



# Manual 28 Biennial Review

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	<b>MIC</b>	<b>MRC</b>
First Read	6/12/2019	6/27/2019
Endorsement	7/10/2019	7/25/2019

- Section 3.4 – Transmission Loss De-rating Factors
  - EDC Total state-estimated Loss MWh and EDC Total state-estimated non-500 kV Loss MWh are bridged to settlements
  - Although very infrequent, conditions can occur when this data is unavailable
  - Document process to handle this condition

**In the event that the EDC total state-estimator Loss MWh or the EDC total state-estimator non-500 kV Loss MWh is unavailable for an hour, PJM calculates the hourly value as the average of the value of the last available hour immediately before and after the impacted hour.**

- Section 5.2.5 – Credits for Resources providing Quick Start Reserve
  - This calculation is obsolete and the section will be deleted and market as “Reserved for Future Use”

- Section 5.2.8 – Credits for Resources Providing Reactive Services
  - Inconsistency with tariff with regards to the 5 minute settlement implementation
  - Operating Reserve for Reactive Services are not credited within balancing operating reserve segments, but credited on an hourly basis

- Section 19.3 – Charges for Day-Ahead Scheduling Reserve
  - Update formula terms for consistency in naming convention

| *Base Day-ahead Scheduling Reserve Requirement MW = the requirement defined in PJM Manual M-13, Section 2, plus any additional reserves scheduled to account for operational uncertainty*

| *Additional Day-ahead Scheduling Reserve Requirement MW = Max(Forecast RT load (MWh) – Adjusted Fixed Demand (MWh), 0) as defined in Manual 11, Section 11*

*Base Requirement Share = Base Day-ahead Scheduling Reserve Requirement MW /*

*(Base Day-ahead Scheduling Reserve Requirement MW + Additional Day-ahead Scheduling Reserve Requirement MW)*

- Various typos corrected throughout the manual