

Stakeholder Comments Template

Reactive Power Requirements and Financial Compensation

Addendum to Draft Final Proposal

Submitted by	Company	Date Submitted
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This template has been created for submission of stakeholder comments on the addendum to the draft final proposal for the Reactive Power Requirements and Financial Compensation initiative that was posted on July 21, 2016. The addendum to the draft final proposal and other information related to this initiative may be found at:

<http://www.aiso.com/informed/Pages/StakeholderProcesses/ReactivePowerRequirements-FinancialCompensation.aspx>.

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on **August, 4 2016**.

1. Please provide your comments on the proposed automatic voltage regulation requirements for asynchronous resources.

As we stated on the stakeholder call of July 28, 2016, CAISO's proposed requirement for asynchronous generators to regulate POI voltage (directly or indirectly), with the reactive power requirement measured at the high side of the generator's step-up transformer, should be subject to the following provision:

- If the POI is shared by two or more generation projects, CAISO will ensure that its voltage regulation requirement will not lead to a voltage/reactive power hunting phenomenon, potentially resulting in damage to transmission and generation equipment. If voltage/reactive power hunting is observed as a result of this CAISO requirement, its mitigation, as well as mending of the damaged equipment, will not be the responsibility of the generators.

This provision is reasonable given that CAISO is responsible for conducting the study of the AVR capability for the interconnecting generators and imposing the reactive power requirement, and should therefore take responsibility for any resulting damages.

In addition, CalWEA respectfully requests written confirmation from CAISO on two items that CAISO agreed to verbally during the July 28 call:

- Confirm that the reactive power requirement at the high side of the generator's step-up transformer, measured in terms of a power factor range (0.95 leading to 0.95 lagging),

will be measured based on the rated voltage and not based on a scheduled POI voltage specified by the CAISO or its PTO – in other words, if the voltage at the POI is below the rated voltage, the generator should not be required to buck and, if the voltage at the POI is higher than the rated value, the generator should not be required to boost.

- Confirm that an existing wind farm may replace its wind turbines (i.e., repower) without becoming subject to the universal reactive power requirements as long as the project's repowering meets the conditions set forth in Section 25.1.2 of the CAISO tariff and the CAISO BPM for generation repowering that assure that the Material Modification Assessment process will not trigger the need to go through an interconnection study process.

At the same time, if a repowered wind farm with no reactive power requirement is able to provide reactive power capability to the grid, CalWEA believes that the generator and the CAISO should pursue a mutual agreement whereby the generator would provide its reactive power capability to the grid.

Finally, CalWEA looks forward to working with the FERC and, subsequently, with the CAISO, on the notion of providing fair compensation for the reactive power requirement on asynchronous generators.