

Comments of Pacific Gas and Electric Company

EIM Year 1 Enhancements

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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) Year 1 Enhancements November 10, 2014 Issue Paper and Straw Proposal.

1. It is not necessary for the CAISO to extend the flexible ramping test to its balancing authority area to ensure resource sufficiency.

The current EIM does not include forward resource adequacy (RA) requirements or must offer obligations for EIM Entities nor does it include a Resource Adequacy Commitment process prior to Real-Time to ensure that adequate capacity is committed to meet Real-Time needs. Instead, the EIM design includes a flexible ramping sufficiency test for participating EIM balancing authority areas (BAAs) at T-40 to ensure that each EIM BAA has sufficient resources committed to meet Real-Time needs. In the event an EIM BAA does not have sufficient resources to pass the flexible ramping test, additional EIM transfers above previous levels between the deficient EIM BAA and other EIM BAAs will not be allowed. In its EIM Year 1 Enhancements Issue Paper and Straw Proposal, the CAISO is proposing to extend the flexible ramping test to the CAISO's BAA at T-40 and in the event the CAISO fails the flexible ramping test, additional EIM transfers into the CAISO above the fifteen minute market (FMM) interval proceeding the operating hour will not be allowed.

PG&E does not believe it is necessary for the CAISO to extend the flexible ramping test to its BAA. The CAISO already has measures to ensure resource sufficiency within the CAISO BAA, including RA resources and must-offer obligations for those RA resources that count towards the capacity requirements established for the CAISO BAA. Specifically, the CAISO BAA has both system, local, and flexible RA requirements, including resource buckets to ensure the proper mix of flexibility. Additionally, the CAISO is looking at developing a Flexible Ramping Product to help maintain power balance in the Real-Time Dispatch (RTD) process. PG&E thinks that if an EIM BAA has provisions to ensure resource sufficiency, including must-offer obligations for resources

that are analogous to CAISO's RA resources, that a flexible ramping test is duplicative and not necessary for that BAA. In the absence of such provisions, applying the flexible ramping test to an EIM BAA to ensure resource sufficiency is a reasonable approach.

This is important because a major benefit of the EIM is to realize the efficiency of a combined inter-regional dispatch of resources. In order to maximize the inter-regional dispatch benefits of the EIM, it is important to capture the benefits of increased resource diversity to address flexibility needs if the CAISO happens to be short of flexibility despite the robust forward RA requirements and real-time procurement mechanisms. Having resource sufficiency tests for EIM Entities that have RA requirements and must-offer obligations is duplicative and unnecessary.

2. PG&E does not support Bid Cost Recovery for non-participating resources.

The CAISO is proposing to include additional energy categories to reflect the operational characteristics of EIM non-participating resources, including standard ramping energy, ramping energy deviation, derate energy, manual dispatch energy, and optimal energy. The CAISO is proposing this additional clarity on RT energy categories in order to align the calculation of expected energy across the EIM area that apply to CAISO resources who self-schedule in the RTM to changes from base schedules of EIM non-participating resources.

In its proposal, CAISO has suggested that there may be circumstances under which a non-participating resource (i.e. a resource that does not have energy bids in the market and no corresponding real-time costs) might receive Bid Cost Recovery (BCR) payments. PG&E does not support BCR payments to non-participating resources, no matter their geographic location. BCR is intended as a mechanism to ensure that resources that provide economic bids into the CAISO market do not incur a net overall daily loss in relation to their stated costs as a result of the CAISO's optimized market results. Non-participating resources do not offer the CAISO the market flexibility associated with the economic bid process, nor have they provided corresponding energy cost values for their output. To offer BCR protection to these resources would be inappropriate and would result in unjustly inflated Real-Time cost recovery uplifts to the market. We encourage the CAISO to examine any such circumstance that would provide such payments and reconcile them against existing Tariff section 11.8.4.1.5.

3. Comments on the GHG flag.

A. Mechanism to allow a resource to opt out of having its energy deemed as being imported into CAISO

PG&E supports developing ways for a participating resource in an EIM Entity to specify its willingness to allow EIM to deem that its energy production is available for import into CAISO. PG&E suggests that CAISO explore approaches that afford participants more flexibility than a simple "yes/no" flag and would give resources the ability to limit

the imports into CAISO that EIM allocates to them without requiring an all-or-nothing decision. For example, perhaps a resource could specify a percentage of its dispatch value or a MW value that would set an upper bound on the imports into CAISO from the resource.

B. Allocation of Imports to Resources

CAISO gives an example on pages 8-9 of the Issue Paper and Straw Proposal in which imports into CAISO are allocated to resources in an EIM Entity. The purpose of such an allocation is unclear since EIM SCED allocates imports to resources as part of the dispatch. Additional detail of the problem being addressed and the mechanism proposed is needed to evaluate the approach.

4. An EIM Entity should be required to allow economic bidding on external interties as long as the neighboring BAA allows fifteen minute scheduling.

The current EIM design provides discretion as to whether an EIM entity allows economic bidding on interties with BAAs outside the EIM footprint, whereas the CAISO allows full RT economic bidding on all interties. The CAISO proposal discusses the implications of this situation and explains how it could result in inefficient market outcomes when an economic bid on the CAISO intertie wheels through an EIM entity. PG&E believes that an EIM Entity should be required to allow economic bidding on external interties as long as the neighboring BAA allows fifteen minute scheduling and thus there is no operational impediment to allowing economic bidding on the interties. This could allow the market to capture additional flexibility outside of the EIM footprint and could lower concern about market power due to increased competition to provide flexibility and balancing.

5. PG&E supports further inquiry into the issue of enforcing EIM transfer limits.

The current EIM implementation enforces EIM transfer limits by ensuring the changes in net scheduled interchange between BAA's in the EIM are less than or equal to the aggregate transmission rights made available to support EIM transfers, which for PacifiCorp is based on contract rights. CAISO believes that as more EIM entities join the EIM, it is more appropriate to enforce EIM transfer limits by individual intertie scheduling point so that the CAISO has the ability to support multiple dynamic schedules between multiple connections between EIM BAAs. PG&E supports further inquiry into this issue in Phase 1 of the EIM Year 1 Enhancements stakeholder process and looks forward to proposals.

6. PG&E recommends that the methodology by which an EIM Entity establishes its administrative price be vetted and approved by the CAISO and included in the CAISO tariff.

To account for the fact that the EIM is a Real-Time market only and does not produce Day-Ahead prices, the CAISO is proposing an administrative pricing rule for the EIM for instances where the CAISO's existing administrative pricing rules (which are presently being revised as part of the Pricing Enhancements Stakeholder Initiative) use CAISO Day-Ahead prices and schedules. Under the CAISO's proposal an EIM Entity would provide the CAISO with an administrative price to use, such as a "proxy price". PG&E would like to further understand how an EIM Entity may determine the administrative price in the event of a disruption to or the suspension of the EIM.

For instance, PacifiCorp's Open Access Transmission Tariff (OATT) includes a mechanism for establishing an hourly pricing proxy based on "the average price for each hour of the delivered energy at California-Oregon Border (COB), Four Corners, Mid-Columbia (Mid-C), and Palo Verde (PV)."¹ In the event of an EIM disruption or suspension where the CAISO uses a day-ahead price, PG&E would like to understand how PacifiCorp would determine its administrative price (i.e. would the price be derived from prices at COB and Mid-C only?).

PG&E recommends that the methodology by which an EIM Entity establishes its administrative price be vetted and approved by the CAISO and included in the CAISO tariff. Stakeholders should also have the opportunity to review the EIM Entity's proposed administrative pricing methodology.

¹ PacifiCorp Open Access Transmission Tariff, Section 1.15A.