Comments of Pacific Gas and Electric Company
Bid Cost Recovery and Variable Energy Resource Settlement – Draft Final Proposal 5/20/15

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) Bid Cost Recover (BCR) and Variable Energy Resource (VER) Settlement May 20th Draft Final Proposal.

- PG&E supports the CAISO's proposal to settle Residual Imbalance Energy (RIE) at the LMP for an economically bidding VER whose output changes due to its forecast.
- PG&E supports the CAISO's proposal to exempt VERs from the Persistent Deviation Metric when following its forecast.
- CAISO should undertake a more holistic revision to settlement rules for VERs in the future.

I. PG&E supports the CAISO's proposal to settle Residual Imbalance Energy (RIE) at the LMP for an economically bidding VER whose output changes due to its forecast.

CAISO identified an inconsistency in its current rules for settling RIE for VERs in its March 2015 Market Issue Bulletin (Residual imbalance energy settlement and ramp rate changes for self-scheduled variable energy resources). For economically bidding VERs, the current rules will settle RIE based on the reference hour bid, regardless if the resource's output is changing due to its bid or forecast. As VER bids are frequently negative, this can result in a negative RIE payment, even if the resource is following its forecast.

PG&E agrees that this is not a desirable settlement outcome, and supports the CAISO's proposal to settle RIE on the LMP of the current hour, rather than the reference hour bid, for economically bidding VERs changing output due to a forecast change.

II. PG&E supports the CAISO's proposal to exempt VERs from the Persistent Deviation Metric (PDM) when following its forecast.

As CAISO has outlined in its proposal, there are instances where the current PDM may unnecessarily limit BCR and RIE payments to some VERs. The PDM was designed to prevent resources from collecting inflated BCR and RIE payments due to intentional deviations from its ADS dispatch level. This is an appropriate metric when applied to dispatchable resources. However, VERs are assessed against their forecast, which can and does differ from the actual resource availability. The PDM could be erroneously triggered for a self-scheduled VER due to the inherent inaccuracy of forecasts, rather than intentional deviation from their forecasts. For this reason, PG&E supports CAISO's proposal to not apply the PDM to VERs that are following a forecast, but continue to apply the PDM to VERs that are changing their output due to an economic bid.

III. CAISO should undertake a more holistic revision to settlement rules for VERs in the future.

During the initiative review process both the CAISO and the market participants identified a number of issues in relation to how VERs are being settled during their daily operation, especially in relation to units responding to forecast while also offering economic energy in the Real-Time market.

While this initiative resolves many of the financial problems for VERs that have arisen since the implantation of the FERC Order 764 changes on May 1, 2014, there continue to be concerns regarding how persistently inaccurate forecast values affect the overall settlement process for these resources, and the correct methodology to classify schedule changes when following such forecasts. These concerns include, but are not limited to:

- Use of Residual Imbalance Energy when forecast changes occur across the Real-Time hourly boundary
- State estimator ADS adjustments when following an incorrect forecast
- Correct use of PDM when a unit is moving from forecast-following to economic dispatch, and vice versa
- Appropriate calculation of Default Energy Bids for VER resources

PG&E recommends that the CAISO needs to undertake a follow-up initiative to address these scheduling and settlement issues and minimize the risk of any further unintended settlement issues going forward.