Distributed System Platform (DSP) Stakeholder Webinar

June 23, 2022
Welcome and Logistics

Welcome and thank you for joining!

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

Presented by: Jared Trumpetto, Con Edison
DER Participation in Markets and FERC 2222

Moving Forward Toward Implementation

Utility Preparations for Launch of the NYISO DER Market Participation Model

- Processes and systems updates are being put in place to prepare for market launch. These are on track.

Continued Collaboration with the NYISO

- The JU continues to work with the NYISO to prepare for market launch. Recent highlights include:
  - Refining processes and the exchange of information related to registration, enrollment, operational coordination, etc.
  - Testing tools for DER enrollment information exchange between the NYISO and individual Utilities.
  - Providing Utility input on the draft NYISO manuals.
  - Finalizing the DERA registration process prior to full launch.

- The JU will continue its preparation and coordination with the NYISO, which is targeting Q2 of 2023 for full launch.
Planning for Additional Stakeholder Sessions

- The April 29th session with DER community members was beneficial for the JU to understand topics for further discussion.

- The JU are preparing to host an additional stakeholder session later in the summer to discuss telemetry requirements. More information will be provided on the JU website and announced in the appropriate NYISO working groups.
Monitoring & Control

Presented by: Chris Lamothe, National Grid
Joint Utilities Draft Monitoring and Control Parameters

Joint Utilities Advance Discussions on Monitoring and Controlling DERs via Smart Inverters

Consistent monitoring and control requirements and parameters across the Joint Utilities will bring benefits to developers in the form of time savings and improved interconnection process efficiency.

- The Joint Utilities are evaluating effective ways to utilize smart inverter technology for the monitoring and control of inverter – based DER
- The NYISO/companies are working on identifying the appropriate data points distributed resources will be required to provide
- The NYISO/companies are also working on identifying the appropriate control points and functionality for these resources, which will aid in maintaining grid resiliency and reliability and 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 Std 1547 – 2018
Interconnection

Presented by: Brenton Fedele, National Grid
Updates to SIR and Equipment Upgrade Costs

Updates to SIR and DER Technical Guidance Matrix and Flex. Interconnection Evaluation

JU collaborate with stakeholders and DPS to edit SIR

- Updates to the SIR were made and filed with the PSC in May 2022 and are anticipated to bring greater clarity for developers.

- JU have also aligned on addition of language to the SIR related to UL 1741 – SB and IEEE Std 1547 – 2018, ensuring that compliant inverters are installed in New York as UL 1741 – SB certified inverters start to become available in 2023.
Updates to SIR and Equipment Upgrade Costs

Updates to SIR and DER Technical Guidance Matrix and Flex. Interconnection Evaluation

Updates to equipment upgrade cost values:

- The JU are evaluating the need for updates and additions to the public-facing Technical Guidance Matrix for DER.
- The JU are also responding to a request from industry members to provide detail on additional equipment upgrade costs.
- Having updated data in the matrix will help inform developers’ assessments of interconnection costs and project economics.
Updates to SIR and Equipment Upgrade Costs

Updates to SIR and DER Technical Guidance Matrix and Flex. Interconnection Evaluation

Evaluating flexible interconnection solutions

- The JU are in ongoing discussions with stakeholders regarding flexible interconnection solutions, with NYSEG/RG&E and National Grid making public presentations on their ongoing pilots.

- In response to questions from DPS, the JU are conducting internal evaluations to assess their respective readiness to deploy flexible interconnection across their service territories.
Hosting Capacity Maps and Analysis

Presented by: Joe White, Con Edison
Hosting Capacity Roadmap

Since 2016, the Joint Utilities have collaborated with stakeholders to identify valuable enhancements to hosting capacity map capabilities and implement those upgrades.

The Joint Utilities have been following a planned Hosting Capacity Roadmap that proceeds by stages.

- **Stage 1** – Distribution Indicators (2016 – Early 2017)
- **Stage 2** – Hosting Capacity Evaluations (October 2017 - 2018)
- **Stage 2.1** – Additional System Data (April 2018)
- **Stage 3.0** – Advanced Hosting Capacity Evaluations, Sub-feeder level, Existing DER (2019 - 2020)
- **Stage 3.5** – EV and Energy Storage Maps (2021 – 2022)
- **Stage 4** – Advanced Scenarios and Increased Granularity
Stage 1 Storage Hosting Capacity Map

As part of stage 3.5 of the Roadmap, the Joint Utilities published Stage 1 of their Storage Hosting Capacity Maps in April.

As committed in 2021, Stage 1 shows separate displays for load and generation hosting capacity...

- Feeder-level hosting capacity (min/max)
- Additional system data
- Downloadable feeder-level summary data
- Existing DER in feeder load curves and allocations
Stage 1 Storage Hosting Capacity Map

As part of stage 3.5 of the Roadmap, the Joint Utilities published Stage 1 of their Storage Hosting Capacity Maps in April.

The JU have discussed the use of one or two input load files tied to:

- Daytime minimum load
- Peak load

The JU provided the following outputs:

- From the storage run in DRIVE, an output file providing charging limits (from peak load analysis) and discharging limits (from daytime minimum load analysis)

Due to stakeholder feedback, all map views now also show...

- sub-transmission circuits that are available to host distributed generation on their individual portals to help developers best evaluate options for storage connections.
Next Steps

The Joint Utilities continue to collaboration with stakeholders on next steps.

On May 18, 2022, the Joint Utilities met with stakeholders to garner feedback regarding the Storage Hosting Capacity Roadmap shown on the next slide

- 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.
### Next Steps

The Joint Utilities continue to collaboration with stakeholders on next steps.

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<th>Interim Step</th>
<th>Next Steps</th>
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<tr>
<td><strong>2022 – 2023</strong></td>
<td><strong>Late 2023–2024</strong></td>
<td><strong>TBD</strong></td>
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<tr>
<td>▪ Sub Feeder Level HC</td>
<td>▪ Seasonal load profiles</td>
<td>▪ Continued granularity</td>
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<tr>
<td>▪ Incremental Feeder Level Installed Since HCA Refresh</td>
<td>▪ Additional ‘scenarios’ based on stakeholder input</td>
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<td>▪ Six-month Update for Circuits that Increase in DG &gt; 500kW</td>
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<td>▪ Continue to implement Cost Sharing 2.0</td>
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Visit website [here](#), email [info@jointutilitiesofny.org](mailto:info@jointutilitiesofny.org) or follow up via the chart below.

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<tbody>
<tr>
<td>Central Hudson</td>
<td>Distributed Generation Group</td>
</tr>
<tr>
<td></td>
<td>• Email: <a href="mailto:dg@cenhud.com">dg@cenhud.com</a></td>
</tr>
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<td></td>
<td>• Phone: 845-486-5215</td>
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<tr>
<td>Con Edison</td>
<td>DG Group</td>
</tr>
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<td></td>
<td>• <a href="mailto:dgexpert@coned.com">dgexpert@coned.com</a></td>
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Information Sharing

Presented by: Alvaro Gener, NYSEG/RG&E
The Joint Utilities continue to collaborate to increase data sharing.

**Integrated Energy Data Requirements (IEDR)**

- The JU transferred the sample data for the initial public version (IPV) use cases in June 17.
- Additional data will be shared in Q3–Q4 2022 once the IEDR developer is onboarded. The following IPV use cases aim to be operational in the IEDR by end of 2022:
  - Installed DERs
  - Planned DERs (Interconnection Queue)
  - Consolidated Hosting Capacity Maps

- The JU are focused on setting up internal processes to collect and provide the requested data fields for future transfers in accordance with cybersecurity and privacy considerations.

- The JU have held conversations with an existing data sharing platform provider to explore secure and reliable data sharing options that meet the needs of the IEDR and its users.

- Each utility have filed individual IEDR quarterly reports for Q3–Q4 2021 and Q1 2022, which can be found under Case–20–M–0082.
Information Sharing Initiatives

The Joint Utilities continue to collaborate to increase data sharing.

Data Access Framework

- On May 2, 2022, the Joint Utilities filed a petition to recommend enhancements to the existing cybersecurity protections and propose a governance committee.
Electric Vehicle Make-Ready Program “MRP”

Presented by: Julia Gold, National Grid
Make-Ready Program Implementation Continues

- JU contracted Atlas Public Policy to support EVSE data collection and reporting
- JU working with NYSERDA Clean Transportation Prize teams as needed
- Filed Annual Reports on 4/15*
- Midpoint Review to commence in October with opportunities for stakeholder input

Q4 2021
- Participated in EV Customer Experience Working Group 11/29
- Presented EV Charging Load Forecasts during Stakeholder Technical Conference 12/10

Q1 2022
- Began coordinating with NYSDOT and other key stakeholders on state planning for National EV Infrastructure (NEVI) federal formula funding for DCFC highway corridor charging

Q2 2022
- Submitted JU comments on the EV Rate Design proceeding on 5/23 and reply comments on 6/3*
- Participated in the Rate Design Technical Session on 6/13

Q3–4 2022
- Continued focus on program implementation and improvement

*Company Annual Reports and Rate Design Comments can be found via NYSDPS Case 18-E-0138
MHDV Electrification: Enabling Clean Public Transit

New York’s ~$700M EV Order supports clean transportation infrastructure for residential customers, commercial customers, and fleets – including meeting the state’s aggressive goals for public transit and school buses

NY is committed to electrify the MHDV sector:

- 25% of Public Transit buses electrified by 2025
- Advanced Clean Trucks (ACT) rule finalized in Dec. ‘21 (requires OEMs >40% ZEV sales by 2035)
- 100% ZEV school bus sales by 2027 (100% of all buses ZEV by 2035)

The 1st electric bus at NFTA in Buffalo (April 2022)
MHDV Electrification: Enabling Clean Public Transit

National Grid supporting NFTA (Buffalo) and CDTA (Albany) to achieve 25% ZEVs with ~$5M infrastructure incentives

NFTA example: 10 buses ordered, testing 1st bus on site

- Electrifying NFTA’s Cold Spring garage, which serves ~90 buses
- Charging buses via DCFC pantograph (overhead) chargers
- Expected completion of depot by the fall of 2022

*The 1st electric bus at NFTA in Buffalo (April 2022)*
## Utility Make-Ready Program Resources

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<td><a href="mailto:EVNationalGridUNY@nationalgrid.com">EVNationalGridUNY@nationalgrid.com</a></td>
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<tr>
<td>Orange and Rockland</td>
<td><a href="mailto:ev@oru.com">ev@oru.com</a></td>
<td>Electric Vehicle Power-Ready Program</td>
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Q&A Session

Moderated by: Matt Robison, ICF
Q&A Session

Please submit questions via the ‘question function’ on the webinar interface

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Thank you!

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