JU STAKEHOLDER WORKSHOP DISTRIBUTION UTILITY SUPPORT FOR NYISO DER PARTICIPATION MODEL & FERC 2222 *April 29, 2022*



JU BUSINESS CONFIDENTIAL DRAFT

April 29, 2022 Workshop Agenda 9:00 – 11:00AM

Time Frame	Agenda Topic
9:00 – 9:10	Introductions and Agenda Overview
9:10– 9:40	Telemetry
9:40-10:10	Communications
10:10-10:40	Safety and Reliability Studies
10:40 -10:55	Additional Topic Areas for Future Workshops
10:55– 11:00	Logistics, Wrap-Up, and Next Steps



Overview

- DU processes and procedures continue to evolve as the NYISO develops detailed manual language that impacts all stakeholders
 - The DUs are committed to engage stakeholders and these manuals and process continue to develop
- Complicating this effort is the NYISO's decision to implement the January 2020 approved Tariff rather than wait for the FERC 2222 tariff approval
 - Many of the implementation challenges of FERC 2222 also apply to the NYISO's Aggregation model
 - The DUs want to minimize changes and stranded costs that will result from additional changes once FERC approves the NYISO 2222 tariff



Telemetry

- Utilities will leverage existing Telemetry architectures
- Individual Utilities developing alternative telemetering solutions for future implementation
- Timelines for implementation vary by Utility
- Technology solutions vary by utility and will take into account Utility cybersecurity requirements
- Respective Utility Contacts for Telemetry deployment are in Appendix



Communications

- Distribution Utilities will leverage current processes to provide notification of planned distribution system maintenance impacting DER operation
- Existing notification procedures may provide capability for customers to request additional parties (e.g., Aggregators) notice regarding system changes impacting DER availability
- Utility TOs will use existing processes to evaluate NYISO award bids to Aggregators



Communications

- Aggregator to provide hourly, granular day-ahead schedules for individual DER
 - Granular day-ahead schedules will be provided in a format consistent with NYISO DAOP ("Day-Ahead Operating Plan") by 1200 DAH once the NYISO releases their DAOP and the Aggregator knows which DERs will participate in the next day market.
- Each Utility will specify the need for these granular schedules
 - After 12:00 PM and No Later than 10:00 PM on the Day Before Dispatch the Distribution Utilities will use this data to analyze the injections and reductions to understand conditions such as station or feeder issues, equipment loading, voltage profiles, DU-issued outage notifications and impacts on reconfigured or rerated circuits, compliance with NWA calls, etc.
 - The Distribution Utilities shall communicate any identified reliability or safety concerns to the Aggregator consistent with NYISO Aggregation Manual Section 2.2.1. Communication Between Distribution Utility and Aggregator.





Communications

Sample DAOP format to be used for Granular Schedules

Gmt Ltz(Date Hr)	Station Name	Gen Name	SubZone Name	Upper Oper Limit	Minimum Limit	Energy	Regulation Mw	Non-Spin Spin	Non-Spin	Forecast Reserve	Gen	h Ptid	
06-Jan-2021 00	Station A	Gen A	NMPC Central	250	1	220				0)	12345	
06-Jan-2021 01	Station A	Gen A	NMPC Central	250		220	1			0)	12345	
06-Jan-2021 02	Station A	Gen A	NMPC Central	250	1	220				0)	12345	
05-Jan-2021 03	Station A	Gen A	NMPC Central	250		220				0)	12345	
06-Jan-2021 04	Station A	Gen A	NMPC Central	250	1	220				0)	12345	
06-Jan-2021 05	Station A	Gen A	NMPC Central	250	1	220				0)	12345	
06-Jan-2021 06	Station A	Gen A	NMPC Central	250	1	220				0)	12345	
05-Jan-2021 07	Station A	Gen A	NMPC Central	250		220				0)	12345	
06-Jan-2021 08	Station A	Gen A	NMPC Central	250	1	220				0)	12345	
06-Jan-2021 09	Station A	Gen A	NMPC Central	250	1	220				0)	12345	
06-Jan-2021 10	Station A	Gen A	NMPC Central	250	1	220	1			0)	12345	
06-Jan-2021 11	Station A	Gen A	NMPC Central	250	1	220				0)	12345	



JU BUSINESS CONFIDENTIAL DRAFT

Safety and Reliability Review

- Distribution Utilities to leverage existing state interconnection processes supplemented with data submitted by the Aggregator through the NYISO's enrollment process to identify safety and reliability concerns
- Distribution Utilities to consider tracking and identification of "at risk" feeders and/or circuits for detailed engineering studies in response to NYISO registration requests
- Distribution Utility procedures may evolve as the nature and penetration of distribution interconnections and the operation of the distribution system change.



Safety and Reliability Review

- Distribution Utilities to verify that *proposed* operational characteristics of individual DER are within the parameters of the interconnection agreement
 - Interconnection Study assumptions on how the resource would be operated
 - Whether the interconnection agreement limits the amount (e.g., kW) or type (e.g., Regulation Service) the DER may provide (e.g., hourly charge and discharge schedules for battery resources)
- Proposed DER operations outside of approved interconnection agreement may require modifications to interconnection agreements, subject to material modification provisions in the SIR process
 - May result in reporting to the NYISO of a safety and reliability concern
 - Modified interconnection agreements would be subject to the SIR queuing process
- Distribution Utilities will identify whether a transmission or distribution system Aggregation-level study is necessary to identify potential system impacts



Enrollment Process Reviews

- Verifying Transmission Node mapping and the electrical location of the DER and Aggregation
- Determining whether the DER's participation in the wholesale markets will lead to duplicative compensation, or the double counting of services
 - Dual Participation will be permission when there no duplicative compensation
 - Identifying if a tariff change is necessary on the retail billing account
- Determining if existing DER metering is sufficient for proposed Wholesale market participation.



Open Discussion

• Additional topics for future sessions



Next Steps

- Review Stakeholder Feedback
- Develop and Distribute (as appropriate)
- Schedule Additional Sessions



Appendix

- Utility Telemetry contacts:
 - Central Hudson Forthcoming
 - Consolidated Edison Stephanie Smith-Honore, (<u>smith-honores@coned.com</u>)
 - National Grid Kimberly Peterson (<u>Kimberly.Peterson@nationalgrid.com</u>)
 - NYSEG/RGE Pasternak, Tom (TPasternak@nyseg.com); Cunningham, Robert (robert.cunningham@avangrid.com)
 - Orange and Rockland Kowalczyk, Nicholas J (KOWALCZYKN@ORU.com); Dunwoody, Scott (<u>dunwoodyS@oru.com</u>)



Contact Information

Please address any follow-up comments to: walter.rojowsky@icf.com

