

## Stakeholder Comments

### Subject: Reactive Power Requirements for Asynchronous Resources Issue Paper and Straw Proposal

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As a follow-up to the discussion at the March 13, 2015 stakeholder conference call, the CAISO is requesting written comments on the Issue Paper and Straw Proposal for Reactive Power Requirements for Asynchronous Resources dated March 5, 2015.

#### Comments:

San Diego Gas & Electric (“SDG&E”) concurs with the CAISO’s proposal for uniform requirements on voltage regulation and reactive support for synchronous and asynchronous generators. The proposal recognizes that an equitable sharing of grid reliability obligations requires that all generators connected to the CAISO controlled grid provide minimum levels of reactive power production/absorption capability. The document correctly explains that the range of possible system conditions is so wide that at any point in time maintenance of grid reliability could require that any generator provide voltage control and/or inject or absorb reactive power. The document further explains that it is simply infeasible to anticipate and study all of these conditions during the generator interconnection process. Finally, the CAISO acknowledges that its proposal represents a change from prior requirements and therefore would only be applied on a going-forward basis.

During the March 13, 2015 stakeholder call, some stakeholders raised the issue of “hunting” where more than one generator has the same Point of Interconnection to the CAISO-controlled grid and these generators simultaneously attempt to regulate voltage at this point. SDG&E believes there are relatively simple operational solutions for “hunting,” and that the CAISO’s proposal is broad enough to accommodate those solutions.

Finally, while the CAISO’s proposal does not address the issue of opportunity costs that may be incurred by a generator to meet minimum reactive power capability requirements, some stakeholders on the March 13, 2015 call suggested that generators should be compensated for the loss of market revenues when real power production has to be reduced in order to adhere to the CAISO’s proposed requirements. SDG&E believes that any decision to provide compensation to generators for (i) opportunity costs, or (ii) for the costs of the equipment necessary to meet minimum reactive power

capability requirements, must apply to all generators, synchronous and asynchronous, and must be based on a comprehensive assessment of all relevant benefits and costs. Theoretical improvements in market efficiency need to be weighed against the direct cost to consumers as well as the cost of implementing the necessary administrative systems.

Until such an assessment is completed, SDG&E supports implementation of the CAISO proposal without any compensation mechanism. SDG&E notes that today, some generators provide more reactive power support than others which has different implications for real power losses in different parts of the system. Different entities end up with different obligations for compensating for real power losses; i.e., the cost burden of real power losses is not fairly distributed because only some generators are currently obligated to provide reactive power support. While the CAISO's proposal is limited to new generators, it will help distribute the burden of real power losses more fairly on a going-forward basis.