

Non-Retail BTMG Performance December 2022 Emergency Events

Theresa Esterly

Sr. Lead Engineer, Markets Automation & Quality Assurance

DISRS

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Non-Retail BTMG Performance

Action Required	Deadline	Who May Be Affected
Review NRBTMG unit performance shortfalls for December 2022 events and resulting netting reduction penalty amounts for wholesale area in Capacity Exchange	5/1/2023	LSEs/EDCs responsible to report data for NRBTMG units located in wholesale area
Account for netting reduction penalty amounts in calculation of wholesale area's NSPL value for 2024 calendar year	12/30/2023	EDCs responsible for determining NSPL values for wholesale areas in zone
Account for netting reduction penalty amounts in calculation of wholesale area's OPL value for 2024/2025 delivery year	12/31/2023	EDCs responsible for determining OPL values for wholesale areas in zone



December 2022 Emergency Events

- Maximum Generation Emergency Action on December 23 & December 24, 2022
 triggered requirement for NRBTMG in RTO to operate and be evaluated for performance
- PJM calculated unit performance shortfalls and resulting netting reduction penalty amount for wholesale area due to area's NRBTMG units failure to perform
- Total netting reduction penalty amount for a wholesale area as a result of December 2022 events and other emergency events that may occur through October 31, 2023 impacts Network Service Peak Load (NSPL) for 2024 calendar year and Obligation Peak Load (OPL) for 2024/2025 Delivery Year



NRBTMG Timeline

NRBTMG required to operate during emergency events from Nov 1-Oct 31

If unit operated during CP hours in prior Nov 1-October
 31 period required to operate during first 10 events

Failure to operate during first 10 events impacts NSPL for wholesale area

Upward adjustment to NSPL for subsequent calendar year

MAR. MAR. NOV. JAN MAY SEP. MAY SEP. JUL. NOV JAN. JUL 2023 2024 2022 Dec. 23 & 24 **Failure to operate** Final total netting reduction Performance results for Dec 2022 **Emergency** Generation penalty amount for during first 10 events events available early April 2023 **Events Output for** wholesale area as a result **Unit performance shortfalls** impacts OPL for event hours of first 10 events **Netting reduction penalty** due Feb 4. Available no later than wholesale area amount for wholesale area 2023 Nov. 30 Upward adjustment to OPL for subsequent delivery year



- RTO Expected Performance = 1313.3 MW
- 336 units with Expected Performance > 0 MW
- 46 units with Expected Performance = 0 MW
 - Unit did not operate during CP hours for Nov 1, 2021-October 31, 2022 period
 - Unit is tied to Pre-Emergency/Emergency DR Hub registration

 Excused MWs for scheduled outage reported in advance of emergency event were granted



NRBTMG Performance Results for RTO

	December 23, 2022	December 24, 2022
Expected Performance (MW)	1313.3 MW	1313.3 MW
Unit Performance Shortfalls (MW)	886 MW	633.5 MW
Netting Reduction Penalty Amount (MW)	89.2 MW	64.2 MW

Total Netting Reduction Penalty Amount = 153.4 MW as a result of December 2022 Emergency Events



Facilitator:
IlyanaDropkin,
Ilyana.Dropkin@pjm.com

Secretary:

Luke.Zinszer, Luke.Zinszer@pjm.com

SME/Presenter: Theresa Esterly, Theresa.Esterly@pjm.com

NRBTMG Performance



Member Hotline

(610) 666 - 8980

(866) 400 - 8980

custsvc@pjm.com



Appendix



Expected Performance Level

Expected Performance Level



Minimum (Netting Capability Value, Highest Hourly Output MW During CP Hours*)

*Excludes generation output that was participating in PJM Markets

Netting Capability Value



Summer Rated ICAP MW



ICAP MWs in PJM Markets



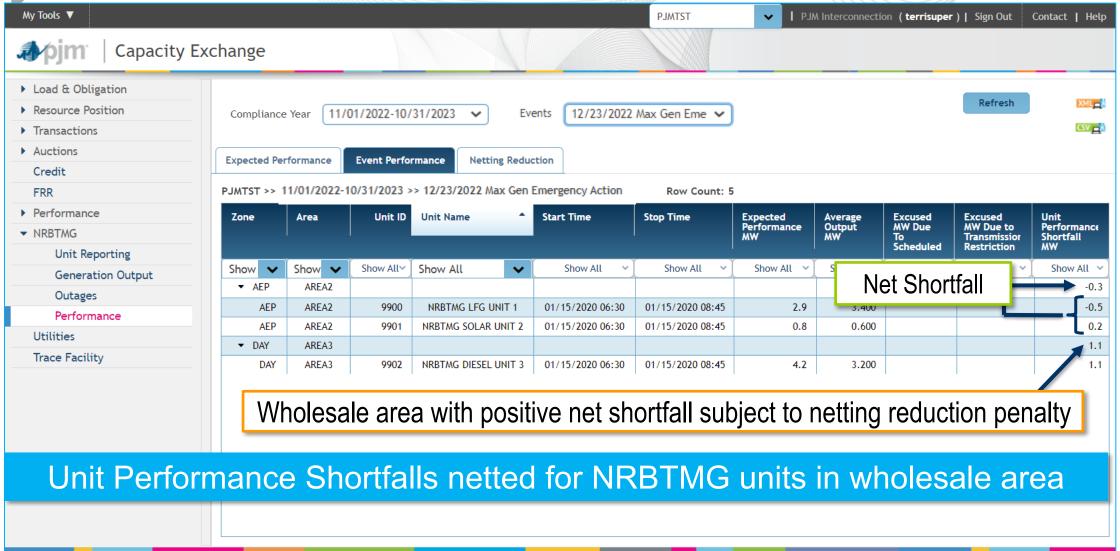
Unit Performance Shortfall



- Excused MWs may be granted due to scheduled outages or transmission restrictions
- No excused MWs for scheduled outages that occur during emergency events from June through September



Unit Shortfalls & Net Shortfalls





Total Netting Reduction for Wholesale Area

Event Netting Reduction



10% of the Net Performance Shortfall for wholesale area for the emergency event

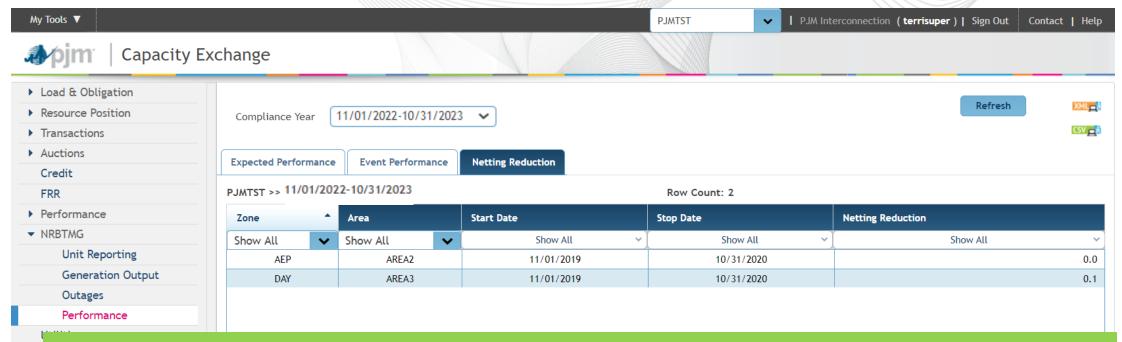
Total Netting Reduction



Sum of event netting reduction amounts for wholesale area for the first 10 emergency events in compliance period



Netting Reduction



The total netting reduction amount for a wholesale area due to the first ten emergency events during the compliance year is displayed.

The EDC that is responsible for calculating the NSPL and OPL for wholesale areas in the zone will be able to view netting reduction data for all wholesale areas in the zone.

In EDC procedures for calculating a wholesale area's NSPL or OPL for the subsequent calendar year/delivery year, the total amount of operating NRBTMG that is allowed to net against the wholesale area's actual load during the relevant hours is to be reduced by the total netting reduction amount for the wholesale area.



Impact to NSPL and OPL

	Area Gross Load (MW)	Operating NRBTMG (MW)	Area Net Load (MW)	Total Netting Reduction Amount (MW)	Operating NRBTMG Minus Total Reduction Amount (MW)	Adjusted Area Net Load (MW)
CP Hour	10	5	5	3	2	8

- EDC is to account for total netting reduction amount in procedures for calculating wholesale area's NSPL or OPL for subsequent calendar year/delivery year
- Operating Non-Retail BTMG that is eligible to net against the wholesale area's actual load during the relevant coincident peak hours is to be reduced by total netting reduction amount
- Results in an upward adjustment to NSPL and OPL for wholesale area

