

Proposed Updates in the “Load Impacts” Area

Theresa Esterly

Sr. Lead Engineer, Markets Automation &
Quality Assurance

MIC Special Session

BTMG Business Rules on Status Changes

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- PJM proposed initial updates to address gaps in the existing business rules in the “Load Impacts” area of Gap Analysis Matrix

#	Component	Existing Language (Status Quo)	Identified Gap
Load Impacts			
11	Impact of operating BTMG to LSE load	Manual 14D, Appendix A #25. Since generation output from operating BTMG 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 BTMG), a net load (gross load minus operating BTMG, 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.	<p>Clarify that operating BTMG is as able to net against the actual gross load; however, any MWs of the unit that are operating and providing energy to PJM in real-time as generation resource is not able to net against the load.</p> <p>Reference the add-back rules in Manual 19 that apply when operate as PJM Load Response.</p>
12	Applicability of load adjustment requests for NSPL & OPL	Manual 14D, Appendix A#13. A Capacity Resource that changes to BTMG, or a new generator that requests BTMG 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.	<p>Address if "Capacity Resource" was intended to apply to both "Generation Capacity Resource" and "Capacity Demand Resource".</p> <p>Address if rule was intended to apply to both retail and Non-Retail BTMG units.</p> <p>Clarify that ability of unit to net its full installed capacity value applies in the determination of LSE's NSPL or OPL value.</p> <p>Clarify the meaning of full installed capacity value. Clarify that full installed capacity value means full summer rated ICAP value for a new unit request.</p> <p>Clarify any unit criteria that needs to be satisfied for a NSPL or OPL adjustment to be warranted.</p>

Entire Gap Analysis Matrix available with posted meeting materials.

23.40. Since generation output from operating BTMG 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 BTMG), a net load (gross load minus operating BTMG, 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. An operating BTMG unit is as able to net against the actual gross load; however, any MWs from the unit that are providing energy to PJM in real-time as generation resource are not permitted to net against the load in the determination of LSE's charges. An operating BTMG unit participating in Pre-Emergency/Emergency Load Response and providing load reductions to PJM may result in an add-back to the LSE's load in the determination of a LSE's peak load contribution (i.e., obligation peak load) in accordance with PJM Manual 19, Load Forecasting and Analysis, Attachment A.

- Update to clarify any MWs of operating BTMG unit providing energy to PJM as generation resource are not permitted to net against load in determination of LSE's charges.
- Update to clarify that add-back to LSE's load may apply in determination of LSE peak load contribution if operating BTMG unit participating in Pre-Emergency/Emergency Load response in accordance with Manual 19, Attachment A.

Units Eligible for NSPL/OPL Adjustment Requests

Eligible

Generation Capacity Resource changing status to Non-Retail BTMG

New in-service Non-Retail BTMG units

Not Eligible

Generation Capacity Resource changing status to Retail BTMG

Demand Resource changing status to "Retail" or Non-Retail BTMG

New in-service "Retail" BTMG units

- When the BTMG business rules were initially developed, "Capacity Resource" would have referred to Generation Capacity Resource as opposed to a Demand Resource. Active Load Management (which reduced load obligation) was in effect at the time of initial business rule development.
- BTMG that is Demand Resource for a Delivery Year has the ability to operate during the coincident peak hours and reduce the NSPL for subsequent calendar year and OPL for subsequent delivery year.
- Retail BTMG are not subject to a PJM operational requirement.

M14D, Appendix A – renumbered #22

12.22. A Generation Capacity Resource that changes status to Non-Retail BTMG, or a new generator that requests reports as Non-Retail BTMG status in the Capacity Exchange system will be able to net its full installed capacity value against the actual gross load for the wholesale area in the determination of an LSE's Network Service Peak Load (NSPL) for the first calendar year the BTMG status is in effect, for transmission and in the determination of an LSE's Obligation Peak Load (OPL) for the first Planning Period for capacity the BTMG status is in effect. In order to net the full installed capacity value, an LSE must request a NSPL or OPL adjustment for the wholesale area in which unit resides. The netting value for all succeeding years will be based on actual generator performance over the 5 CP and 1 CP days coincident peak hour(s) used in the determination of an LSE's network service peak load and obligation peak load.

- Update to clarify Generation Capacity Resource changing status to Non-Retail BTMG or a new Non-Retail BTMG unit is eligible for a Network Service Peak Load (NSPL) or Obligation Peak Load (OPL) adjustment.
- Update to clarify ability to net full installed capacity value against actual gross load for wholesale area for first calendar year (NSPL) or first Planning Period (OPL) that BTMG status is in effect.

Proposed Criteria for NSPL Adjustment Generation Capacity Resource to Non-Retail BTMG Status

- Unit was in Generation Capacity Resource status during Zonal 1CP hour
- Unit's status change is effective prior to or commences with the start of the calendar year for which a NSPL adjustment is sought
- MW Adjustment is based on the installed capacity value of the Generation Capacity Resource in Capacity Exchange system prior to the status change
- Adjustment may be capped to ensure that the LSE's network service peak load for wholesale area will not be negative.

NSPL Adjustment Timeline Generation Capacity Resource to BTMG Status

Generation Capacity
Resource status

BTMG status effective June 1, 2021

JAN. MAR. MAY JUL. SEPT. NOV. | JAN. MAR. MAY JUL. SEPT. NOV.

2021

2022

Nov 1, 2020 – October 31, 2021

- Zonal 1 CP hour determined for 2022 CY

2022 CY

- 1st calendar year operates in BTMG status

October 31, 2021

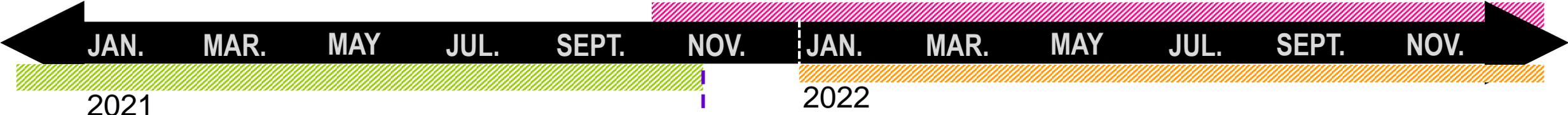
LSE deadline to request NSPL decrease for 2022 CY if unit was in
Generation Capacity Resource status during Zonal 1CP hour

Proposed Criteria for NSPL Adjustment New Non-Retail BTMG

- Unit is a new Non-Retail BTMG unit reported in the Capacity Exchange system
- Unit was not in-service during zonal 1CP hour
- Unit is in-service by October 31 deadline or is scheduled to be in-service in the month of November
- Officer Certification form is submitted to attest to the actual/scheduled in-service date of the unit
- MW adjustment is based on the summer rated ICAP value of Non-Retail BTMG unit as reported in Capacity Exchange System
- Adjustment may be capped to ensure the LSE's NSPL or OPL value for wholesale area does not go negative

NSPL Adjustment Timeline New BTMG Unit

New BTMG unit in-service October 1, 2021



Nov 1, 2020 – October 31, 2021

- Zonal 1 CP hour determined for 2022 CY

2022 CY

- 1st calendar year operates in BTMG status

October 31, 2021

LSE deadline to request NSPL decrease for 2022 CY if unit was not in-service during Zonal 1CP hour

M14D, Appendix A – renumbered #23

23. An LSE's Requests for an adjustment to Network Service Peak Load (NSPL) for the wholesale area in which the Non-Retail BTMG unit resides for the first calendar year the unit is in BTMG status BTMG changes for transmission charges, black start service, and reactive service must be submitted via email to PJM at rpm_hotline@pjm.com received by PJM by October 31 prior to such calendar year. If the request is for a Generation Capacity Resource changing status to Non-Retail BTMG, the following criteria must be satisfied: (1) unit was in Generation Capacity Resource status during the zonal 1 CP hour and (2) the effective date of the status change must be prior to or commence with the start of the calendar year for which a NSPL adjustment is being sought. The amount of NSPL adjustment requested may not exceed the installed capacity value of Generation Capacity Resource in the Capacity Exchange system prior to the status change. If the request is for a new Non-Retail BTMG, the following criteria must be satisfied: (1) the new unit was not in-service during the zonal 1CP hour; (2) the new unit is in-service by the October 31 deadline or has a scheduled in-service date during November 1 to November 30; and (3) an Officer Certification form attesting to the actual or scheduled in-service date of the new unit is submitted with the request. If the request is for a new BTMG with a scheduled in-service date from November 1 to November 30, documentation to support the in-service date must also be received by PJM by October 31. The amount of NSPL adjustment requested may not exceed the summer rated installed capacity value of the new Non-Retail BTMG unit reported in the Capacity Exchange system. The amount of NSPL adjustment requested may be capped if the LSE's resultant NSPL for the wholesale area will become negative as a result of the adjustment request. PJM will coordinate with the relevant EDC to process the LSE's NSPL adjustment request and finalize the approved amount of NSPL adjustment. The related approved Network Service Peak Load adjustment will become effective the following January 1. The change and shall remain in effect for a period no less than one calendar year.

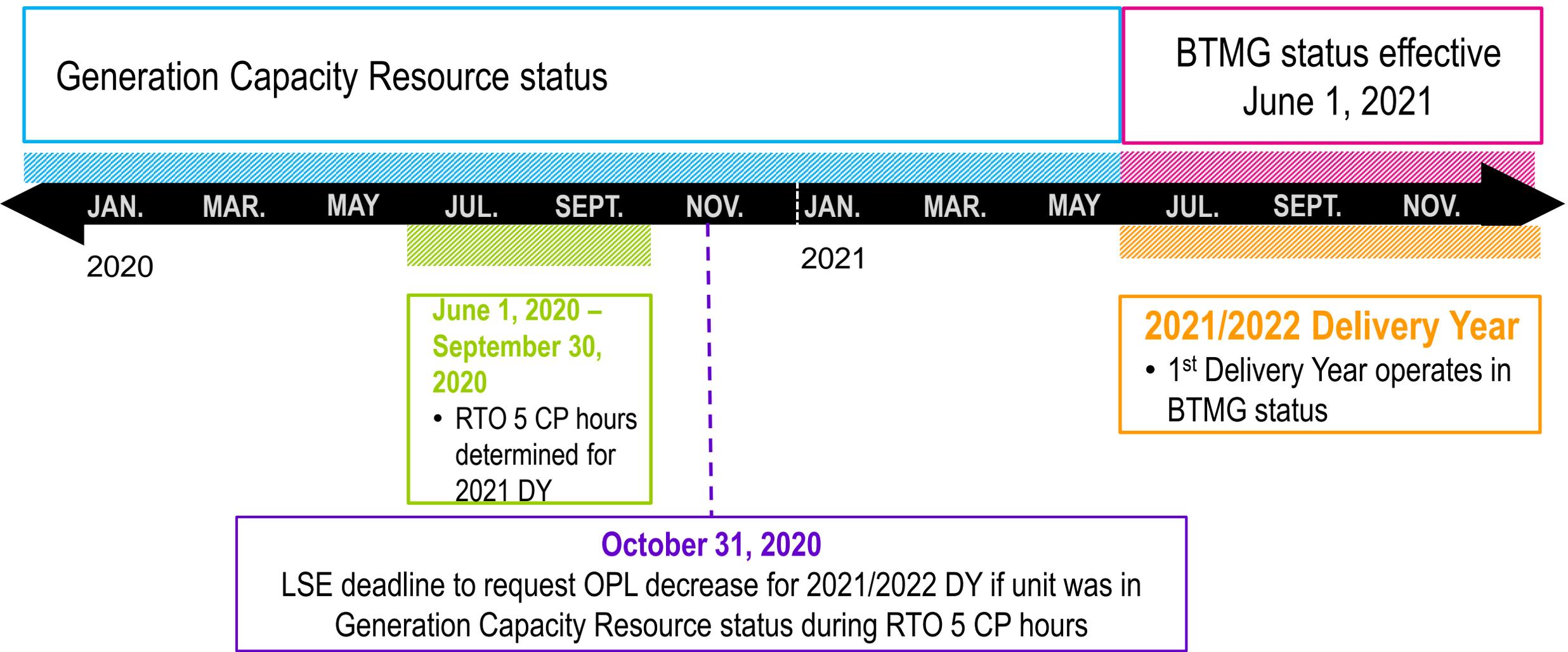
- Updates to clarify:
- NSPL adjustment request process
 - Criteria to be eligible for an adjustment to NSPL
 - Amount of NSPL adjustment that may be requested
 - NSPL adjustment may be capped

Proposed Criteria for OPL Adjustment Generation Capacity Resource to Non-Retail BTMG Status

- Unit was in Generation Capacity Resource status during RTO 5 CP hours
- Unit's status change is effective prior to or commences with the start of the Planning Period for which a OPL adjustment is sought
- MW Adjustment is based on the installed capacity value of the Generation Capacity Resource in Capacity Exchange system prior to the status change
- Adjustment may be capped to ensure that the LSE's obligation peak load for wholesale area will not be negative.

OPL Adjustment Timeline

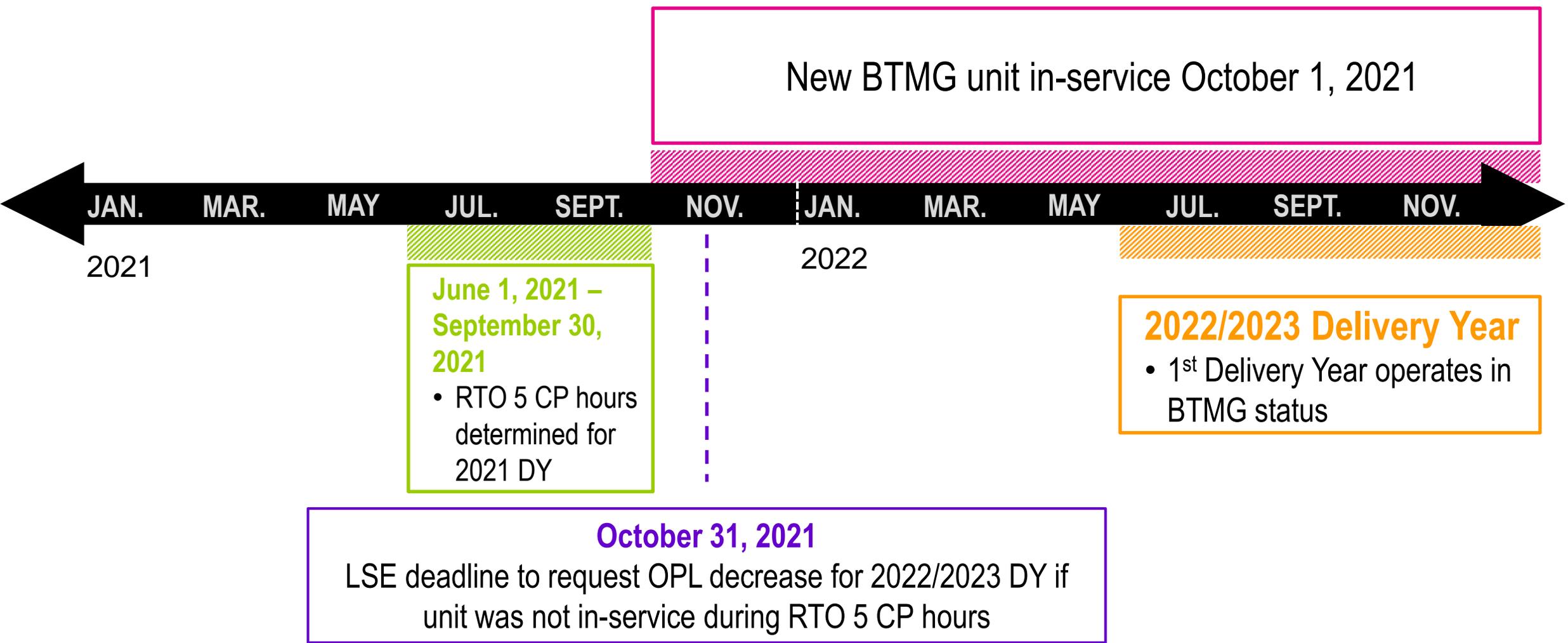
Generation Capacity Resource to BTMG Status



Proposed Criteria for OPL Adjustment New Non-Retail BTMG

- Unit is a new Non-Retail BTMG unit reported in the Capacity Exchange system
- Unit's in-service date is after the RTO 5CP hours
- Unit is in-service by October 31 deadline or is scheduled to be in-service in the month of November
- Officer Certification form is submitted to attest to the actual/scheduled in-service date of the unit
- MW adjustment is based on the summer rated ICAP value of Non-Retail BTMG unit as reported in Capacity Exchange System
- Adjustment may be capped to ensure the LSE's NSPL or OPL value for wholesale area does not go negative

OPL Adjustment Timeline New BTMG Unit



New BTMG unit in-service October 1, 2021

JAN. MAR. MAY JUL. SEPT. NOV. | JAN. MAR. MAY JUL. SEPT. NOV.

2021

2022

June 1, 2021 – September 30, 2021
 • RTO 5 CP hours determined for 2021 DY

2022/2023 Delivery Year
 • 1st Delivery Year operates in BTMG status

October 31, 2021
 LSE deadline to request OPL decrease for 2022/2023 DY if unit was not in-service during RTO 5 CP hours

M14D, Appendix A – renumbered #25

~~25. An LSE's Requests for an adjustment to obligation peak load for the wholesale area in which the Non-Retail BTMG unit resides for the first Planning Period the unit is in BTMG status. BTMG changes for capacity obligations must be submitted by email to PJM at rpm_hotline@pjm.com received by PJM by October 31 prior to such Planning Period. If the request is for a Generation Capacity Resource changing status to Non-Retail BTMG, the following criteria must be satisfied: (1) unit was in Generation Capacity Resource status during the RTO 5CP hours and (2) the effective date of the status change must be prior to or commence with the start of the Planning Period for which a OPL adjustment is being sought. The amount of OPL adjustment requested may not exceed the installed capacity value of Generation Capacity Resource in the Capacity Exchange system prior to the status change. If the request is for a new Non-Retail BTMG, the following criteria must be satisfied; (1) the new unit's in-service date is after the RTO 5 CP hours; (2) the new unit was in-service by the October 31 deadline or has a scheduled in-service date during November 1 to November 30; and (3) an Officer Certification form attesting to the actual or scheduled in-service date of the new unit is submitted with the request. If the request is for a new Non-Retail BTMG with a scheduled in-service date from November 1 to November 30, documentation to support the in-service date must also be received by PJM by October 31. amount of OPL adjustment requested may not exceed the summer rated installed capacity value of the new Non-Retail BTMG unit reported in the Capacity Exchange system. The amount of OPL adjustment requested may be capped if the LSE's resultant OPL will become negative as a result of the adjustment request. PJM will coordinate with the relevant EDC to process the LSE's OPL adjustment request and finalize the approved amount of OPL adjustment. The related approved Obligation Peak Load adjustment will become effective the following June 1. The change and shall remain in effect for a period no less than one Planning Period.~~

Updates to clarify:

- OPL adjustment request process
- Criteria to be eligible for an adjustment to OPL
- Amount of OPL adjustment that may be requested
- OPL adjustment may be capped

27. EDCs that are responsible for determining LSE NSPL or OPL values shall have the ability to view data reported for Non-Retail BTMG units in their relevant zone in the Capacity Exchange system to facilitate the timely processing of NSPL and OPL adjustments for new Non-Retail BTMG units.

- Add new rule to provide EDCs that are responsible for determining LSE NSP or OPL values the ability to view data reported for Non-Retail BTMG units in their relevant zone in the Capacity Exchange system to facilitate timely process of NSPL and OPL requests for new Non-Retail BTMG units.

Approved LSE NSPL Adjustment

- Corresponding decrease to:
 - Zonal NSPL

Approved LSE OPL Adjustment

- Corresponding decrease to:
 - Zonal Weather-Normalized Summer Peak
 - RTO Weather-Normalized Summer Peak
 - Zonal Coincident Summer Peaks at 5 CP Hours
 - RTO Coincident Summer Peaks at 5 CP Hours

Expected Performance Level of Non-Retail BTMG unit

- Expected performance level for the November 1 through October 31 compliance period is applicable once Non-Retail BTMG status is effective
- Expected performance level is the approved NSPL/OPL adjustment

M14D, Appendix A – new rule #24 & 26

13.24. The zonal metered peak for the 1 CP hour (zonal Network Service Peak Load) will be adjusted downward by the total amount of approved NSPL adjustments in the zone.

26. The zonal weather normalized summer peak will be adjusted downward by the total amount of approved OPL adjustments in the zone. The zonal metered peaks for each of the RTO 5 CP hours will be adjusted downward by the total amount of approved OPL adjustments in the zone.

- Add new rule to address the impact of approved NSPL adjustments to zonal Network Service Peak Load.
- Add new rule to address impact of approved OPL adjustments to zonal weather normalized summer peak and the zonal metered peaks for each of the RTO 5 CP hours.

28. An approved adjustment to NSPL or OPL will result in the expected performance level of the Non-Retail BTMG unit for the November 1 through October 31 compliance period to be applicable once the Non-Retail BTMG status is effective. The expected performance level of the Non-Retail BTMG will be set to the approved NSPL/OPL adjustment amount.

- Add new rule to address the impact of an approved adjustment to NSPL or OPL to the expected performance level of the Non-Retail BTMG unit.

M14D, Appendix A – renumbered rule #29

~~16. Requests for BTMG 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.~~

~~14.29. The effective date of a status change from Generation Capacity Resource and/or Energy Resource status to BTMG status or from BTMG status to Generation Capacity Resource and/or Energy Resource status shall only occur on the first of a month. All resource modeling changes in PJM tools must be completed to effectuate such a status change. The real-time load reported in Inschedule and real-time generation output reported in PowerMeter shall be reported by EDC, LSE, or generation owner such that it accurately reflects the change in status to BTMG status or from BTMG status for relevant MWs of capability as of the effective date of the status change. The change to BTMG status or from BTMG status shall remain in effect for a period no less than 12 months from the month the change becomes effective.~~

- Update rule to clarify:
 - Effective date of status change shall only occur on the first of a month.
 - Resource modeling changes in PJM tools must be completed to effectuate a status change.
 - Real-time load in Inschedule and real-time generation output provided in PowerMeter shall be reported such that it accurately reflects the change to/from BTMG status for relevant MWs of capability as of the effective date of status change.

M14D, Appendix A – renumbered rule #30

~~15.30. Once the status change from Generation Capacity Resource and/or Energy Resource to BTMG status is effective, the generation output from the operating BTMG unit 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 BTMG) and a net load (gross load minus operating BTMG, 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 in accordance with business rule #40. If a generator is granted BTMG status for one purpose (such as capacity), it must become BTMG 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 BTMG pursuant to Rules 14 and 16 will be deemed to have given notice pursuant to Rule 15 to request BTMG status for capacity obligations for the Planning Period immediately following the Planning Period in which the Rule 14 and/or 15 BTMG request was made/effective, so as to comply with the notice requirements provided in Section 2.5.2 of the PJM Tariff.~~

- Update rule to clarify that once the change to BTMG status is effective, the generation output from the operating BTMG unit is allowed to net against load in accordance with business rule #40.

M14D, Appendix A – renumbered rule #31

~~16-31~~. The timing requirements established in Rules [1423](#), [1525](#) and [16-29](#) are not affected by a transfer of ownership; BTMG status changes [and adjustments to NSPL or OPL](#) are only permitted [in accordance with](#) the timetable described in Rules [1423](#), [1525](#) and [1629](#) above.

- Update rule to reference the correct business rule numbers related to timing requirements.

Facilitator:

Nicholas Disciullo, Nicholas.Disciullo@pjm.com

Secretary:

Andrea Yeaton, andrea.Yeaton@pjm.com

SME:

Terri Esterly, Theresa.Esterly@pjm.com

MIC Special Session - Behind the Meter Generation Business Rules on Status Changes



Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com