

Analysis Track Testing of CAISO MRTU Pricing and Dispatch Interim Results

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LECG

OVERVIEW

Analysis track testing and validation of the CAISO day-ahead market, real-time predispach, and real-time dispatch software has been largely completed.

Except as identified below, the software is generally working as designed and intended, and the issues that have been identified but not yet completely resolved do not appear to involve any fundamental problems with the price calculations, unit commitment or dispatch.

ISSUE RESOLUTION

Since May the CAISO, Siemens and LECG have:

- Resolved issues with the recalculation of LAP and other aggregate prices in the IFM and RTUC software.
- Resolved issues with the definition of the objective function, avoiding premature termination of market runs, materially improving solution quality in some instances.
- Resolved inconsistencies in shift factor and loss factor rounding in the calculation of prices.
- Resolved modeling and pricing issues relating to disconnected units.

ISSUE RESOLUTION

- Resolved handling of transmission constraint violation penalties in the pricing pass.
- Completed analysis track testing of IFM, RTUC and RTD cases.
- Completed reruns of selected IFM and RTUC cases to verify resolution of previously identified issues.
- Completed testing and evaluation of Class B cases.

REMAINING ISSUES

- Resolve issues with the recalculation of LAP and other aggregate prices in the RTD software.
- Complete verification of LAP prices in Class B cases 4004 (DLS), 4004 (DGS) and 2006.
- Verify that changes in the treatment of ancillary service shortages operate as intended in IFM and RTUC.
- Resolve apparent issues with proration logic on interties.
- Run and evaluate test cases that include wheeling transactions and forbidden regions and nomograms.
- Continue evaluation of marginal resources in original IFM case 7a and RTD case 301.