California ISO

Attachment A

Stakeholder Process: Generator Contingency and Remedial Action Scheme Modeling

Summary of Submitted Comments

Stakeholders submitted four rounds of written comments to the ISO under the generator contingency and remedial action scheme modeling stakeholder initiative on the following dates:

- Round One (comments following Issue Paper), 05/13/16
- Round Two (comments Revised Issue Paper & Straw Proposal), 12/02/16
- Round Three (comments on Revised Straw Proposal), 04/05/17
- Round Four (comments Draft Final Proposal), 07/14/17

Stakeholder comments were received from:
Boston Energy Trading and Marketing (Boston Energy), California Department of Water Resources (CDWR), DC Energy, Pacific Gas & Electric (PG&E), PacifiCorp, Powerex, Six Cities, Southern California Edison (SCE), Silicon Valley Power (SVP), Western Power Trading Forum (WPTF)

Stakeholder comments are posted at:
http://www.caiso.com/informed/Pages/StakeholderProcesses/GeneratorContingency_RemedialActionSchemeModeling.aspx

Other stakeholder efforts include:

- Conference Call, 04/25/16
- Conference Call, 11/15/16
- Conference Call, 03/22/17
- Conference Call, 07/07/17

Comments of following Market Participants	Model generator and remedial action scheme constraints in the day-ahead and real-time market	Model generator and remedial action scheme constraints in the congestion revenue rights market
Boston Energy	Requests the ISO to publish the list of generation/load that have remedial action schemes included in the proposed modeling	Requests the ISO to publish the list of generation/load that have remedial action schemes included in the proposed modeling
California Department of Water Resources (CDWR)	No position	No position
DC Energy	Support. Requests the ISO to publish the list of generation/load that have remedial action schemes included in the proposed modeling	Support. Requests the ISO to publish the list of generation/load that have remedial action schemes included in the proposed modeling

Pacific Gas & Electric Company (PG&E)	Support	Support
PacifiCorp	Support	No position
Powerex	Support	Support
Six Cities	No position. Stresses the importance of allocating sufficient time and resources to implementation efforts such that a thorough market simulation is accomplished before go-live.	Support

Southern California Edison (SCE)	Concerned that there will be unjustified energy revenues for generators connected to remedial action schemes because a generator connected to a remedial action scheme may receive a higher locational marginal price than a generator not associated with a remedial action scheme. Concerned that the design provides adverse incentives for network upgrades in the case where a generator associated with a remedial action scheme receives a higher proposed modeling than a generator not associated with a remedial action scheme. This is because the generator could receive a higher locational marginal price without funding transmission capacity increases. Concerned that the design creates distortions in the interconnection process in the case where a generator associated with a remedial action scheme receives a higher locational marginal price than a generator not associated with a remedial action scheme. Maintains that the generator should be required to fund transmission capacity increases to receive higher locational marginal prices. Concerned because the interconnection process ensures that all generation (that is not part of a RAS) will be able to generate even under a single contingency condition. Should a single contingency condition occur in real-time, units armed with a remedial action scheme would trip (if necessary) and the remaining generation would have sufficient transmission available to continue production. The conceptual framework behind the proposal does not seem to acknowledge that the interconnection process allows non-remedial action scheme generation to continue production even under a single contingency condition. Concerned because it claims that the interconnection process ensures that all generation that is not associated with remedial action schemes will be able to generate even under a single contingency condition. If this were true, then those resources would have access to sufficient transmission to continue production and the proposal would not even be necessary. It claims that the proposal does not recognize that that the interconnection process allows non-remedial action scheme generation to continue production even under a single contingency condition.	Support

Silicon Valley Power (SVP)	No position	Support
Western Power Trading Forum (WPTF)	Support	Support

Management Response	Management sees the proposed price formation for resources on remedial action schemes as justified because it appropriately values the resources' contribution to congestion on the system and results in the most efficient dispatch of the resource. Management does not believe its proposal provides adverse incentives for transmission development because it is ISO and PTO that determines, based on reliability studies, appropriate transmission upgrades whether they be remedial action schemes or conventional transmission. Management does not believe its proposal creates distortions in the interconnection process because the ISO bases resource interconnection requirements on reliability studies and fixed infrastructure cost. When the transmission system can no longer support additional remedial action schemes, other transmission upgrades may be developed. Management does not agree that its interconnection process guarantees transmission access to non-remedial action scheme generation under single contingency conditions. The market may limit dispatch on all projects, regardless of deliverability status, if the total amount of generation is in excess of available transmission capacity. Pursuant to the ISO tariff, Appendix DD, section 2.4.2, "Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or point of delivery or rights to any specific MW of available capacity on the CAISO Controlled Grid." Further, the proposal does acknowledge that resources that are not associated with remedial action schemes continue to produce after the contingency event; this is exactly what the proposal models in the security constrained economic dispatch. Stakeholders requesting a list of generation/load nodes that have remedial action schemes are primarily concerned about the congestion revenue rights market model; all constraints modeled in the congestion revenue rights market will be released prior to auction using existing process. Management understands the importance of allocating sufficient time and resources to implementation efforts and allow a thorough market simulation prior to go-live. The implementation will follow its normal process including a market simulation phase.	Stakeholders requesting a list of generation/load nodes that have remedial action schemes are primarily concerned about the congestion revenue rights market model; all constraints modeled in the congestion revenue rights market will be released prior to auction using existing process. The ISO will also monitor congestion revenue rights market revenue imbalance due to the changes in modeling between the congestion revenue rights market and the day-ahead market going forward.