

Appendix A: Behind the Meter Generation Business Rules

Definition and Purpose of Behind-the-Meter Generation (**BtMGBTMG**)

1. The purpose of these rules is to permit market participants operating Behind-the-Meter Generation (**BtMGBTMG**) to receive the associated benefits. These benefits are recognized by allowing such generation to net for the purposes of calculating transmission, capacity, ancillary services, and administrative fee charges.
2. The netting rules for **BtMGBTMG** are set forth in the PJM Open Access Transmission Tariff (“PJM Tariff”), the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. (“Operating Agreement”), and the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region (“RAA”). These documents filed with the Federal Energy Regulatory Commission will take precedence in the event of any conflict or ambiguity between these rules and the filed documents.

Eligibility for **BtMBTM** Netting

3. These rules apply to **BtMGBTMG** used by end-use customers, municipal electric systems, electric cooperatives, and electric distribution companies to serve load. The load must be located at the same electrical location as the **BtMGBTMG**, such that no transmission or distribution facilities are utilized to transmit energy from the **BtMGBTMG** to the load. An exception to the prohibition on use of distribution facilities rule is allowed, in cases where permission to use the requisite distribution facilities has been obtained from the owner, lessee, or operator of such facilities. Such permission must be submitted in writing to PJM from the owner, lessee or operator of such distribution facilities.
4. **BtMGBTMG** netting is only available to entities that have Network Integration Transmission Service agreements with PJM.
5. These business rules do not supersede any elements of existing retail service agreements or standby service agreements between an entity and its Load Serving Entity or the ~~E~~lectric ~~D~~istribution ~~C~~ompany (**EDC**) to which the associated load is connected.

BtMBTM Netting – General Rules

6. **BtMGBTMG** does not include at any time, any portion of a generating unit’s capacity that is designated as a Capacity Resource; or in any 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.
7. Generation Owners shall not be eligible to receive payments, pursuant to Schedule 2 of the PJM Tariff, for reactive service for portions of generating units upon becoming a **BtMBTM** Generator. Generation Owners subject to this rule shall cooperate with PJM in making any regulatory filings that may be required to implement this rule.
8. The need for metering for small **BtMGBTMG** will be treated on a case-by-case basis, depending on local operational security needs. For the purposes of this rule, small **BtMGBTMG** shall be individual generating units that are less than 10 MW, or multiple generating units that are collectively less than 10 MW. Generally, these units will not require metering for operational security purposes. Rules for metering are detailed in the PJM Manual for Generator Operational Requirements (M-14D).

9. **B:MGBTMG** that is 10 MW or greater (or has been identified as requiring metering for operational security reasons) must have both revenue metering and telemetering for operational security purposes. Single unit small **B:MBTM** generators that collectively total more than 10 MW, may be aggregated behind the meter and metered as a single unit to meet this requirement should PJM require metering for the aggregate generation. Rules for metering are detailed in the PJM Manual for Generator Operational Requirements (M-14D). For telemetry and metering to be communicated to PJM the unit must be modeled in the PJM Energy Management System. For modeling rules to fulfill this requirement, please refer to Manual 3A, Section 1.2.1.

10. **B:MGBTMG** will be recognized in PJM transmission and generation adequacy planning models. Load and generation will be modeled separately where practicable.

11. If multiple generation units are located behind the meter, each unit can be designated as either a Capacity Resource or as **B:MGBTMG** on a unit specific basis or on a partial unit basis.

12. A party may change all or a portion of a unit's capability from Capacity and/or Energy Resource status to **B:MGBTMG** status, or from **B:MGBTMG** status to Capacity and/or Energy Resource status (provided the generator has met the applicable requirements for Capacity Resource status), but cannot be used for both purposes simultaneously for a designated portion of a unit's capability. Any portion of a unit that has been qualified as a Capacity Resource is subject to the same requirements as any other PJM Capacity Resource. Because of the number of procedural requirements associated with changing to or from **B:MGBTMG** status, such changes shall be limited to once per year in accordance with the schedule set forth below.

13. A Capacity Resource that changes to **B:MGBTMG**, or a new generator that requests **B:MGBTMG** status will be able to net its full installed capacity value for the first calendar year for transmission and the first Planning Period for capacity. The netting value for all succeeding years will be based on actual generator performance over the 5 CP and 1 CP days.

14. Requests for **B:MGBTMG** changes for transmission charges, black start service, and reactive service must be received by PJM by December 1 and will become effective the following January 1. The change shall remain in effect for a period no less than one calendar year.

15. Requests for **B:MGBTMG** changes for capacity obligations must be received by PJM by December 1 and will become effective the following June 1. The change shall remain in effect for a period no less than one Planning Period.

16. Requests for **B:MGBTMG** changes for energy-based ancillary service charges (i.e., those ancillary services charged on a MWh basis such as regulation, spinning and operating reserves) and for administrative fee charges can be made anytime. The change will become effective on the first of the month following PJM's communication that all logistical modifications (as may be required, for example, to metering or billing/settlement records) have been completed. The change shall remain in effect for a period no less than 12 months from the month the change becomes effective.

17. If a generator is granted **B:MGBTMG** status for one purpose (such as capacity), it must become **B:MGBTMG** for all other purposes described in Rules 14, 15 and 16 above, and in accordance with the timetables established in those rules. A generator that changes its status to **B:MGBTMG** pursuant to Rules 14 and 16 will be deemed to have given notice pursuant to Rule 15 to request **B:MGBTMG** status for capacity obligations for the Planning Period



immediately following the Planning Period in which the Rule 14 and/or 15 ~~B:MG~~BTMG request was made/effective-, so as to comply with the notice requirements provided in Section 2.5.2 of the PJM Tariff.

18. The timing requirements established in Rules 14, 15 and 16 are not affected by a transfer of ownership; **BtMGBTMG** status changes are only permitted according to the timetable described in Rules 14, 15 and 16 above.

19. If Non-Retail **BtMGBTMG** is subject to a reduced netting credit as described in Rule 34~~63~~ below, that generator is ineligible to change its behind the meter status until the full effect of that reduction has been fully rolled out.

20. If a Capacity Resource moves behind the meter, its injection rights will be treated the same as if the unit had been deactivated. Those injection rights are defined in Section 230 of the PJM Tariff, generally, and Section 230.3.3 specifically with respect to rights that apply if a generation resource is deactivated.

Participation in Load Management Programs

21. **BtMGBTMG** may participate in all relevant PJM demand side response programs (e.g. the PJM Interchange Energy Market and the PJM Capacity Market (RPM)) under the terms and conditions in effect at the time the **BtMGBTMG** requests participation in the program, subject to Rule 22 below.

22. A generator may be used for Load Management (LM) credit or it can be used to net against load as a **BtMBTM** generator, but cannot be used for both purposes simultaneously. The election of **BtMBTM** or LM status must remain in effect for an entire planning period.

23. A **BtMBTM** generator may participate in the PJM Load Response programs under the terms and conditions in effect at the time the **BtMBTM** generator requests to participate in the program.

Generation Netted Against Load

24. The load associated with **BtMGBTMG** must have a Load Serving Entity (LSE). The LSE will be responsible for supplying energy, capacity, ancillary services and transmission for that portion of the load not supplied by the **BtMGBTMG**. For the purposes of this rule, the load not supplied by the **BtMGBTMG** shall include load normally supplied by the **BtMGBTMG** during periods when the **BtMGBTMG** is not operating.

24-25. Since generation output from operating **BtMGBTMG** is allowed to reduce the actual gross load at a retail end-use customer site or at the wholesale area level (in the case of Non-Retail **BtMGBTMG**), a net load (gross load minus operating **BtMGBTMG**, not to be less than zero) is able to be used in the determination of LSE's charges for energy, ancillary services, capacity, transmission, and administrative fee charges.

~~The capacity obligation for the load will be based on the average of the net load at the site(s) (gross load minus operating **BtMG**, not to be less than zero) at the time of the Zone's transmission peak (1CP) during the five (5) coincident peak hours, in accordance with the 5CP methodology in effect for the Zone.~~

~~a. Network Integration Transmission Service charges will be calculated as the net load at the site(s) (gross load minus operating **BtMG**, not to be less than zero) at the time of the Zone's transmission peak (1CP).~~

~~a. Regulation and Spinning Reserve obligations will be calculated based on the net MWh of load at the site (hourly gross load minus operating **BtMG**, not to be less than zero) in real time.~~

~~a. Day-Ahead Operating Reserves will be charged based on the net amount of load at the site(s) that clear(s) in the PJM Day-Ahead energy market.~~



~~b. Balancing Operating Reserve deviations will be measured based on the net change of both the BtMG and the load between day-ahead and real-time.~~

~~b. PJM Schedule 9 administrative fees based on real time load and generation will be charged on the net value of load or generation as measured in real time.~~

25-26. Under this “netting” arrangement, the EDC and/or LSE will be responsible for reporting both the load and generation information to PJM for use in the load forecast for generators for which metering is required for operational security purposes. The EDC may need to obtain this information from the LSE and both parties are required to cooperate to ensure PJM receives the information.

26-27. For wholesale market participation, the interconnection requirements will be publicly available and, in cases where parallel operation will exist with the distribution or transmission system, determined by the EDC in accordance with applicable state or other jurisdictional requirements. The generator will be evaluated using the PJM interconnection process only if it is involved in a wholesale transaction.

BTM Netting – Non-Retail Participation

27-28. Non-Retail **BTM** netting provisions apply to behind the meter generation used by municipal electric systems, electric cooperatives, and EDCs to serve load, provided that, if distribution facilities are used to deliver energy from Non-Retail **BTM** to load, then permission to use such distribution facilities has been obtained from the owner, lessee, or operator of such distribution facilities. Such permission shall be submitted to PJM in writing from the owner, lessee or operator. Non-Retail BTM does not include a generation facility that is dedicated to a retail end-use program that directly offsets retail charges under regulations promulgated by a Relevant Electric Retail Regulatory Authority (e.g., Net Energy Metering, Community Solar, or Aggregate Net Energy Metering programs).

29. All Load Serving Entities (LSE) that has Non-Retail **BTM** that may be used to net against a municipal electric system, electric cooperative, or EDC’s wholesale area load that such LSE serves using the Non-Retail **BTM** option must have a Network Integration Transmission Service agreement with PJM.

30. On an annual basis in the month of June, PJM will solicit the LSEs that serves the entire load of a modeled municipal electric system, electric cooperative, or EDC wholesale area in the Capacity Exchange system (s) load to complete and submit a Non-Retail **BTM** reporting template for each the LSE account that is serving the entire load for a modeled wholesale area(s) and provide the requested data on Non-Retail BTM units with nameplate capacity that are greater than or equal to 0.1 MW and are located in such modeled wholesale area(s). If there are multiple LSEs that serve load in a modeled EDC wholesale area in the Zone or if there are multiple LSEs that serve load in the Rest of the Zone (i.e., Zone minus modeled wholesale areas in the Capacity Exchange system), PJM will solicit the EDC for the modeled EDC wholesale area or for the Rest of the Zone to complete and submit a Non-Retail BTM reporting template applicable to the modeled EDC wholesale area or the Rest of the Zone.

31. Each solicited LSE and EDC shall respond to PJM’s request by the stated deadline of the request and submit a completed Non-Retail **BTM** reporting template by LSE account or EDC account and provide all requested data in the template to the extent the LSE or EDC holds or after best efforts can obtain the requested data. If an LSE or EDC demonstrates to PJM that a generator agreement prior to 2005 contains confidentiality requirements that prohibit the disclosure of certain data requested in the template, the LSE or EDC shall not be required to provide such data. The stated deadline of PJM’s request shall allow the LSE or EDC at least 31 days to respond. If there is a LSE or EDC account for which there is no Non-



Retail ~~BTMGBTMG~~ located in ~~the wholesale area(s) served by the LSE account area for which the LSE or EDC was requested to report~~, the solicited LSE or EDC shall indicate on the Non-Retail ~~BTMGBTMG~~ reporting template that there is no Non-Retail ~~BTMGBTMG~~ located in ~~that area. the modeled wholesale area(s) served by the LSE account.~~ A completed Non-Retail ~~BTMGBTMG~~ template shall be submitted to @pjm.com.

32. The Non-Retail ~~BTMGBTMG~~ reporting template shall be posted on the pjm website.

33. Each unit shall be identified separately on the Non-Retail ~~BTMGBTMG~~ reporting template. An electric storage resource with nameplate capacity that is greater than or equal to 0.1 MW co-located with another resource type shall be identified separately on the Non-Retail ~~BTMGBTMG~~ reporting template.

34. The summer rated installed capacity value of a unit reported on the Non-Retail ~~BTMGBTMG~~ reporting template shall be determined by the LSE consistent with the methodology for determining Summer Net Capability for the resource type in Manual 21, section 2. However, there is no summer or winter capability verification test requirement for Non-Retail ~~BTMGBTMG~~. In the case of a new solar or wind Non-Retail ~~BTMGBTMG~~ unit, the summer rated installed capacity value shall be determined as the Net Maximum Capacity as defined in Manual 21, Appendix B multiplied by the posted class average capacity factor at the time of the Non-Retail ~~BTMGBTMG~~ reporting template submittal. For mature solar or wind Non-retail ~~BTMGBTMG~~, a LSE/EDC may use actual historical performance data to determine the summer rated installed capacity value.

35. If a portion of the reported unit or the entirety of a previously reported unit has been qualified as a Generation Capacity Resource or Energy Resource, the installed capacity MWs participating in PJM Markets for the current Planning Period shall also be reported on the Non-Retail ~~BtM~~**BtM**GBTMG reporting template.

36. If a portion of the reported unit or the entirety of a previously reported unit is currently registered as Pre-Emergency, Emergency, or Economic Load Response, the LSE shall indicate on the Non-Retail ~~BtM~~**BtM**GBTMG reporting template the installed capacity MWs participating in PJM Markets.

37. The netting capability of a unit reported on the Non-Retail ~~BtM~~**BtM**GBTMG reporting template shall be the summer rated installed capacity value minus the installed capacity MWs participating in PJM Markets.

38. To assist LSEs/~~EDCs~~ with the completion of the Non-Retail ~~BtM~~**BtM**GBTMG reporting template, PJM shall post on the pjm website a list of potential Non-Retail ~~BtM~~**BtM**GBTMG based on EIA-860 data.

39. If there is an update to the data originally submitted in the Non-Retail ~~BtM~~**BtM**GBTMG reporting template, the LSE/~~EDC~~ shall submit an updated Non-Retail ~~BtM~~**BtM**GBTMG reporting template to ~~BtM~~**BtM**GBTMG@pjm.com within 31 days of the effective date of the change. For example, a new or deactivated unit shall be reported to PJM through the submittal of an updated Non-Retail ~~BtM~~**BtM**GBTMG reporting template within 31 days of the in-service or deactivation date. However, a new unit or Capacity Resource that changes status to Non-Retail ~~BtM~~**BtM**GBTMG shall be reported on an updated Non-Retail ~~BtM~~**BtM**GBTMG reporting template no later than December 1 in order to comply with business rules #13 through #15 if an adjustment to ~~a n-~~ ~~LSE's~~**LSE's** wholesale area's network service peak load or obligation peak load is requested for next calendar year or delivery year. For new units, the LSE/~~EDC~~ must also include with the updated submittal a copy of a letter from the owner, lessee, or operator of the distribution facilities that indicates permission to use the distribution facilities to transmit energy from the Non-Retail ~~BtM~~**BtM**GBTMG to the wholesale area load on the distribution system has been granted.

28.40. PJM shall post aggregate data on the Non-Retail ~~BtM~~**BtM**GBTMG submitted to PJM in the Non-Retail ~~BtM~~**BtM**GBTMG reporting templates consistent with the criteria in Manual 33, Section 3: Market Data Postings.

29.41. Non-Retail ~~BtM~~**BtM**GBTMG netting is subject to a threshold amount in the determination of network service peak loads and obligation peak loads. Non-Retail ~~BtM~~**BtM**GBTMG netting is not subject to a threshold amount in the determination of actual or scheduled loads used in energy, ancillary services, or administrative fee charges. The Non-Retail ~~BtM~~**BtM**GBTMG threshold is 1,500 MW for calendar year 2006 for ~~transmission charges, black start service, and reactive service,~~ network service peak loads and for the 2006/2007 Planning Period for ~~capacity obligations~~ obligation peak loads. Each year thereafter, the Non-Retail ~~BtM~~**BtM**GBTMG threshold will be increased based on PJM RTO load growth. PJM RTO load growth will be determined based on the most recent forecasted weather-adjusted coincident summer peak divided by the weather-adjusted coincident peak for the previous summer. After applying the load growth factor, the Non-Retail ~~BtM~~**BtM**GBTMG threshold will be rounded to the nearest whole MW, and that rounded number will be the Non-Retail ~~BtM~~**BtM**GBTMG threshold for that current calendar year or Planning Period and the base amount for calculating the Non-Retail ~~BtM~~**BtM**GBTMG threshold for the succeeding calendar year or Planning Period.

30. PJM shall communicate a change in the Non-Retail ~~BtM~~**BtM**GBTMG threshold through an email to all ~~BtM~~**BtM** generators and posting on the PJM website.

42. If the total amount of Non-Retail ~~BtM~~**BtM**GBTMG in PJM netting exceeds the Non-Retail

BTMGBTMG threshold, the amount of operating Non-Retail BTMGBTMG eligible to net against the wholesale area load shall be prorated back to the threshold in the determination of wholesale area's network service peak loads and obligation peak loads. In such instance, the amount of operating Non-Retail BTMGBTMG eligible for netting by an entity in the wholesale area shall be the product of its the total operating Non-Retail BTMGBTMG in such wholesale area multiplied by an adjustment ratio. The adjustment ratio is equal to the of the Non-Retail BTMGBTMG threshold divided by the total amount of the Non-Retail BTMGBTMG in the PJM RTO (not to exceed 3,000 MW). [Example: if the Non-Retail BTMGBTMG threshold is 1,500 and the total amount of Non-Retail BTMGBTMG netting in the PJM RTO reaches 2,000, then 75 percent of an entity's the operating Non-Retail BTMGBTMG in the wholesale area would be eligible for netting.]

43. The total amount of Non-Retail BTMGBTMG in the PJM shall be calculated based on the sum of the netting capability values reported to PJM in the most recent submittals of Non-Retail BTMGBTMG reporting templates.

44. PJM shall post the total amount of Non-Retail BTMGBTMG in PJM, Non-Retail BTMGBTMG threshold, and the adjustment ratio that is applicable for the calendar year/Planning Period on the pjw website no later than November 30 prior to such calendar year/Planning Period

45. If the ratio adjustment for a calendar year/Planning Period is less than 100%, the EDC that is responsible for calculating the obligation peak load and network service peak load for the wholesale area in a transmission zone, shall apply the ratio adjustment in their procedures for calculating an LSE's the wholesale area's network service peak load for the calendar year and obligation peak load for the Planning Period. In their procedures, the EDC shall reduce the total amount of operating Non-Retail BTMGBTMG in the wholesale area that is allowed to net against the LSE's wholesale area's actual load to an amount equal to the total operating Non-Retail BTMGBTMG in the wholesale area that is allowed to net times the ratio adjustment. The total operating Non-Retail BTMGBTMG in the wholesale area that is allowed to net shall be based on the total hourly generation output data for Non-Retail BTMGBTMG units in the wholesale area less any hourly generation output of such Non-Retail BTMGBTMG units participating in PJM Markets.

46. If there are multiple LSEs that serve the load in a modeled EDC wholesale area or in the Rest of the Zone, the impact of any reduced netting to the network service peak load value or obligation peak load value that would be determined for the modeled EDC wholesale area or the Rest of the Zone as a result of the total amount of Non-Retail BTMGBTMG in PJM exceeding the Non-Retail BTMGBTMG threshold or the 3000 MW cap (as described in business rule 54) shall be allocated to the multiple LSEs that serve load in a modeled EDC wholesale area in the Zone or in the Rest of the Zone in accordance with the EDC's procedures for calculating an LSE's network service peak load or obligation peak load.

47. An LSE/EDC that submitted a Non-Retail BTMGBTMG reporting template is also responsible for completing and submitting a Non-Retail BTMGBTMG generation output template by LSE/EDC account and transmission zone. For each of the units listed in the LSE/EDC's Non-Retail BTMGBTMG reporting template that have a netting capability value greater than 0.1 MW, the hourly generation output data for the zonal 1CP hour and RTO 5CP hours are reported in the Non-Retail BTMGBTMG generation output template.

48. An EDC may request hourly generation output data for additional hours if additional hours are used in an EDC's procedures for calculating the LSE's network service peak load for the calendar year or obligation peak load for the Planning Period. An EDC's request for additional hours of generation output data must be submitted to BTMG@pjm.com no later than October 15 prior to a calendar year/Planning Period for incorporation into a Non-Retail BTMGBTMG

generation output template that is applicable for such calendar year/Planning Period.

49. PJM shall post the Non-Retail **BTMGBTMG** generation output template that is applicable for the calendar year/Planning Period on the pjm website no later than October 31 prior to such calendar year/Planning Period.

50. The hourly generation output data for the entire unit shall be reported in the Non-Retail **BTMGBTMG** generation output template. If a portion of the hourly generation output participated in a PJM Market, such portion of the hourly generation output shall also be reported on the Non-Retail **BTMGBTMG** generation output template.

51. An LSE/**EDC** must submit a completed Non-Retail **BTMGBTMG** generation output template for the applicable calendar year year/Planning Period. The Non-Retail **BTMGBTMG** generation output template must be submitted to PJM at BTMG@pjm.com and to the applicable EDC contact no later than November 30 prior to such calendar year/Planning Period.

52. To facilitate the submittal of Non-Retail **BTMGBTMG** generation output templates to the appropriate EDC contact person, PJM shall work with the EDCs that are responsible for determining network service peak loads and obligation peaks in a transmission zone, and post a list of EDC contact information on the pjm website.

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53. The total amount of Non-Retail **BTMGBTMG** eligible for netting under the **BTMGBTMG** provisions is capped at 3,000 MW. If this cap is reached, no additional Non-Retail **BTMGBTMG** will be eligible for netting in the determination of network service peak loads and obligation peak loads. Furthermore, within six months of reaching the cap, PJM shall file with the FERC to justify either continuation of the existing **BTMGBTMG** rules (including any expansion of the rules to include additional MW) or any change to the rules.

54. After the 3000 MW cap is reached, a new Non-Retail **BTMGBTMG** unit reported in a Non-Retail **BTMGBTMG** reporting template is ineligible to net against **an LSE's wholesale area's** load in the determination of **LSEs'the wholesale area's** network service peak load and obligation peak load. The LSE/**EDC** must indicate on the Non-Retail **BTMGBTMG** reporting template and on Non-Retail **BTMGBTMG** generation output template submittals that the new Non-Retail **BTMGBTMG** unit is ineligible for netting. An EDC's procedures for calculating **an LSE's wholesale area's** network service peak load and obligation peak load must ensure that the generation output of a Non-Retail **BTMGBTMG** unit identified as ineligible for netting is not included in the total operating Non-Retail **BTMGBTMG** in the wholesale area that is allowed to net against the wholesale area actual load.

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~~Each calendar year, netting Non-Retail BtMGBTMG resources~~A Non-Retail BtMGBTMG unit that had generation output that was allowed to net against the wholesale area actual load in the determination of a LSE's wholesale area's network service peak load or obligation peak load, shall be required to operate during the first ten occurrences of Maximum Emergency Generation Emergency (MEGE) conditions in the zone in which the resource is located between the period of November 1 through October 31. This obligation applies to an MEGE condition called for either generation or transmission emergencies. Notice of an MEG event shall be communicated through the PJM all-call system.

56. The emergency procedures that trigger the performance expectation to load Non-Retail BtMGBTMG are specified in PJM Manual 13. Members are informed of emergency events in PJM through the Emergency Procedures tool. Users of Emergency Procedures tool can sign up for email or text notification via their user profile to receive emergency procedure messages.

57. Once an emergency procedure triggers the performance expectation to load Non-Retail BtMGBTMG, a Non-Retail BtMGBTMG unit is requested to operate at its maximum net or gross electrical power output, subject to the equipment stress limits for the Non-Retail BtMGBTMG unit; however, the performance of a unit during an emergency event will be measured against the expected performance level of such unit.

58. The expected performance level of a Non-Retail BtMGBTMG unit is the highest netting credit level realized for such unit for the prior November 1 through October 31 period, capped at the unit's netting capability value reported on the Non-Retail BtMGBTMG reporting template. The highest netting credit level realized is the maximum hourly generation output level excluding any generation output participating in PJM Markets that was reported for such unit in the LSE/EDC's Non-Retail BtMGBTMG generation output template multiplied by the ratio adjustment.

59. Based on the LSE/EDC Non-Retail BtMGBTMG generation output template submittals, PJM will determine the Non-Retail BtMGBTMG units that are subject to a performance compliance evaluation for the first ten occurrences that emergency procedures trigger the requirement to load during the current period of November 1 and October 31 and the expected performance level for each unit. In December, PJM will send a notification to all LSE/EDCs that have Non-Retail BtMGBTMG units that are subject to a performance compliance evaluation for the first ten occurrences that emergency procedures trigger the requirement to load during the current period of November 1 and October 31 and provide the expected performance level for each unit that will be used by PJM to evaluate performance compliance.

60. If an emergency procedure triggers the performance expectation to load Non-Retail BtMGBTMG in an emergency event area, PJM shall evaluate the performance of all Non-Retail BtMGBTMG units that are subject to a performance compliance evaluation and located in the area of the emergency event.

61. If there are any emergency event(s) in a month for which Non-Retail BtMGBTMG performance compliance is to be evaluated by PJM, PJM shall post a Non-Retail BtMGBTMG performance compliance template applicable to the events in the month within two business days after the conclusion of the month to facilitate the collection of hourly generation output data during the emergency events.

62. LSE/EDCs that have Non-Retail BtMGBTMG units that are subject to a performance compliance evaluation for the emergency event(s) during the month shall complete and submit a Non-Retail BtMGBTMG performance compliance template to PJM at BtMGBTMG@pjm.com no later than 31 days after PJM posts the Non-Retail BtMGBTMG performance compliance

template applicable to the events in the month. However, LSE/EDCs that have Non-Retail BtMGBTMG units that are subject to a performance compliance evaluation for emergency event(s) during the month of October shall complete and submit a Non-Retail BtMGBTMG performance compliance template by November 25.

63. For each performance compliance event, MEG condition in which netting Non-Retail BtMGBTMG that is subject to a performance compliance evaluation and 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 determining a LSE's wholesale area's network service peak load and obligation peak load will be reduced by ten percent of the amount of megawatts the resource failed to produce. The amount of megawatts that the resource failed to produce, the unit's performance shortfall, will be the difference between its full netting credit expected performance level and its megawatt average output over the MEG period of the emergency event. [Example: if a netting Non-Retail BtMGBTMG resource is expected to perform required to operate with at an output of 100 MW during an Maximum Emergency Generation condition emergency event for which performance compliance is evaluated, but only operates to a level of 75 MW, in the next year, the amount of hourly generation output from the unit that will be allowed to net against the wholesale area load eligible netting from that resource will be reduced by 2.5 MW, which is the product of the following calculation: $(100 - 75) \times .10$].

64. A unit's performance shortfall may be reduced by the over-performance of another Non-Retail BtMGBTMG unit associated with the LSE's same wholesale area and located in the emergency action area.

65. The Non-Retail BtMGBTMG unit's performance shortfall for a performance compliance event may be excused if the LSE/EDC can demonstrate to PJM that such unit was unable to generate at the expected performance level due to the actual wholesale area load level being served by the unit during the period of the performance compliance event and restrictions placed on the unit to prevent injections into the PJM transmission system.

66. No later than November 30, PJM shall provide to the impacted EDCs a list of Non-Retail BtMGBTMG units by LSE/EDC account that failed to perform during performance compliance events for the prior November 1 through October 31 period and each unit's total netting reduction amount due to the unit's failure to perform for the period. PJM shall also provide a copy of the impacted EDC notice to the applicable LSE. The EDC's procedures for calculating a LSE's wholesale area's network service peak load and obligation peak load shall ensure that the total operating Non-Retail BtMGBTMG that is allowed to net against the LSE's wholesale area's actual load during the relevant hours is reduced by the sum of the total netting reduction amounts of all Non-Retail BtMGBTMG units located in the wholesale area that failed to perform. Any reductions in netting will be applied in the succeeding calendar year with regard to network service peak load transmission service, reactive service, and black start service, and the succeeding Planning Period with regard to obligation peak load, netting related to capacity obligations.

32-67. If there are multiple LSEs that serve the load in a modeled EDC wholesale area or in the Rest of the Zone, the impact of any netting reduction amount to the network service peak load value or obligation peak load value that would be determined for the modeled EDC wholesale area or the Rest of the Zone as a result of Non-Retail BTMG units in the modeled EDC wholesale area or in the Rest of the Zone that fail to perform during performance compliance events shall be allocated to the multiple LSEs that serve load in a modeled EDC wholesale area in the Zone or in the Rest of the Zone in accordance with the EDC's procedures for calculating an LSE's network service peak load or obligation peak

load.

33-68. A generator that moved behind the meter is not eligible to move back in front of the meter until the impact of the reduced netting penalty described in Rule 34-65/63 above has been rolled out.

69. Non-Retail ~~BtM~~**BtMGBTMG** may not schedule a unit outage in the months from June through September.

70. The LSE/~~EDC~~ that reported Non-Retail ~~BtM~~**BtMGBTMG** in a Non-Retail ~~BtM~~**BtMGBTMG** reporting template is responsible for reporting a scheduled outage of a Non-Retail ~~BtM~~**BtMGBTMG** unit that has a netting capability value greater than 0.1 MW to PJM at ~~BtMGBTMG~~**BtMGBTMG**@pjm.com as soon as the LSE/~~EDC~~ becomes aware of the scheduled outage on the unit. The email notification shall identify the unit, outage start date/time, expected outage stop date/time, and the outage MWs. Only those scheduled outages during the period of October through May and reported to PJM in advance of a performance compliance event will excuse the unit from the failure to perform during a performance compliance event.

34-71. PJM shall post aggregate Non-Retail ~~BtM~~**BtMGBTMG** data on the highest netting levels realized, the expected performance levels, and the generation output levels provided during an emergency event consistent with the criteria in Manual 33, Section 3: Market Data Postings.

BtM Adjustment Process

~~34.~~ Parties seeking a ~~BtM~~ adjustment of any type must notify PJM at . The ~~BtM~~ request must contain the following information:

- ~~• Contact name, company, email address and phone number~~
- ~~• Name of generation unit(s) and EIA plant and unit identification numbers~~
- ~~• Summer net dependable rating of the unit(s)~~
- ~~• Name of the applicable Load Serving Entity and Electric Distribution Company~~
- ~~• If applicable, written approval from the owner, lessee or operator of a distribution facility used to deliver energy from the BtM generator to load~~
- ~~• For non-retail BtM generation, the phone number to be added to the PJM all-call list~~

~~34.~~ PJM will respond to the request and coordinate data and information flow between all affected parties (customer, LSE, EDC, etc.) to determine eligibility, peak load adjustments, etc.

Transmission Owner ~~BtM~~BtMGBTMG** Reporting and Communication Process**

35-72. PJM will maintain a list of municipal electric systems, electric cooperatives and electric distribution companies by transmission zone which will be verified by Transmission Owners on an annual basis.

36-73. PJM will provide each Transmission Owner with a list of ~~BtM~~**BtMGBTMG** facilities greater than 1 MW located within the relevant transmission zone, delineated by municipal electric system, electric cooperative and/or electric distribution company as determined by PJM's examination of EIA forms or other available public information. To the extent that the Transmission Owner holds or after reasonable efforts can obtain information, the Transmission Owner will then provide PJM the necessary information, defined below in this section, to determine the impact of ~~BtM~~**BtMGBTMG** during a manual load dump event or other emergency situations on an annual basis. Municipal electric system, electric cooperative and/or electric

distribution company will coordinate with Transmission Owner to provide the necessary information, defined below in this section, for **B:MGBTMG** located in their area upon request by the Transmission Owner.¹⁰ If the Transmission Owner is unable after reasonable diligence to provide the information defined below in this section, the Transmission Owner will inform PJM. PJM will include the Transmission Owner verified **B:MGBTMG** information in the Post Contingency Local Load Relief Warning (“PCLLRW”) tool or other tool as applicable. Transmission Owner will provide the following information¹¹ for each **B:MGBTMG** and as defined in Manual 3A, Appendix D:

- PJM Transmission Substation - Electrically connected Transmission Substation PJM 8 character EMS name.
- Voltage (kV) - Voltage (PJM EMS terminal voltage at high side of load transformer). If connected at distribution system then this should be the high side voltage at PJM interconnection facility.
- PJM equipment name – Official PJM name for equipment (transformer, line, loads) PJM 8 character.

37.74. To the extent that the Transmission Owner holds or after reasonable efforts can obtain information, Transmission Owner may provide additional or updated information for **B:MGBTMG** facilities (i.e., contact information, typical operational mode, start up time, etc.) on the list or add **B:MGBTMG** facilities to the list as appropriate. Transmission Owner may also review and update the **B:MGBTMG** information more frequently than on an annual basis. PJM will maintain confidentiality of all information provided by Transmission Owner and will only release such information under conditions governed by Operating Agreement, section 18.17.

38.75. Transmission Owner may coordinate with **B:MGBTMG** facility interconnected to the transmission system, or through the relevant electric distribution utility, during expected prolonged emergency load dump/shed or as otherwise necessary to help mitigate a grid emergency. As **B:MGBTMG** facilities do not participate in the wholesale energy market, any request to operate for the purpose of helping to mitigate a wholesale market issue is on a voluntary basis at the discretion of the **B:MGBTMG** owner. Any request to operate to mitigate a wholesale market issue will be communicated to the **B:MGBTMG** as a voluntary request at the discretion of the **B:MGBTMG** owner, other than the existing Non-Retail **B:MGBTMG** provisions.

¹⁰ If a Municipal electric system, electric cooperative, electric distribution company or affiliated transmission company is not a PJM member, and such company does not cooperate with the Transmission Owner’s request to provide the information described above, the Transmission Owner will provide such information to the extent it is reasonably available.

¹¹ If **B:MGBTMG** is connected to more than one transmission substation then Transmission Owner will provide up to 3 connected transmission substations as needed.