

# BSM Renewable Exemption Study Technologies

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Capacity Market Design

**ICAPWG/MIWG**

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# Agenda

- **Project Background**
- **Candidate Study Technologies**
- **Next Steps**

# Project Background

# A Grid in Transition – The Plan

- Carbon Pricing
- Comprehensive Mitigation Review
- DER Participation Model
- Energy Storage Participation Model
- Hybrid Storage Model
- **BSM Renewable Exemption Study**

Aligning Competitive Markets and New York State Clean Energy Objectives



- **Enhancing Energy & Shortage Pricing**
  - Ancillary Services Shortage Pricing
  - Constraint Specific Transmission Shortage Pricing
  - Enhanced Fast Start Pricing
- **Review Energy & Ancillary Services Product Design**
  - More Granular Operating Reserves
  - Reserve Enhancements for Constrained Areas
  - Reserves for Resource Flexibility

Valuing Resource & Grid Flexibility



- **Enhancements to Resource Adequacy Models**
- **Revise Resource Capacity Ratings to Reflect Reliability Contribution**
  - Expanding Capacity Eligibility
  - Tailored Availability Metric
- **Capacity Demand Curve Adjustments**

Improving Capacity Market Valuation



# Tariff Requirements

- **In each ICAP Demand Curve Reset Filing Year, the ISO must conduct a periodic review to determine the technology types that should be Exempt Renewable Technologies (MST 23.4.5.7.13.2.1)**
  - The ISO will determine, for each Mitigated Capacity Zone, which candidate intermittent renewable technologies have (a) high development costs and (b) a low capacity factor, such that considering (a) and (b) there is limited or no incentive and ability to develop the candidate intermittent renewable technology in order to artificially suppress capacity prices (MST 23.4.5.7.13.2.2)
  - The ISO's periodic review shall provide for: (a) The ISO's preliminary identification of candidate intermittent renewable technologies for stakeholder review and comment (MST 23.4.5.7.13.2.3)
    - We are here today to fulfill this provision

# Candidate Study Technologies

# Candidate Study Technologies

Technology	NYISO Zones			
	G	H	I	J
Ground Mounted Solar PV Project Size: 1 - 10 MW	✓	✓	✓	✓
Ground Mounted Solar PV Project Size: 10 - 50 MW	✓	✓	✓	✓
Ground Mounted Solar PV Project Size: Greater 50 MW	✓	-	-	-
Wind Onshore 2 - 4 MW WTG* Size Project Size: 2 - 50 MW	✓	-	-	-
Wind Onshore 2 - 4 MW WTG* Size Project Size: 50 - 200 MW	✓	-	-	-
Wind Offshore 6 - 12.5 MW WTG* Size Project Size: up to 400 MW	-	-	-	✓
Wind Offshore 6 - 12.5 MW WTG* Size Project Size: 400 - 800 MW	-	-	-	✓
Run of River Hydro Project Size: 1 - 10 MW	✓	-	-	-
Landfill Gas (LFG) Project Size: 2 - 10 MW	✓	✓	✓	✓

Note: \*WTG = Wind Turbine Generator

# Next Steps



# Next Steps

- Targeting to return to a working group in the fall to provide the draft list of exempt technologies for stakeholder and MMU review and comment
- While impacts are not anticipated, the NYISO will remain cognizant of any implications that the forthcoming FERC order on the NYISO's 4/7/20 renewable exemption compliance filing may have on this study
  - The NYISO has requested an order by 6/8/20
- Per the Tariff, on or before the 60<sup>th</sup> day following the FERC issuance of an order accepting ICAP Demand Curves based on the ICAP Demand Curve periodic review, the ISO shall file with the Commission the results of its Exempt Renewable Technology periodic review and determination

# Questions?

# Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policymakers, stakeholders and investors in the power system

