

# Landfill Gas Resources for Tailored Availability Metric

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### Agenda

- Background
- Landfill Gas Resources for TAM
- MST 5.12
- Next Steps
- Appendix



## Background



### **Background**

- For Intermittent Power Resources, the stakeholder discussion for the Tailored Availability
  Metric (TAM) project presented analysis of the impact the TAM changes would have on wind
  and solar Resources when weighting the hourly production data within the respective 6 and
  8-hour PLWs
  - The TAM rules were accepted by FERC on September 3, 2020 and will become effective March 1, 2021 for implementation beginning with the Day-Ahead Market run for the operating day May 1, 2021
- As accepted by FERC section 5.12.6.2 (UCAP Calculations) refers to "Intermittent Power Resources" (IPRs) when referencing this new weighting methodology for determining the UCAP value of these resources.
  - An IPR by definition of the tariff includes wind, solar, and landfill gas Resources,
- However, in section 5.12.14.3 of the Services Tariff the Tariff language provides that the NYISO will "re-evaluate the hourly weighting factors percentages during the Peak Load Window for wind and solar Resources."



# Applying the Peak Load Weighting Factors for Landfill Gas Resources



### **Landfill Gas Resources**

- Although not directly discussed during the TAM presentations this spring, the tariff language that applies the peak load weighting factors accepted by FERC rules is applicable to all Intermittent Power Resources
  - Today, landfill gas Resources are treated similarly to wind and solar and it is appropriate to continue to treat these resources consistently
  - Therefore, the NYISO will apply the TAM rules to landfill gas Resources, as well as wind and solar Resources (See Appendix for details)
  - The NYISO is providing some analytics of how the TAM rules will impact Landfill Gas Resources



### **Data Analysis**

 The data below shows the deltas between the current 4hour window and the weighted 6 and 8-hour PLWs for aggregate LFGE units within the previous 4 years

Summer LFGE	

Year	6-Hour PLW	8-Hour PLW
2017	-0.002%	-0.002%
2018	0.000%	0.000%
2019	0.001%	0.002%
2020	0.000%	0.002%

#### Winter LFGE

Year	6-Hour PLW	8-Hour PLW
2017	0.008%	0.000%
2018	0.000%	-0.003%
2019	0.003%	0.001%
2020	0.010%	0.001%



### MST 5.12



### MST 5.12

- The NYISO wants to clarify in section 5.12.14.3 that the NYISO will re-evaluate the hourly weighting factors percentages during the Peak Load Window for <u>Intermittent</u> <u>Power Resources</u>
  - The current language reflects this language for wind and solar Resources only



## Next Steps



### **Next Steps**

#### December 2020:

- Seek stakeholder approval at BIC
- Seek stakeholder approval at MC

### January 2021:

- Seek Board of Directors approval
- File tariff revisions with FERC



# Appendix



#### Intermittent Power Resources Proposal under TAM

- 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 Intermittent Power Resources will also shift



#### Intermittent Power Resources Proposal under TAM

- 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%



#### Intermittent Power Resources Proposal under TAM

- 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, Intermittent Power
   Resources will still have the opportunity to receive
   100% performance factors if they perform in all hours of the Peak Load Window

Table 1

	Summer Peak Load Window		Winter Peak Load Window	
НВ	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%



### 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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