# DER Energy Market Design: Dual Participation

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**Market Issues Working Group** 

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### **Agenda**

#### Dual Participation

- Expectations
- Obligations
- NYISO-DSP Coordination
- BSM



### **Background**

| Date     | Working Group                      | Discussion points and links to materials                               |
|----------|------------------------------------|--|
| 06-01-18 | Market Issues Working Group (MIWG) | DER Market Design: Updates   |
| 06-19-18 | Market Issues Working Group (MIWG) | DER Market Design: Updates   |
| 07-26-18 | Market Issues Working Group (MIWG) | DER Market Design Updates: Energy Market Bid to Bill Examples          |
| 10-09-18 | Market Issues Working Group (MIWG) | DER Market Design Update: Wholesale Obligations for Dual Participation |
| 10-10-18 | Market Issues Working Group (MIWG) | DER Market Design Update   |
| 11-05-18 | Market Issues Working Group (MIWG) | DER Market Design Updates  |
| 12-18-18 | Market Issues Working Group (MIWG) | DER Overall Energy Market Design Review                                |
| 02-04-19 | Market Issues Working Group (MIWG) | DER Overall Energy Market Design Review Part I                         |
| 02-06-19 | Market Issues Working Group (MIWG) | DER Overall Energy Market Design Review Part II                        |
| 02-15-19 | Market Issues Working Group (MIWG) | Metering, LBMP Calculation, and Creditworthiness                       |



### Overview & Purpose





- 12/18 MIWG
- Develop and enhance participation opportunities for DER in the NYISO-administered wholesale markets by creating:
  - A Dispatchable DER Participation Model; and
  - Dispatchable Homogenous Aggregations of DER
- Create a model that supports the NYISO Market Design
  Vision Attract and retain the most efficient resources to meet NY's reliability needs.



#### **Purpose of this Presentation**

- Review previous topics discussed with stakeholders to enable and enhance the participation of DER in the NYISO Markets
- Identify the Market Administration and Control Area Services Tariff (Services Tariff) sections affected by the topic discussed for draft Tariff that has been posted
- This presentation does not cover the following topics which will be discussed in future presentations:
  - Additional Capacity Revisions (expected March)



#### **DER Definition for the Market Design**

- DER: A Generator, Energy Storage Resource, Intermittent Power Resource, Energy Limited Resource, or Capacity Limited Resource participating in an Aggregation whose maximum physical injection is 20 MW or less and Demand Side Resources (including facilities that can reduce Load and inject Energy) that respond to the ISO's instructions.
- Dispatchable DER are a subset of DER that are capable of responding in real-time to NYISO dispatch instructions.



## **Dual Participation**



#### **Dual Participation**

- The NYISO's proposed market design will allow resources that provide Wholesale Market services to also provide services to another entity (e.g., the utility or a host facility)
  - The NYISO believes that providing resources with the flexibility to meet wholesale and distribution system needs will deliver the maximum benefit to New York electricity consumers
  - Resources participating in the wholesale markets will continue to be obligated to follow all applicable NYISO market rules and utilize good utility practices
- Dual participation concept applies to all resources, not just DER Aggregations
  - NYISO is evaluating whether it can implement the dual participation market rules prior to the majority of the DER market rules become effective



#### Requirements

- Dual participating resources will be required to:
  - Comply with all NYISO market rules for the services offered to the wholesale market
    - Non-compliance may result in financial penalties
  - Appropriately offer into the wholesale markets to reflect any nonwholesale (e.g., retail) obligations
    - Resources will be required to follow NYISO dispatch instructions at all times;
    - Resources will submit offers to NYISO when providing non-wholesale service
      - Based on resource type and market product enrollment, the offer may denote "Self" or "ISO"-Committed mode
    - Resources will receive payments for Energy or Ancillary Services scheduled through these offers



#### **Dual Participation Obligations**

- Outages on the Distribution system must be accommodated through Aggregator's Bid/Schedule/Notify procedures
  - As part of the Aggregator/TO communication procedures, the Aggregator will be responsible for reflecting distribution system outages in its Wholesale Market Bids
  - The Aggregator is responsible for updating bids or derating the Aggregation to properly represent an Aggregations ability to perform as a result of any outages
- Resources participating in the Capacity Market must elect any changes to their participation by August 1<sup>st</sup> of the year prior to the Capability Year in which that change will be effective



#### **Dual Participation Obligations (cont.)**

- Resources with load reduction at the time of NYCA and Locality Peak will be added back to the actual metered load for determining ICAP Requirements
  - Similar to the add-back done currently for SCR load reductions
- Resources that switch from a retail load modifier to NYISO wholesale market participation must do so at the beginning of the Capability Year
  - Resources must notify the NYISO of this change prior to August 1st of the year preceding the Capability Year
- Resources that exit the NYISO wholesale market to be a retail load modifier must notify the NYISO of its intended operation
  - If notified prior to August 1st of the year preceding the Capability Year, then the resource's transition to a retail load modifier will be reflected in the requirements for the Transmission District
  - If not notified prior to August 1st of the year preceding the Capability Year, then the resource's transition to a retail load modifier will not be reflected in the Transmission District Requirements



#### **Market Exit Obligations**

- Resources may leave the market at any time but will still be required to fulfill any:
  - Capacity Market obligations
    - Forward position in Capacity Market: must resolve its position prior to obligation month
    - Allocated Sales in Capacity Market: DA Market bidding obligation still exists
  - Generator Deactivation Notifications
    - Injection based Resources are required to notify the NYISO a year in advance of leaving the Wholesale Market
- Market exit does not exclude resources from penalties or sanctions imposed resulting from action in NYISO markets



#### **NYISO-DSP Coordination**

- All Aggregators, including Aggregators with dual participating Resources, will need to comply with the NYISO-DSP-Aggregator operational coordination framework to ensure that NYISO and DSP have accurate information on the operational status and availability of the Aggregations and individual DER within the Aggregation
  - NYISO's operational decisions will primarily be at the Aggregation-level; DSP may need individual DER-level information to assess DER's impact on specific distribution feeders and on the distribution system
- Meter authorities will be required to properly account for all Load at M2\* for LSE's wholesale market reporting & billing if direct metering is used for the individual DER
  - \*Permissible metering configurations were presented on February 6<sup>th</sup>
    - https://www.nyiso.com/icapwg?meetingDate=2019-02-06
- Meter authorities will be required to report the host load of facilities, net of wholesale participation



#### **Revenue Streams and BSM**

- Resources will present any contracts or documents as a result of an information request by the NYISO MMA as part of the BSM process
  - This is an existing requirement
  - Additional information was presented on February 15<sup>th</sup> to the ICAPWG/MIWG
    - https://www.nyiso.com/icapwg?meetingDate=2019-02-15
- More information will be provided at a later ICAPWG/MIWG in March, 2019



## **Next Steps**

- Review Energy Market Tariff
- Review Topics not Discussed Today



### Feedback?

Email additional feedback to: DER\_Feedback@nyiso.com



Don't forget the underscore

