



California ISO

WESTERN EIM

Decision on western EIM resource sufficiency evaluation enhancements – phase 1

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Management proposes several enhancements to improve the accuracy of the EIM resource sufficiency evaluation (RSE)

- RSE tests if a balancing authority area has scheduled or bid sufficient supply to prevent leaning
 - Capacity test assesses whether scheduled and bid-in supply capacity can meet its forecast demand
 - Flexible ramping sufficiency test assesses whether there is sufficient energy ramping capability to meet 15-minute load variations
- Failure of either test results in limiting additional EIM transfers into or out of the balancing authority area
- Balancing test assesses whether base schedules are submitted that under- or over-schedule supply relative to demand
 - financial penalties are applied to EIM entities that fail the test

Management proposes enhancements to the capacity test to more accurately account for available supply

- Only count capacity that is online or that the real-time market could start for the upcoming hour
 - Avoids including capacity that is unavailable from resources returning from outage
- Remove net load uncertainty from the capacity test requirement
 - Net load uncertainty calculation has proven to be inaccurate and can produce spurious capacity test failures
 - Revisit in subsequent initiative phase
- Remove inertia uncertainty from the capacity test requirement
 - Allow time to address accuracy of the calculation

Management proposes three enhancements to the flexible ramping test to more accurately count ramping capability

- If supply shortfall occurs, adjust load forecast to account for the shortfall in the preceding hour to determine ramping capability requirement
 - The starting point for calculating ramping needs would be inaccurate without accounting for the shortfall
- Account for multi-stage generators' ramping capability when transitioning between configurations
- Consider storage resources' state of charge in calculating their ramping capability

Management also proposes enhancements to more accurately account for imports and exports in the RSE

- Exclude ISO hour-ahead scheduling process schedules if e-tag not submitted by the final hourly RSE run (40 minutes prior to the hour)
 - These imports/exports are not assured of being delivered and are dispatched to zero in the fifteen-minute market
- Remove RSE component that accounts for potential undelivered imports/exports based on past amounts
 - Analyses have shown the current methodology does not accurately predict undelivered amounts
 - Revise methodology in subsequent initiative phase

Management proposes to exclude the ISO balancing authority area from the allocation of balancing test penalty revenues

- ISO balancing authority area is not subject to the balancing test because it uses its day-ahead market instead of submitting base schedules to the real-time market
- However, ISO balancing authority area is currently eligible for allocation of balancing test penalty proceeds
- Propose to exclude ISO from allocation of penalty revenue
 - Allocating balancing test penalty proceeds to ISO market participants does not provide incentives for scheduling behavior

Proposal also includes enhancements to consider certain actions EIM balancing authority areas take outside of the ISO market

- Allow EIM balancing authority areas to reduce RSE load forecast to represent dispatch of smaller demand response programs
 - Demand response load forecast reductions are currently limited to programs that are at least 4 percent of the load forecast
- Considered measures to deem a balancing authority area as failing the RSE under certain emergency conditions
 - Continue to develop clear criteria for emergency conditions that would result in RSE failure

Management is planning system enhancements to increase the RSE related data available to market participants and has worked with the ISO Department of Market Monitoring to improve reporting

- System enhancements will provide additional data so EIM balancing authority areas can better understand their RSE requirements
- Department of Market Monitoring has assumed primary role in RSE reporting and analysis to ensure objectivity and increase the information available

Stakeholders support the proposal as providing incremental improvements to the RSE

- Stakeholders support further consideration of additional topics in subsequent phase of the initiative
 - recognize the complexity of accounting for load conformance and how export transfers are cleared in HASP
 - Management has committed to resolving these issues as soon as feasible
- Some stakeholders concerned that enhancements for counting capacity for the RSE does not go far enough and may continue over count available supply
- Some stakeholders believe that hourly EIM participation should be limited following the declaration of a NERC EEA 2
 - Management believes this proposal needs further consideration to determine appropriate criteria
 - Bring proposal to subsequent EIM Governing Body/ISO Board meeting

Management requests the ISO Board and the EIM Governing Body approve this set of enhancements to the resource sufficiency evaluation

- Enhancements provide more accurate assessment of whether a balancing authority areas supply is sufficient to meet its demand
- Enhancements more appropriately allocate RSE penalty revenues
- Management is continuing to work with stakeholders to further enhance the accuracy of the resource sufficiency evaluation