

Day Ahead Market Parameter Settings: Further Analytic Results for ETC/TOR



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MRTU Tariff establishes priority order for ETCs and TORs

- Recommended parameter values for IFM reflect priority order in MRTU tariff, particularly sections 31.3.1.3 (Reduction of Load Aggregation Point (LAP) Demand) and 31.4 (Uneconomic Adjustments in the IFM). Priority order in Section 31.4:
 - 1. Reliability Must Run (RMR) Generation pre-dispatch reduction
 - 2. Day-Ahead Transmission Ownership Right (TOR) Self-Schedules
 - 3. Day-Ahead Existing Transmission Contract (ETC) Self-Schedules
 - Different ETC priority levels will be observed based upon global ETC priorities provided to the CAISO by the Responsible Participating Transmission Owners (PTOs).
- Followed by other schedule types: other self-schedules, must-run and must-take resources, economic bids



Tariff priority is maintained in market optimization using penalty prices on self-schedule adjustments

Penalty Price Description	Scheduling Run Value	Pricing Run Value
Transmission constraints (branch, corridor, nomogram, contingency)	\$5000	\$1500, 5000
Transmission ownership rights and highest ETCs	4500	500, -30
ETC self-schedules	3200 to 4500	500, -30
Self-scheduled CAISO Demand and exports using Non-RA Supply	\$1600	\$500
Generic self-scheduled supply = 10% above cap	550	500



Test Case for ETC/TOR Scheduling Run examines how priorities are honored

- To test impact on representative ETCs, CAISO constrained key lines to CDWR pumps and Hyatt-Thermalito generator.
 - Each site has multiple lines as feeders from CAISO 230 kV grid.
 - In event of outage, transmission capacity is determined by capacity of remaining feeder lines.
 - More severe constraint is derate of one in-service line's capacity.
 Parallel lines are then constrained to flows similar to the derate.
- 230 kV lines, derated to 10 MW each:
 - 30580_ALTM MDW to 38610_DELTAPMP
 - 30765 LOSBANOS to 38615 DS AMIGO
 - 30970_MIDWAY to 38600_BUENAVJ1
 - 38620_HYATT to 30300_TABLMTN
- Test case builds upon development of other parameter values. ETC priority is applied to individual resources, not balanced adjustment.



Analytical Results on ETC/TOR Scheduling Run Confirm that Priorities are Honored

- For ETC priority level = \$3200, only Banks pumps have self-schedule adjustments in test case.
- The following were not adjusted:
 - Dos Amigos: Highest LMP in scheduling run = \$3185
 - CDWR07 aggregation: Highest LMP in scheduling run = \$2537
 - Hyatt-Thermalito: Lowest LMP in scheduling run = \$-1509
- At Banks pumps, ETC priority level = \$3600 avoids selfschedule adjustments
 - Banks: Highest LMP in scheduling run = \$3531
- Conclusion: CAISO-recommended penalty prices on self-schedule adjustments honor the TOR and ETC priorities established by MRTU tariff.

