

## Comments of Pacific Gas and Electric Company

### *Energy Imbalance Market Transition Period Draft Final Proposal*

Submitted by	Company	Date Submitted
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Pacific Gas and Electric Company (PG&E) offers the following comments on the California Independent System Operator’s (CAISO) Energy Imbalance Market (EIM) Transition Period Draft Final Proposal. PG&E’s main comments, in summary, are:

1. PG&E supports the CAISO’s proposal to establish a twelve month EIM transition period for PacifiCorp. PG&E believes that given the market performance issues during the first few months of EIM Go-Live with PacifiCorp it would be prudent to extend the transition period beyond the current 90 day tariff waiver that the Federal Energy Regulatory Commission (FERC) approved on December 1, 2014.<sup>1</sup>
2. While PG&E supports the CAISO’s proposal to establish an EIM transition period for PacifiCorp, PG&E suggests that rather than creating an automatic twelve month transition period for all new EIM entrants, the CAISO should base the need and duration of future EIM transition periods on the lessons learned from PacifiCorp and the system needs of new EIM entities.
3. PG&E recommends robust monitoring for any potential gaming opportunities resulting from imposing asymmetric bid caps in the CAISO BAA and EIM BAAs during transition periods and recommends delaying the reinstatement of virtual bidding at the interties for one year to avoid creating gaming opportunities.
4. PG&E recommends that the CAISO include the same reporting requirements contained in the 90-day tariff waiver during EIM transition periods to provide transparency into the causes of price volatility and progress made to remedy transitional issues.

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<sup>1</sup> December 1, 2014 FERC Order Granting Tariff Waiver and Directing Informational Filings, p.13.

1. PG&E supports the CAISO's proposal to establish a twelve month EIM transition period for PacifiCorp.

PG&E agrees with the CAISO that it would be prudent to extend the transition period beyond the current 90-day tariff waiver that the Federal Energy Regulatory Commission (FERC) approved on December 1, 2014 to address the price volatility in the PacifiCorp areas. The first report released by the CAISO on the EIM market performance highlighted the reduction in the number of price spikes in the PacifiCorp BAAs and the progress made by the CAISO and PacifiCorp at resolving the causes of the price volatility. This report also outlined steps the CAISO and PacifiCorp plan to take as well as ongoing issues it has yet to address.

Given the amount of work that remains to resolve the causes of the price volatility (including modeling discrepancies for distributed generation resources, profiles of startup and shutdowns, and multi-stage generating resources as well as addressing quality issues with the telemetry data) PG&E believes a twelve month transition period for PacifiCorp with the remedies in the CAISO proposal is a prudent step to avoid subjecting market participants to unnecessary and unrepresentatively high prices when power balance or transmission constraint violations are caused by transitional conditions and are not reflective of actual physical conditions.

2. PG&E recommends basing the need and duration of future EIM transition periods on the lessons learned from PacifiCorp and the system needs of new EIM entities.

Regarding the applicability of the EIM transition period to all new EIM entities, PG&E believes that the issues contained in the CAISO's proposal and identified thus far during the 90-day waiver period warrant closer stakeholder review and participation than afforded by the expedited schedule planned in this stakeholder initiative. Given the need for additional time to understand and address the issues in PacifiCorp, PG&E recommends that establishing transition periods for future EIM entities be addressed through the EIM Year 1 Enhancements stakeholder process and utilize the information included in the reports on EIM performance throughout the transition period.

While a twelve month transition period is reasonable for PacifiCorp given the amount of work that remains to resolve the causes of the price volatility, it is not clear whether this will be the appropriate amount of time to address transitional issues for other new EIM entrants. The time needed to address transitional issues, including training operator staff and installing physical infrastructure, will likely not be uniform for all new EIM entrants. PG&E suggests that rather than creating an automatic twelve month transition period for all new EIM entrants, the CAISO should implement a more flexible timeline for transition periods that is based on the progress each new EIM entrant has made towards addressing its identified transitional issues. A progress-based, rather than timeline-based approach will allow both the CAISO and new EIM participants to leverage lessons learned from the efforts that PacifiCorp is currently undertaking. A transition plan should be established for each new EIM entrant and should use the results from the testing, market simulation, and market experience of previous EIM entrants as a measure to determine an appropriate transition period timeframe for that new entrant given its particular needs. This will allow new market participants to take advantage of all systems that have been developed to

remedy identified problems and will incentivize testing ahead of each new entrant as the transition period can be scaled to fit the transition needs of that entrant.

PG&E also recommends that during the transition period the gradual increase of the bid cap is more flexible than the firm schedule the CAISO proposes. The CAISO should analyze the progress made resolving the remaining operational issues before proceeding with each increase in the bid cap and in the event the data shows that the problems have been effectively resolved at any point during the transition period the bid cap could be increased to the standard \$1,000/MWh level.

3. PG&E recommends robust monitoring for any potential gaming opportunities resulting from imposing asymmetric bid caps in the CAISO BAA and EIM BAAs during transition periods and recommends delaying the reinstatement of virtual bidding at the interties for one year to avoid creating gaming opportunities.

PG&E is concerned about the potential for unintended consequences and gaming opportunities with asymmetric bid caps between the CAISO BAA and EIM BAAs during transition periods. Because the CAISO proposal extends this transition period to all new EIM entrants, PG&E has heightened concerns about a gaming opportunity that could arise as new EIM entrants create multiple bid caps across a wide geographic area.

In addition to the asymmetric bid caps, PG&E is concerned about the potential for unintended market consequences caused by the interaction of expanding limits and dropping penalties to zero on multiple transmission constraints simultaneously. This issue has not arisen during the 90-day tariff waiver period due to the limited number of constraints between the CAISO and the PacifiCorp areas, but it is unclear if this would be the case for an EIM entity with a larger number of interconnections with the CAISO.

PG&E does not fully understand the implications of multiple bid caps between the CAISO and EIM areas at this time and the aggressive timeline in this stakeholder process does not afford market stakeholders adequate time to develop this understanding. The CAISO and the Department of Market Monitoring should institute robust monitoring of bidding behavior across both the CAISO and EIM areas during the transition period and, if gaming opportunities are identified, the CAISO should immediately address them. In addition, these transitional issues should be included in the EIM Year 1 Enhancements stakeholder process.

PG&E also believes that introducing virtual bidding at the interties would further complicate the transitional issues. PG&E recommends delaying the reinstatement of virtual bidding at the interties for one year so that it does not create gaming opportunities during PacifiCorp's EIM transition period or during the early stages of NV Energy's EIM participation.

4. PG&E recommends that the CAISO include the same reporting requirements contained in the 90-day tariff waiver during EIM transition periods to provide transparency into the causes of the price volatility and progress made to remedy these transitional issues.

The CAISO has maintained that price volatility in the PacifiCorp BAAs during the first few months of EIM Go-Live has been largely driven by transitional conditions that restrict the perceived capacity available to the PacifiCorp BAAs through the EIM clearing process. The CAISO indicates in its proposal that these anomalies are temporary as they are associated with the initial startup and transitional period of EIM operations, and do not necessarily reflect actual physical conditions on the system in all cases. Both the CAISO and the CAISO's Department of Market Monitoring (DMM) reports on the performance of the EIM attribute this artificial scarcity to data alignment issues and a lack of visibility on the part of the CAISO's optimization software to the most recent information from PacifiCorp's resources.

The first informational reports on the performance of the EIM provided valuable data on the causes of price volatility in the EIM area. PG&E recommends permanently instituting reporting requirements during EIM transition periods so that stakeholders can gain further visibility into the problems causing the perceived scarcity and the progress made at resolving the causes of the price volatility. Because stakeholders don't know the actions taken outside of the market, it is difficult to understand and assess the data-driven and information-coordination issues that the CAISO has identified. Continued monthly reporting should help provide further insight into what problems are causing the market to resort to penalty pricing, how effectively these problems are being resolved, and the expected dates, where applicable, by which these problems will be fully resolved.