



# NRBTMG Business Rules Problem Statement & Issue Charge

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OC Meeting  
February 5, 2019

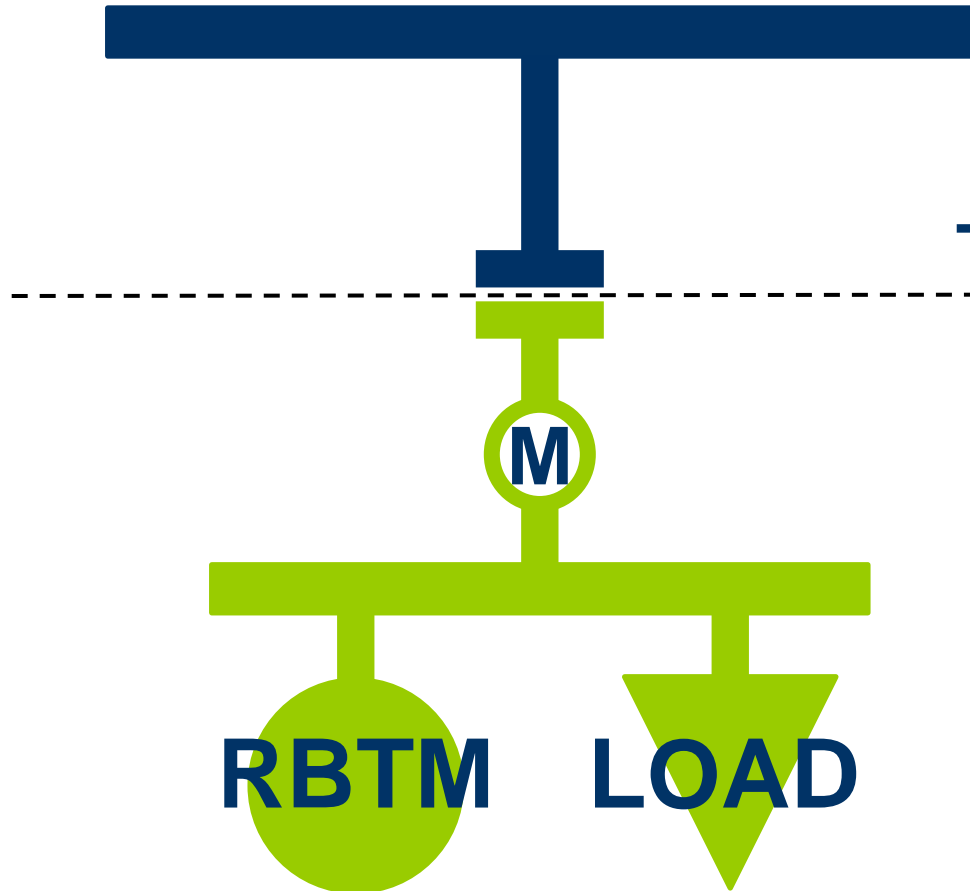
Behind the  
Meter  
Generation  
(BTMG)

**Non-Retail BTMG** is BTMG that is used by municipal electric systems, electric cooperatives, or electric distribution companies to serve load.

**Retail BTMG** is BTMG that is located behind a retail electricity customer's meter and is used to serve that retail customer's load.

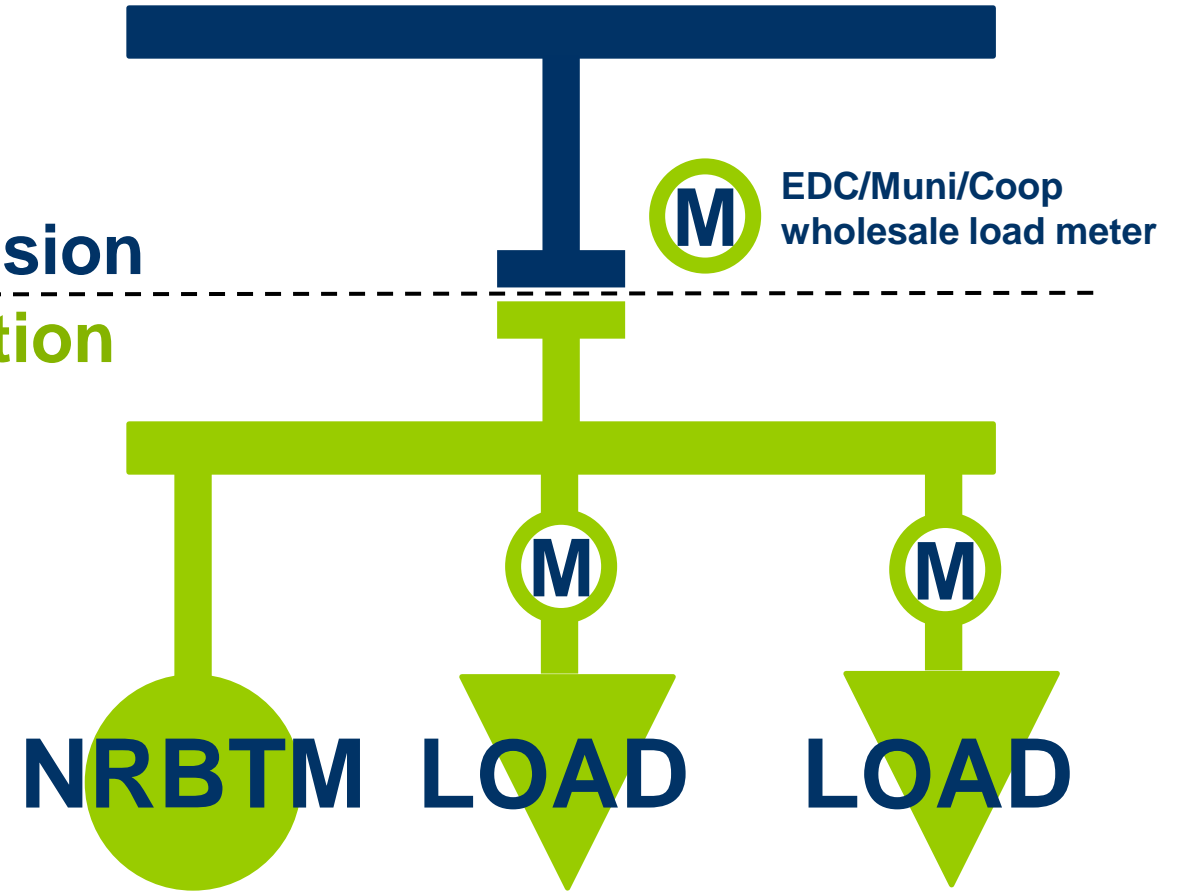
## Retail BTM

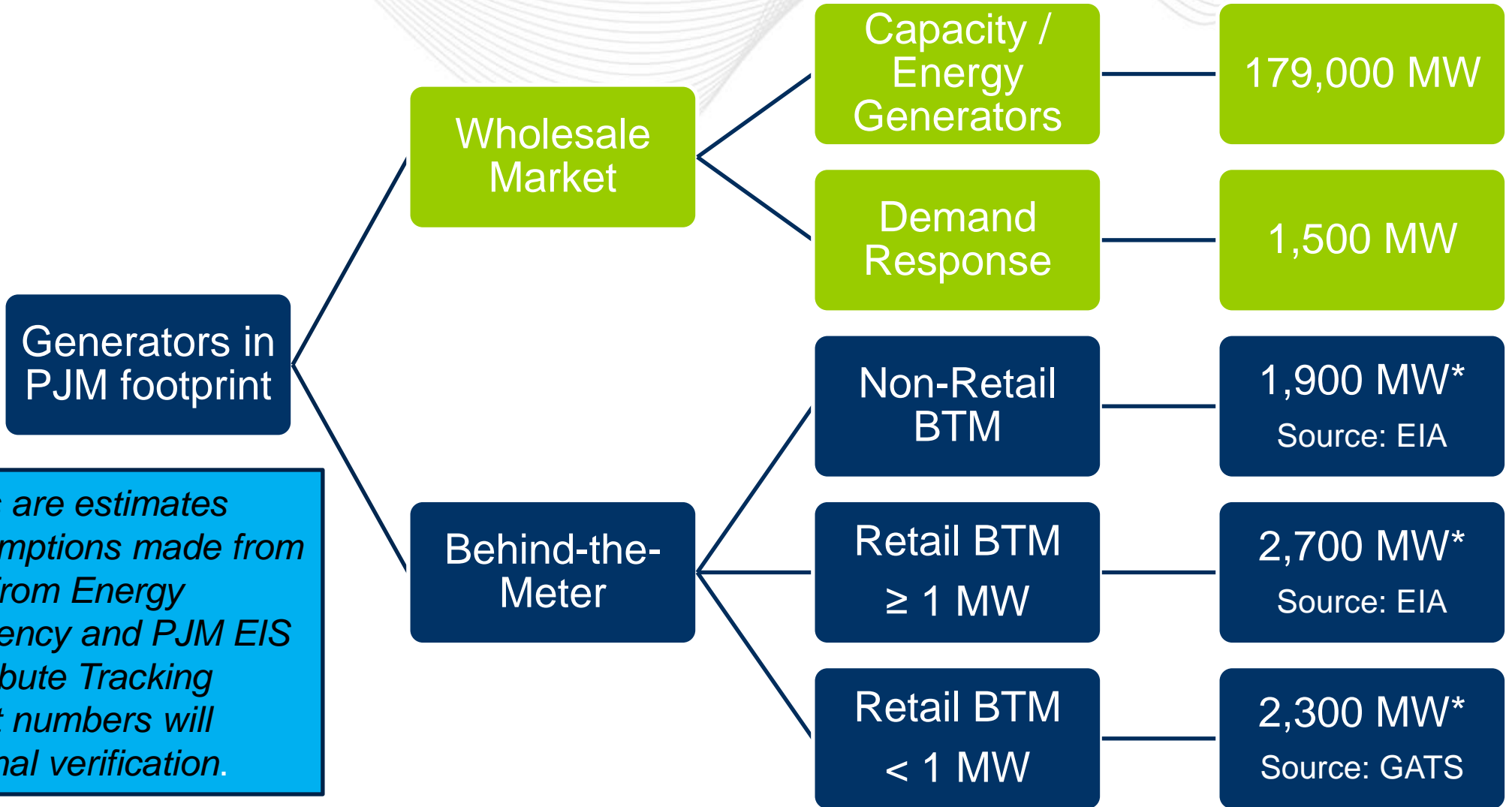
Serves load for one retail electricity customer



## Non-Retail BTM

Serve load for multiple retail electricity customers





*\*BTM numbers are estimates based on assumptions made from public reports from Energy Information Agency and PJM EIS Generator Attribute Tracking System. Exact numbers will require additional verification.*

- Allowed to net against EDC/muni/coop wholesale load for purposes on calculating transmission, capacity, ancillary services, and administrative fee charges
  - Reduces RTO and zonal peak load forecasts used in PJM Capacity Markets
  - No installed capacity reserves are carried by PJM for the load that is served by operating NRBTMG
- Non-Retail BTMG Threshold (up to a 3000 MW cap) limits the amount of NRBTMG eligible for netting and each party's ability to net is pro-rated back to Threshold
  - If 3000 MW cap is reached, no additional NRBTMG is eligible for netting
  - PJM shall file with FERC within six months justifying the continuation of the existing rules or any changes to the rules

# NRBTMG Settlement Agreement (EL05-127) Summary of Performance Requirement

- Required to operate at full output during first 10 times between Nov 1 and Oct 31 that Maximum Generation Emergency (MGE) conditions occur in the zone in which Non-Retail BTMG is located
  - Applies to MGE condition called for generation or transmission emergencies
- Failure to operate during MGE condition results in reduced netting benefit for purposes of charges for transmission, capacity, reactive service, and black start service

- Performance requirements are defined in OATT and RAA
- PJM has obligation to administer the NRBTMG requirements in compliance with agreements and manuals
- Concern that NRBTMG is under-reported and the amount is closer to NRBTMG Threshold or 3000 MW cap at which specific requirements are triggered.
- More clarity in Member and PJM responsibilities, processes, and procedures is needed to administer the NRBTMG requirements

- NRBTMG business rules established in 2005 prior to implementation of RPM, Capacity Performance requirements, and ATSI, DEOK, and EKPC integrations
- Clarifications in performance and reporting requirements of NRBTMG are needed to ensure all parties understand and are able to perform their responsibilities
- As per Settlement Agreement, there is need to determine if changes to business rules are needed once the 3000 MW cap is reached
- PJM identified the following areas to address
  - Triggers for Operation
  - Performance Evaluation
  - Reporting Requirements
  - Cap Evaluation



*NRBTMG is required to operate when **Maximum Generation Emergency (MGE) conditions** occur in the zone in which Non-Retail BTMG is located.*

- Clarify which specific Emergency Procedure(s) trigger the requirement to operate
- Update Emergency Operations Manual (M-13) to include PJM and Member actions required for NRBTMG

*For each MGE condition in which netting NRBTMG is not on a scheduled outage but 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 will be reduced by 10% of the amount of MWs the resource failed to produce.*

- Clearly define the expected performance level and ensure such MW level is reported
- Clarify when and how outages are scheduled for NRBTMG
- Clarify the processes/procedures to administer a reduced netting credit if a NRBTMG fails to perform

*NRBTMG needs to be transparent to PJM and the data reported on NRBTMG needs to be current for PJM to administer the NRBTMG requirements.*

- Enhance reporting requirements in Generator Operational Requirements Manual (M-14D)
- Clarify that NRBTMG reporting requirements are mandatory
- Establish deadlines and processes for initial reporting of NRBTMG data, data updates, and submission of NRBTMG generator output data

*If amount of NRBTMG exceeds the NRBTMG Threshold, the amount of NRBTMG eligible for netting shall be prorated back to the Threshold. If 3000 MW cap is reached, no additional NRBTMG will be eligible for netting, and PJM shall file with FERC to justify continuation of existing rules or changes to rules.*

- Evaluate the current level of NRBTMG in PJM as compared to the NRBTMG Threshold and 3000 MW cap
- Clarify the processes/procedures for pro-rating back to Threshold.
- Determine if 3000 MW cap is still valid given current PJM footprint

- Expected Deliverables
  - OA, OATT, and RAA Revisions
  - Manual Revisions (M-13, M-14D, M18)
  - FERC filing
  
- Timeline
  - Expected start is April 1, 2019
  - Work duration of 9 months with monthly meetings required
  - FERC filing by December 31, 2019

# Appendix

**Behind The Meter Generation** shall refer to a generation unit that delivers energy to load without using the Transmission System or any distribution facilities (unless the entity that owns or leases the distribution facilities has consented to such use of the distribution facilities and such consent has been demonstrated to the satisfaction of the Office of the Interconnection); provided, however, that Behind The Meter Generation does not include (i) at any time, any portion of such generating unit's capacity that is designated as a Generation Capacity Resource; or (ii) in an hour, any portion of the output of such generating unit that is sold to another entity for consumption at another electrical location or into the PJM Interchange Energy Market.

**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.