

Stakeholder Comments

Issue Paper & Straw Proposal – Mitigation for Exceptional Dispatch in LMPM Enhancements Phase 2

Submitted by	Company	Date Submitted
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Southern California Edison (SCE) appreciates the opportunity to comment on the California Independent System Operator (CAISO) and Department of Market Monitoring (DMM) July 20 Straw Proposal on - Mitigation for Exceptional Dispatch (ED) in LMPM Phase 2. SCE thanks the CAISO for hosting the July 27 web conference to educate stakeholders on its proposal.

SCE is encouraged by the CAISO's and DMM's effort to identify and address issues related to the new LMPM, in particular issues related to EDs under LMPM Phase 2. SCE believes the principle and methodology proposed by the CAISO and DMM to mitigate ED resources are reasonable. However, the current proposal is not complete in the sense that it does not address negative impacts of ED on the overall mitigation process due to a loophole in the current Dynamic Competitive Path Analysis (DCPA) design. The loophole, which is explained in detail in the comments below, will result in unmitigated bids setting the LMP and lead to false real-time price spikes. As the purpose of this stakeholder process is to address issues related to EDs under the LMPM Phase 2, SCE urges the CAISO and DMM to address the loophole in this stakeholder process. Further, SCE proposes a simple solution to address this loophole.

SCE supports the principle of mitigation for Exceptional Dispatch (ED).

As recognized by the Issue Paper, there is a gap in applying local market power mitigation (LMPM) under circumstances where EDs are issued to manage non-competitive constraints. Because most EDs are preemptive, without proper measures this will introduce a potentially material under-identification of local market power. SCE is encouraged by CAISO and DMM work towards avoiding under-mitigation and developing mitigation measures for EDs.

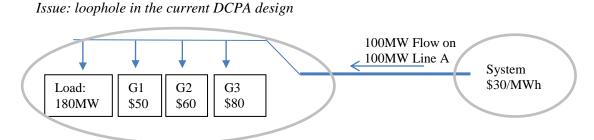
SCE supports the CAISO and DMM's proposal to develop a list of non-competitive constraints beforehand for preemptive EDs. SCE recommends that the CAISO fine tune the list criteria, monitor the effectiveness of the criteria, and revise it as required.

For example, the current proposal suggests the competitiveness of a constraint for ED mitigation purposes should be based on the most recent 60 historical trading days. Information developed through such a historical dataset may not accurately reflect contemporary system conditions in the 15-minute real-time intervals. As such, to avoid under-mitigation and potential real-time price spikes associated with unmitigated bids, any given constraint that would be deemed non-competitive based on more recent data (*e.g.*, a constraint is non-competitive most of the time over the past week) should be deemed non-competitive even when longer-term historical data suggests otherwise. In addition, to ensure consistency with the new, dynamic LMPM process, an ED should be mitigated within the market run in which it has a positive non-competitive LMP congestion component, as with any other resource.

SCE opposes the proposed exemption for Path 15 and Path 26 from the mitigation rule that a constraint will be deemed non-competitive if congested for less than 10 hours in the 60 day test period. Path 15 and Path 26 should be subject to the same mitigation rules, as with many other major CAISO transmission paths, to ensure consistency. SCE requests that CAISO and DMM provide detailed justification for the need of this exemption

SCE proposes excluding ED supply from Dynamic Competitive Path Assessment (DCPA) calculations as a solution to a loophole in the current DCPA design.

SCE reiterates that the CAISO and DMM should address a potential mitigation loophole. The DCPA and LMPM, as currently designed, is likely to make both non-ED and ED resources skip mitigation under certain circumstances when EDs are dispatched. This is because, per the current design, ED-committed resources may provide counterflows to congested constraints, making all resources in the congested areas skip mitigation. This is illustrated in a simple example below.



Illustrative Example: An ED of G3 results in skipped mitigation for all units, G1-G3, in a congested area

	Bid Price	Belong to Top 3 Net	Max Available	Dispatch	Subject to Bid
		Suppliers?	Capacity	without ED	Mitigation?
G1	\$50	Yes	40 MW	40 MW	Yes
G2	\$60	No	60 MW	40 MW	Yes
G3	\$80	No	130 MW	0	

Scenario #2: Under ED

	Bid Price	Belong to Top 3	Max Available	ED Amount	Dispatch	Subject to Bid
		Net Suppliers?	Capacity		_	Mitigation?
G1	\$50	Yes	40 MW	0	40MW	No
G2	\$60	No	60 MW	0	0	No
G3	\$80	No	130 MW	40 MW	40MW	

Under Scenario #1 in which no EDs are issued, G1 and G2 are mitigated, because the remaining capacity is less than the counterflow and Line A is non-competitive. The remaining capacity after the removal of the top three suppliers is 60 MW from G2; G3 remains offline and cannot provide any counterflow due to ramping limitation. The 60 MW of available capacity is less than the required 80 MW of counterflow. If the Default Energy Bids for G1 and G2 are \$35/MWh and no other system constraints are binding, the final LMP for the congested area is \$35/MWh.

Under Scenario #2 in which an ED is issued, all units in the congested area will skip mitigation, resulting in a non-competitive LMP if the current DCPA calculations are not revised. Assume a 40 MW ED for G3, 40 MW of economic dispatch for G1, and G2 not dispatched. The remaining capacity after the removal of the top three suppliers is 130 MW from G3, which is greater than the required 80 MW of counterflow. Line A is deemed competitive after G3 is EDed. In this case, no mitigation would be applied to any of the three units in the market run. The final LMP will be (1) the G1 bid price of \$50/MWh (assuming G3 is not eligible to set the LMP); or (2) the G3 bid price of \$80/MWh (assuming G3 is eligible to set the LMP).

Further, for any counterflow requirement that falls in between 60 MW and 130 MW, the ED of G3 will make units G1-G3 skip the mitigation, resulting in the unmitigated bids setting the LMP. Mitigation for G1, G2 and G3 is skipped in Scenario #2 since the DCPA, as currently designed, does not exclude ED resources when calculating the counterflows. The 40 MW out-of-market dispatch (ED for G3) effectively lowered the counterflow requirement from 80 MW to 0 MW, because G3 alone could provide the required counterflow. This changes the constraint from non-competitive to competitive; as a result, no mitigation is applied and the unmitigated bids set the price.

SCE's proposed solution to the loophole

To address this loophole, ED resources should be excluded from the DCPA calculation. Accordingly, for Scenario #2, the 130 MW ED capacity from resource G3 would be excluded from the remaining capacity. This would ensure that the bids for units G1, G2 and G3 will be subject to the LMPM process when appropriate.

The fact that EDs are out-of-market dispatches, and thus likely not competitive supply, indicates that it is inappropriate to treat them as other on-line resources dispatched by the market optimization software when performing the DCPA process. Excluding ED resources from the counterflow calculation is a simple and effective remedy, and does not require any market re-runs.