

Tailored Availability Metric

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April 8, 2020

Agenda

- **Background and Recap**
- **NYISO's Final Proposal**
- **Next Steps**
- **Appendix**

Background and Recap

A Grid in Transition – The Plan

- Carbon Pricing
- Comprehensive Mitigation Review
- DER Participation Model
- Energy Storage Participation Model

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



Recap

- **2020 Deliverable: Q2 Market Design Complete for a May 1, 2021 Implementation**

NYISO's Final Proposal

Availability-based Resources

- For availability-based resources that use the EFORd or UOL calculation for their derating factor, the NYISO is proposing to take the average of the previous 2-like Capability Period EFORds
- For new resources the class average will be used
 - For example:
 - If a resource has recorded data for 1 Capability Period, the AEFORd will take the average of the calculated EFORd of the unit's actual data for 1 Capability Period and the class average for the missing Capability Period
- For a resource that is in an ICAP ineligible state (e.g., Mothball, IIFO) the NYISO will look-back until historic "like" data is available
 - For example:
 - For a Summer 2018 Capability Period AEFORd, if historic data was unavailable for months August – October 2016, the NYISO would replace the missing data from the next available historic year, *i.e.* August – October 2015
 - MST 5.12 has been updated to reflect this change

Wind and Solar Resources

- **The NYISO is proposing a reoccurring study every 4 years, that would result in hourly capacity value weightings across the Peak Load Window**
 - Weightings would be applied to the respective hourly production data
 - The study would run concurrently with the study for Expanding Capacity Eligibility
 - Each study could reset the top 4 hours within the Peak Load Window and percentages based on the percentages for Expanding Capacity Eligibility
- **The duration of the Peak Load Window is dependent on resources with duration limitations**
 - When the system reaches 1000 MW of duration limited resources and the window shifts from 6 hours to 8 hours, the PLW for wind and solar will also shift

Proposal

- **At this time, the NYISO is proposing the following weightings across the 8-hour and 6-hour PLW**
- **For a 6-hour PLW, the top 4 hours will receive a 75% weighting**
 - Weightings of the shoulder 2 hours will be equally weighted at 12.5% each
- **For an 8-hour PLW, the top 4 hours will receive a 70% weighting**
 - Weightings of the shoulder hours will be 3-tiered
 - In other words, the next top 2 hours will be weighted 20%, and the last 2 hours will be weighted 10%

Proposal

- **Summer and Winter Capability Period months will receive the following set of weightings as shown in Table 1**
 - For the Winter PLW, the top 4 hours will remain consistent with methodology used today, and the top load hours from Expanding Capacity Eligibility (HB 16 – HB 19)
- **Under this construct, wind and solar resources will still have the opportunity to receive 100% performance factors if they perform in all hours of the Peak Load Window**

Table 1

HB	Summer Peak Load Window		Winter Peak Load Window	
	6 Hour	8 Hour	6 Hour	8 Hour
12		5.0%		
13	12.5%	10.0%		
14	18.75%	17.5%		5.00%
15	18.75%	17.5%		5.00%
16	18.75%	17.5%	18.75%	17.50%
17	18.75%	17.5%	18.75%	17.50%
18	12.5%	10.0%	18.75%	17.50%
19		5.0%	18.75%	17.50%
20			12.5%	10.0%
21			12.5%	10.0%
Top 4 Hours	75%	70%	75%	70%

MST 5.12

- **Updates have been made to 5.12.6.2 to reflect the following:**
 - The hourly weightings proposed for wind and solar resources within the 8-hour and 6-hour Peak Load Window
 - A table has been added to show the hourly weightings
 - The previous 2 like-Capability Period look-back for availability-based resources
 - For resources in an ICAP ineligible state, language has been modified to denote the previous “like-month” data will be used
- **Section 5.12.14.3 has been updated to reflect the 4-year reoccurring study for wind and solar resources**
- **Detailed changes will be made to Section 4.5 and Attachment J of the ICAP Manual pending FERC approval**

Next Steps

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■ Proposed schedule:

- April 2020:
 - ✓ Seek stakeholder approval at BIC
 - Seek stakeholder approval at MC
- May 2020:
 - Assuming stakeholder approval, seek Board of Directors approval
 - Assuming Board of Directors approval, file tariff revisions with FERC for a May 1, 2021 implementation

Feedback/Questions?

The NYISO will consider input received during today's Working Group meeting and further input sent in writing to deckels@nyiso.com or econway@nyiso.com

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- 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

