

Stability Limits in Markets and Operations

Joe Ciabattoni, Manager Interregional Market Operations Operations Committee December 3, 2020

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- August 7, 2019
 - Problem Statement
 Approved by MIC

- September 2, 2020
 - Capacity Constraint
 Package aka Unit
 Output Constraint
 Approved by MIC



- Clarifies the type of stability limit that will be controlled
 - Real power MW
- Changes the method of control to unit output constraint
 - Currently: Economic limit reduction or thermal surrogate are used
 - Future: Real Time SCED & Day-ahead will control unit output plus reserves to remain within stability limit
- Clarifies that LOC will not be paid to the generator owners for reductions related to stability
- Manual language to be effective with software implementation

Manual 03: Transmission Operations



First Read Summary M28

- Added language to clarify that generators would not be eligible for lost opportunity cost (LOC) credits for reductions associated with honoring stability limits
- Manual language to be effective after software implementation

Manual 28: Operating Agreement Accounting



- The changes to M03 and M28 are conforming changes necessary to support to packages that were approved at the Markets Implementation Committee
- The alternate package is the same as the primary package with the exception that Lost Opportunity Credits (LOC) will be paid to the PJM Member
 - Alternate M03 deletes the LOC wording
 - Alternate M28 no changes are necessary



- Security Constrained Economic Dispatch (SCED) and Dayahead engines control stability limit (MW)
- Sum of generators output (plus reserves) are economically dispatched within the stability limit
 - Limit ≥ Generator 1 + Generator 2 + Generator 3...
- Shadow price of unit output constraint is not reflected in LMP
- Generators will not be eligible to receive Lost Opportunity Cost credits related to unit output constraints

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