

## Settlement Agreement

Theresa Esterly Sr. Lead Engineer, Capacity Market Operations OC Meeting April 9, 2019

#### History

#### March 1, 2004 Filing ER04-608

PJM proposed rules to allow BTMG at same, single electrical location to net against load

#### May 6, 2004 FERC Order

Accepted filing subject to condition. Required PJM to examine whether appropriate to expand BTMG netting provision to municipal and cooperative system loads and file status report.

#### May 2004 – March 2005 **BTMG Working Group**

**Deliberated on expanding** the BTMG business rules. PJM filed three status reports to FERC on the topic.

#### March 18, 2005 **Final Status Report**

PJM stakeholders rejected proposal that allowed BTMG on distribution system to net based on ten PJM coincident peaks during summer period for transmission and capacity purposes.



BTMG connected to distribution system.

**October 24, 2005** Settlement Agreement Established the Non-

retail BTMG business rules.

#### Issues to be addressed by Settlement

Appropriateness of expanding netting provision  Whether generation not located with load should be categorically excluded from BTMG netting provision

Impact on reliability as a result of expansion  Whether reliability concerns raised by PJM are relevant to question of netting to determine the responsibility of the costs of transmission system or whether such concerns can be addressed in other ways

Reliability concerns:

- Classifying high levels of municipal generation would reduce level of installed capacity reserves on system
- PJM did not have right to call upon BTMG in an emergency



#### **Settlement Agreement**

- Applicability of the BTMG Netting Rules
- Non-Retail BTMG Threshold
- 3000 MW NRBTMG Cap
- Maximum Generation Emergency Obligation
- Filing Rights



- Netting rules shall be expanded to apply to BTMG used by municipal electric systems, electric cooperatives, and electric distribution companies to serve load ("Non-Retail Behind the Meter Generation")
- If distribution facilities are used to deliver energy from NRBTMG to load, then permission to use distribution facilities must be obtained from owner, lessee, or operator of such facilities
- Netting rules for BTMG apply only to those entities that have Network Integration Transmission Service agreements with PJM



### Non-Retail BTMG Threshold

- NRBTMG Threshold caps the amount of NRBTMG in PJM that will be eligible for 100% netting
- Initial NRBTMG Threshold shall be 1500 MW for 2006 calendar year for transmission charges and 2006/2007 delivery year for capacity charges.
- Each year thereafter, NRBTMG Threshold is increased based PJM load growth.
- Load growth shall be determined based on most recent forecasted weatheradjusted summer peak for PJM region divided by weather-adjusted coincident peak for prior summer for the same area.
- NRBTMG Threshold shall be rounded up or down to nearest whole MW.
- NRBTMG Threshold for current calendar year/delivery year shall be the base amount for calculating the NRBTMG Threshold for succeeding calendar year/delivery year.



**NRBTMG** Threshold Calculation

2018 CY & 2018/2019 DY NRBTMG Threshold = 1953 MW

Load Growth

= 2019 Forecasted Summer Peak ÷ 2018 Weather Normalized Summer Peak

- = 151,357 MW ÷ 147,375 MW
- = 1.0270

### 2019 CY & 2019/2020 DY NRBTMG Threshold

- = Base amount \* Load Growth
- = 1953 MW \* 1.0270
- = 2006 MW

Base amount for

calculating 2019

CY & 2019/2020

**DY** Threshold



- If amount of NRBTMG in PJM exceeds the NRBTMG Threshold, the NRBTMG eligible for netting shall be pro-rated back to the NRBTMG Threshold
- Entity's NRBTMG eligible for netting shall be product of entity's total NRBTMG multiplied by the ratio of NRBTMG Threshold divided by total amount of NRBTMG in PJM (not to exceed 3000

MW).

Example: NRBTMG Threshold = 1500 MW NRBTMG in PJM = 2000 MW Ratio = 1500 MW/2000 MW = 0.75

Entity's NRBTMG = 20 MW Entity's Eligible NRBTMG Netting Amount = 20 MW \* 0.75 = 15 MW



## 3000 MW NRBTMG Cap

- NRBTMG in PJM shall be capped at 3000 MW for netting purposes unless modified pursuant to a filing
- If 3000 MW cap is reached, no additional NRBTMG will be eligible for netting for purposes of determining charges for transmission service, reactive service, black start service, and capacity obligations
- In event 3000 MW cap is reached, within 6 months of the date the cap is reached, PJM shall make a section 205 filing to justify either continuation of existing BTMG rules (including any expansion of rules to include additional MWs) or any changes to the rules.
  - Filing to address the effect of the implementation of current BTM rules on reliability and equitable allocation of cost responsibility



- Each year (November 1- October 31), NRBTMG resource shall be required to operate during first 10 occurrences of Maximum Generation Emergency (MGE) conditions to address either a generation or transmission emergency in the zone in which the resource is located
- Obligated to operate up to the resource's emergency rating up to the duration so rated, and the obligation to operate at its normal rating for the duration of the MGE condition.
- Failure to operate results in reduced netting benefit



## Reduced Netting Benefit for Failure to Operate

- Except for failure to operate due to scheduled outages during months of October through May, for each MGE condition in which such resource fails to operate, in whole or in part, the netting associated with that resource for purposes of charges for transmission service, reactive service, black start service, and capacity obligations shall be reduced by 10% of the amount of MWS the resource failed to produce
- Reductions in netting shall be applied in the succeeding calendar year with respect to transmission service, reactive service and black start service, and in the succeeding delivery year for capacity obligations

Example: Required Output during MGE = 100 MW NRBTMG Output during MGE = 50 MW Shortfall = 50 MW Entity's Eligible NRBTMG Netting Amount for next CY/DY will be reduced by 10% \* Shortfall or 5 MW





- Nothing in Settlement Agreement shall be construed as affecting the rights of any party to make future filings under section 205 and 206 of Federal Power Act
- PJM shall have right unilaterally to make 205 filing to provisions of OA to extent provisions and amendments concern reliability or operational issues with BTMG netting rules
- PJM shall have right unilaterally to make 205 filing to provisions of OATT to extent provisions and amendments concern BTMG netting rules



**Reliability Concerns Addressed** 

Settlement Agreement terms provided mechanisms to protect the reliability of system, while permitting increased participation in BTMG netting program.

Netting up to NRBTMG Threshold

3000 MW Cap on NRBTMG

Requirement to operate during Maximum Generation Emergency condition

PJM rights to file to change BTMG provisions in event that PJM identifies a reliability concern



# Appendix



### Parties to Settlement Agreement

- American Electric Power Service Corporation
- American Forest & Paper Association
- Borough of Chambersburg, PA
- Eastern Utilities Commission
- City of Geneva, IL
- Illinois Municipal Electric
  Agency

- Old Dominion Electric Cooperative
- PEPCO Holdings & its affiliates
- PJM Industrial Customer Coalition
- PJM Interconnection
- Public Service Electric & Gas



**Maximum Generation Emergency** shall mean an Emergency declared by the Office of the Interconnection to address either a generation or transmission emergency in which the Office of the Interconnection anticipates requesting one or more Generation Capacity Resources, or Non-Retail Behind The Meter Generation resources to operate at its maximum net or gross electrical power output, subject to the equipment stress limits for such Generation Capacity Resource or Non-Retail Behind The Meter resource in order to manage, alleviate, or end the Emergency.