



**Comments of Pacific Gas and Electric Company
Participating Intermittent Resource Program Protective Measures
Stakeholder Conference Call**

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)'s Extension of Participating Intermittent Resource Program (PIRP) Protective Measures.

PG&E opposes extending special protections to PIRP resources on the following grounds:

1. Extending PIRP protective measures interferes with PG&E's contracting processes.
2. The cost allocation associated with PIRP protective measures does not provide proper incentives to renegotiate contracts and exposes parties that have to renegotiate costs.
3. Extending PIRP protective measures sends perverse market incentives.

These points are further articulated below.

1. PG&E opposes the extension of PIRP protective measures on the grounds that it interferes with PG&E's contracting processes.

By extending special protections to PIRP resources, it interferes with PG&E's contracting with these resources. With any contract negotiating process, there is an understanding that CAISO market rules may change, and the contracts contemplate the allocation of financial benefits and burdens accordingly. With PIRP protective measures, a Variable Energy Resource (VER) was able to qualify because of the terms and conditions in its existing power purchase agreement. In power purchase agreements, one such contract term is whether the buyer, PG&E, or the seller (i.e., the VER), assumes the role of scheduling coordinator and the burden of being exposed to the settlement of uninstructed imbalance energy.

Presumably, all the parties receiving special protections are responsible for payment of the resource's real-time imbalance energy charges as specified in the contracts. These resources are only responsible for these payments because they assumed the role of scheduling coordinator and the associated risk that the CAISO's markets would change in the future—a risk that is inherent in being a scheduling coordinator. Resources likely took such risk into consideration when pricing the project in its offer and presumably included risk premium embedded in the contract price. CAISO's effort to extend these special protections will continue the paradigm where the buyers pay twice for the imbalance costs that the resource should be bearing under the contracts.

First, PG&E pays the cost through the implicit premium it pays to the resource for the energy delivered. The premium reflects the risk that the resource took on at contract execution; that its imbalance costs would go up in the future if PIRP imbalance netting settlement provisions were eliminated. Second, PG&E pays again by bearing

a portion of the costs that the protective measures impose on the market.¹ In effect, by extending these protective measures, the CAISO would be inappropriately inserting itself into the contract negotiation with VER.

2. PG&E opposes the extension of PIRP protective measures as the cost allocation method based on net negative deviations does not provide proper incentive to renegotiate contracts and exposes parties that have to renegotiate costs.

The CAISO's current costs allocation method does not provide proper incentives for the load serving entities (LSE) from negotiating contracts because they only pay a prorata share based on the net negative deviations. At the same time, the CAISO's current cost allocation mechanism exposes others to potential costs. At a minimum CAISO should address this.

If one LSE renegotiates with PIRP protected resources, while other LSEs fail to address the CAISO request that protected resources execute amended and restated power purchase agreements, all LSEs would still bear the cost of imbalances based on the net negative deviations. Therefore, in the case where both instances occur (i.e., PG&E is the scheduling coordinator and other LSEs have not renegotiated contracts), PG&E bears the cost of imbalances for contracts that have been renegotiated and is also assigned net negative deviations for other PIRP protected resources.

As an alternative to the current cost allocation, PG&E supports SCE's previously submitted proposal.² SCE recommended that for resources with a current LSE contract, the proper incentive would be to allocate all the grandfathered netting benefit costs back to the LSE which holds the contract with the resource requesting protective measures.

3. PG&E opposes the extension of PIRP protective measures on the grounds that it sends perverse market incentives.

It is counterintuitive that despite the need for flexibility and managing over-gen as reflected in the duck-curve, CAISO would still incent block resources which do not have an economic incentive to respond to CAISO market signals. Providing exposure to price signals allows resources to choose when to reduce output to mitigate the impact of their generation at times when it is harmful to the system. Furthermore, as demonstrated over a few days in 2016, conditions expected for 2020 in the early analysis of "duck curve" are occurring now.³ Insulating some VERs from the market, as the proposed protective measures do, only serves to exacerbate this problem.

Extending the PIRP protective measures sends perverse incentives as these resources would remain completely shielded from paying imbalance charges creating little or no incentive to invest in the technology to be dispatched or renegotiate contracts.

¹ In comparison, the resource receives better treatment than it bargained for; it gets the premium payment from PG&E but is protected from the risk it has assumed, the cost consequences of the elimination of PIRP monthly imbalance netting.

² SCE Comments. FERC Order 764 Market Changes Intermittent Resource Protective Measures Straw Proposal July 26, 2013. (http://www.caiso.com/Documents/SCEComments-FERCOrder764MarketChanges-IntermittentResourceProtectiveMeasures_StrawProposal.pdf)

³ Fowlie, Meredith, The Duck has Landed, Energy at Haas, U.C. Berkeley, May 2, 2016. California ISO Hourly Data, March 28-April 3, Years 2013-2016. (<https://energyathaas.wordpress.com/2016/05/02/the-duck-has-landed/>)