program took effect on November 16 •
  - Starting on that date, **DCFC** projects must meet the following requirements:
    - Hardware must conform to ISO 15118-3 standard, capable of enabling software conforming to ISO 15118-2 or -20
    - Software must conform to ISO 15118-2 or -20
    - Hardware must conform to OCPP 2.0.1 or later for projects committed after November 16, 2024
  - Starting June 1, 2025, newly committed **Level 2** projects must meet the requirements listed above
- Equipment that is eligible for the Make-Ready Program is listed on the <u>Joint Utilities Eligible Equipment List</u> and the <u>EPRI</u> ۲ Vetted Product List
  - Starting on March 1, 2025, the Joint Utilities Eligible Equipment List will be retired, and the EPRI VPL will be the only source to confirm eligibility of charging equipment for the Make-Ready Program











## New Program Launched: Load Management Technology Incentive Program

- LMTIP provides incentives for energy storage projects and other advance load management software and equipment. •
- Incentives are available for customer-owned demand management technologies capable of reliably balancing, curtailing, • or deferring a customer's net EV charging demand on the electric grid.
- Commercial customers are eligible if they also participate in Demand Charge Rebate or Commercial Managed Charging ٠ Program or (apart from participants in CECONY) in the Make-Ready Program.

	<b>On-Site Energy Storage</b>	Energy Storage- Integrated EVSE	Load Management Software	
		III 0 ₽		
Eligible Equipment INT UTILITIES	Customer-owned, behind-the- meter battery energy storage systems (and associated equipment) that provide energy storage services for EV charging stations such as using the battery to minimize demand charges, avoiding disruption to power, and delivering the maximum capacity to chargers using power sharing at a site.	Incentives are available to offset the incremental cost of installing battery- integrated EV chargers compared to standalone EVSE. The EVSE component itself is not eligible for incentives through LMTIP.	Up to five (5) years of the costs of load management software that provides active load management for EV charging stations.	Any prov func stati stor cabi pow mor com harc mar



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### Load Management Hardware



equipment that vides a load-limiting ctionality to EV charging ions, without energy age, such as power inets, switches to enable ver sharing, load nitoring, nmunications, or safety dware to enable load nagement.



## **EV Phase-In Rate Order**

### Order Implementing Electric Vehicle Charging Rates for Commercial Customers: Issued October 17, 2024 by PSC

- Utilities will file amended EV Phase-In Rate (PIR) tariffs in compliance with the requirements of the Order to be effective within 12 months (October 17, 2025) and with at least 90 days' notice (July 19, 2025)
- Utilities will continue the Demand Charge Rebate or Commercial Managed Charging programs until the EV PIR becomes available
  - Utilities will conduct outreach to current participants in these existing programs to notify them of the availability of the EV PIR
- The PIR reduces the demand charge based on a site's load factor and is beneficial for sites where utilization will ramp up over time.
  - Customers must have a Charging Ratio of 50% or greater to be eligible to participate.
  - Rate increases through 4 tiers based on the site's load factor.
  - When the site reaches a load factor of ≥ 25%, the charge for the site's otherwise applicable service class (OASC) replaces the PIR.











## Upcoming EV Stakeholder Webinars

	Date: December 11
Update on the MHD EV	Time: 12–1pm
Grid Impact & Investment	Registration:
Study and MHD Make-	https://nyserdany.webex.com/weblink/register/r510e
Ready proceeding	a02be8771f09273c29def83a3cea

### Date: December 13

EV Infrastructure Interconnection Working Group (EVIIWG) December Meeting

### Time: 10am-12pm Registration: <u>https://meetny-</u> gov.webex.com/weblink/register/r5eb1946a4cbb456 d136541800b2eea9e

Technical Conference on Interoperability and Universal Accessibility of EV Charger Hardware

### Date: December 17

Time: 1-2:30pm More information: <u>https://dps.ny.gov/event/evs-tech-</u> <u>conference-consider-interoperability-and-universal-</u> <u>accessibility-electric-vehicle</u>















## Q&A Session Moderated by: Matt Robison, ICF











Please submit questions via the 'question function' on the webinar interface

Additional questions may be emailed to info@jointutilitiesofny.org following the webinar

Visit <u>www.jointutilitiesofny.org</u> for more information

**Quarterly Newsletter** 

Check out our quarterly newsletter with meaningful, substantive updates related to the DSIPs





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# Thank you!



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