Special MRC – Balancing Operating Reserve (BOR) Credit Reform Proposal

Package Proposal MRC 1st Read: https://www.pjm.com/-/media/DotCom/committees-groups/committees/mrc/2025/20250521/20250521-item-05---bor-credit-reform-solution-proposal---presentation.pdf

Proposal Summary:

Main Elements of the Proposal:

1. Use of a new Tracking Ramp Limited Desired MW metric to measure how well a unit follows dispatch across consecutive intervals.
    - This new metric replaces the use of the existing Desired MW metrics (dispatch signal, ramp-limited desired MW and LMP Desired MW) in the calculation of Balancing Operating Reserve Credits and deviation charges
2. Structural changes to the Balancing Operating Reserve Credit calculation
    - Simplifies the calculation and increases transparency
3. Adjustments to the periods for which resources will be eligible to receive Balancing Operating Reserve Credits
4. Conforming changes to the calculation of generator deviations
    - Replace existing desired MW metrics with Tracking Ramp Limited Desired MW metric
    - Eliminate some automatic exemptions since Tracking Ramp Limited Desired MW will account for any deviation needed to provide another service, unlike the existing desired metrics
    - MW and percentage-based exemption thresholds remain unchanged

Other Elements of the Proposal:

- Conforming updates to Reactive Services Make Whole Credits
- Clarify how the following actions impact the determination of following dispatch and BOR credits
    - Offering limited flexibility (using the Fixed Gen Flag or clamping min/max limits)
    - Violating parameter limits
- Address the determination of following dispatch during a Market Suspension

Other Materials Explaining the Proposal:

- MIC Special Session Detailed Proposal Overview
- Consolidated BOR Credit Proposal Examples
- CBIR Matrix

Summary Table: Terminology Changes

Terminology Changes	Governing Document Sections	Description
Replace Operating Reserve terminology in settlement sections with Energy Make Whole or energy uplift.	• OA Section 18.17 • OATT Attachment K-Appendix, Section 3.2.3 • OA Schedule 1 Section 3.3A • OATT Attachment K-Appendix, Section 1.12 • OATT Attachment K-Appendix, Section 1.10(d) • OATT Attachment K-Appendix, section 1.10.1A(f) • OATT Attachment K-Appendix, section 8.8	Energy Make Whole is the terminology used for settlement calculations that compensate resources for additional costs incurred in excess of market revenues. Energy uplift is the terminology used to categorize both Energy Make Whole and lost opportunity cost credits. In general, lost opportunity cost credits compensate resources for foregone profits, Energy Make Whole credits compensate resource for costs incurred in excess of revenues.

Summary Table for Package Redlines:

	Design Component	Design Component #	Governing Document Sections	Description
Tracking Ramp Limited Desired	New Tracking Ramp Limited Desired MW (power) and MWh (energy) metrics	6	3.2.3(e-1)	New subsection describing the Tracking Ramp Limited Desired calculation and business rules.

	Design Component	Design Component #	Governing Document Sections	Description
Balancing Operating Reserve credit calculation	Impact of deviating from dispatch on the Energy Make Whole Credit calculation Use of Tracking Ramp Limited Desired MW to determine Energy Make Whole credits	2, 2a – 2g 6	3.2.3(e-2)	New subsection describing the balancing Energy Make Whole credit calculation methodology (shift to the 3 step calculation methodology) Use of Tracking Ramp Limited Desired in the Step 2 calculation is described in 3.2.3(e-2)(i).
	Use of Fixed Gen Flag: impact of its use on Energy Make Whole credits	3a	3.2.3(e-1)	The Tracking Ramp Limited Desired MWh metric, used in the balancing Energy Make Whole credit calculation, is described in 3.2.3(e-1). The rules for the minimum and maximum parameters used in the calculation are included in 3.2.3(e-1).
	Offering Limited Dispatchable Range: impact on Energy Make Whole credits	4a	3.2.3(e-1) 3.2.3(e-2)	See item 3a above The balancing Energy Make Whole credit calculation offsets, referred to as Company Responsible Negative Revenues, are described in 3.2.3(e-2).
	Violating Parameter Limits	5	3.2.3 (e)(iii)	Specifies impact on balancing uplift credit calculation or eligibility based on type of parameter violation.
Eligibility	Eligibility for Energy Make Whole credits	1a, 1b, and 1c	3.2.3 (e)(i)	New language for eligibility rules during pool-scheduled commitment period, ramp up period (referred to as pre-commitment period), and during ramp-down (referred to as post-commitment period)
	Eligibility during extensions	1d	3.2.3 (e)(ii)	Rule added to Segment language in 3.2.3(e)(ii)

Design Component		Design Component #	Governing Document Sections	Description
Generator Deviations	Use of Tracking Ramp Limited Desired MW to determine generator deviations (uplift charges)	6a – 6c	3.2.3(o)	Tracking Ramp Limited Desired MWh used for the calculation of generator deviations except for scenarios listed as requiring the use of day-ahead MWh
	Use of DA MW to determine generator deviations (uplift charges)	6e	3.2.3(o)	Rules for the use of Day-ahead MWh in the generator deviation calculations
	Use of Fixed Gen Flag: impact on generator deviations (uplift charges)	3b	3.2.3(o)	Included as a non-dispatchable qualification resulting in the use of day-ahead MWh in the generator deviation calculation.
	Offering Limited Dispatchable Range: impact on generator deviations (uplift charges)	4b	3.2.3(e-1) 3.2.3(o)	The new Tracking Ramp Limited Desired MWh metric, used for calculating generator deviations, is described in 3.2.3(e-1). The rules for the minimum and maximum parameters used in the calculation, including restricting the limits, are included 3.2.3(e-1).
	MW reference point for determining deviations from dispatch and % off dispatch	7 and 8	3.2.3(o)	Language specifies TRLD MWh is used except for scenarios requiring the use of DA MWh
	Threshold for excusing deviations from uplift charges	9	3.2.3(o)	Retains status quo % off deviation excusals and hourly MW tolerance
	Scenarios when generators are automatically exempt from deviations	9a	3.2.3(o)	Language specifies business rules for exemptions
Other	Real-time visibility into deviations and unit performance	10	N/A	No Tariff changes required.
	Conforming updates to Reactive Service make-whole credit	11	3.2.3B(f)	Conforming changes to the Reactive Service make whole provisions to use Tracking Ramp Limited Desired
	Market Suspension	12	3.2.3(e-2)(iii) 3.2.3(g) 3.2.3(q)(iii)	Energy Make Whole provisions in 3.2.3(e-2)(iii) BOR charges status quo in 3.2.3(g) and new 3.2.3 (q)(iii)

Other Changes:

Status Quo Rules	Governing Document Sections	Description
Load Response excluding shut down costs from the second segment	3.2.3 (e)	Sentence moved from 3.2.3(e) to 3.3A.5(b). Section 3.3A.5(b) describes the calculation of balancing Energy Make Whole credits for Economic Load Response Participants.
Balancing Energy Make Whole Segment rules	3.2.3(e)	Segment language restructured for readability
Scheduling of Operating Reserves where "Operating Reserves" is the operational use of the term	3.2.3(a)	Language referring to the scheduling of Operating Reserve, using the operational definition of the term, moved to OATT Attachment K-Appendix, section 1.10.1(e).
Balancing Operating Reserve Cost Allocation	3.2.3(b) and 3.2.3(p)	Consolidated redundant language describing the Balancing Operating Reserve Cost Allocation methodology, which is the status quo process to categorize balancing Energy Make Whole credits as either deviations or reliability for charge allocations. The language previously in section 3.2.3(b) was retained and moved to section 3.2.3(p). The language previously in section 3.2.3(p) was removed.
Total Credits allocated to RTO deviations	3.2.3(g)	Clarified the following: • Credits listed in (g) include any balancing Energy Make Whole credits paid to import transactions • Credits listed in (g) are allocated as charges to total RTO deviations Included Market Suspension rule

Status Quo Rules	Governing Document Sections	Description
Calculation of deviation quantities used in assessing BOR charges	3.2.3(h)	• Restructured language for readability • This section now solely describes the following: 1.) calculation of total daily deviations 2.) deviation netting rules 3.) rules for assigning deviations to the Eastern or Western regions • Moved rule for Black Start Service cost allocation to 3.2.3(p) • Added references to restructured 3.2.3(q) describing the status quo settlements charge calculation ○ Current Tariff language: Market Participant Deviation * Rate, where rate = Total Credits/Total Deviations ○ Revised Tariff language (mathematically equivalent): Total Credits * (Market Participant Deviations / Total Deviations)
Balancing Operating Reserve charges and rates	3.2.3(q)	• Restructured language for readability and to clarify how charges are determined for each Market Participant • (q)(i) describes status quo categorization of reliability and deviations cost allocation buckets into the Eastern or Western region • NEW: (q)(ii) describes the calculation of Eastern, Western, and RTO region balancing uplift reliability charges • NEW: (q)(iii) describes the calculation of Eastern, Western, and RTO region balancing uplift deviation charges • (q-1)(i) describes the calculation of 1.) Eastern and Western regional adder rates for reliability and 2.) Eastern and Western regional adder rates for deviations • (q-1)(ii) describes the calculation of the RTO rate for reliability and the RTO rate for deviations