

Manual 03:

3.9.1 Process for Handling Generator Stability Limitations

The Reliability Limited Generation Compensation Task Force established the following procedure on how PJM currently handles stability issues on the transmission system. When a stability issue(s) are identified and advanced coordination is not possible, PJM will:

- Confirm/calculate the stability limit(s) and communicate the limit, including any changes to the limit(s), to the impacted generator owner(s) as quickly as possible and prior to DA market submission when practical.

Limit may be established as:

- Real power (MW) limitation;
- Reactive power (MVAR) limitation;
- Station (Maximum units online in a generating or pumping mode) limitation.

- For real power (MW) stability limits only, create a corresponding generator output constraint (in MW) for a single generator or a group of generators whereby these generator output constraints shall be respected within the:

- Day Ahead Market reserve assignments and economic dispatch.
- Real Time Market regulation/reserve assignments and economic dispatch.

- The stability limit and the corresponding generator output constraint will be updated periodically based upon ongoing topology changes, interface that would be used in the Day Ahead and Real

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Lost Opportunity Credits (LOC) credits are not paid for any reductions associated with honoring the stability limit when a generator output constraint is used in the Day Ahead or Real Time Market.

For previously identified stability constraints already documented in an ISA, the generation owner may have already agreed to limit its output to ensure stability constraints are mitigated. In such cases, a generator output constraint will be configured such that the economic dispatch will limit the output of such resource (inclusive of regulation and reserve assignments) to the agreed upon limit before the output of any other impacted generators are limited.

- Such ISA notations must be reflected within the associated PJM Transmission Operating Procedures (M-03B) in order for PJM Operations staff to manage them per the arrangement.

Time Market so that LMP will be utilized to reflect the stability constraints.

- If the generator chooses to reduce their Economic Maximum bid below the stability limit, the constraint would not bind.
- If the constraint does bind, it would be handled consistent with how PJM handles other transmission constraints on the system. All current market rules regarding Lost Opportunity Cost

(LOC) would apply and LOC would be paid as currently defined in the Tariff when a transmission constraint is in effect.

For previously identified stability constraints already documented in an operational procedure, the generation owner may have already agreed to limit its output to ensure the stability constraint is mitigated. In such cases, an interface constraint in the Day Ahead and Real Time markets is not necessary.

Manual 28:**5.2.6 Credits for Resources Reduced or Suspended due to a Transmission Constraint or for Other Reliability Reasons**

At the end of each Operating Day, PJM calculates the credits due to each PJM Member for resources incurring lost opportunity costs associated with following PJM's request to reduce or suspend the output of a generating resource due to a transmission constraint or for other reliability reasons. A generation resource that is reduced using a generator output constraint to honor a stability limitation is not eligible for lost opportunity cost credits for the MWh reduction associated with honoring the stability limit.