Comments of Pacific Gas & Electric Company

Intertie Deviation Settlement – Straw Proposal

Submitted by	Company	Date Submitted
Paul Gribik (415-973-6274) Adeline Lassource (415-973-7004)	Pacific Gas & Electric Company	October 29, 2018

Pacific Gas and Electric Company (PG&E) respectfully offers the following comments on the California Independent System Operator's (CAISO) Intertie Deviation Settlement Straw Proposal published on October 8, 2018 and discussed at the stakeholders' meeting held on October 15, 2018. PG&E supports the CAISO in its efforts to provide more accurate estimates of the net scheduled interchange, increased grid reliability, and accurate market pricing. PG&E also appreciates the background analysis the CAISO provided in the straw proposal and the analysis presented at the October 15 meeting which clarify the importance of undelivered intertie resources from both award decline and absence of E-Tag submission, and the impact on grid reliability and real-time market prices.

PG&E requests the CAISO further clarify the following elements of the straw proposal:
(1) the determination of fifteen-minute binding awards and E-Tagging requirement for hourly block resources;
(2) the determination of under/over delivery quantity; and
(3) the allocation and price of under/over delivery charge proposal, as further developed in below sections.

1- <u>PG&E requests the CAISO provide additional clarity on the determination of fifteen-minute binding awards and E-Tagging requirement for hourly block resources</u>

In Section 7.1 of the Straw Proposal and on slides 37-38 of the presentation, CAISO proposes to implement a real-time E-Tagging for hourly block schedules and to modify the deadline to submit the E-Tag moving from T-20 min to T-40 min. The Fifteen-Minute Market (FMM) award for an hourly block resource will be the minimum of the Hour-Ahead Scheduling Process (HASP) schedule, Automated Dispatch System (ADS) accepted award, and the E-Tag transmission profile.

The CAISO explains that the purpose of the 15 min binding award is to ensure that the FMM is aware of tagged values and eliminates pricing impact to Real-Time Dispatch (RTD) when tags are submitted after the FMM has run.

The CAISO proposes to determine the FMM award for an hourly block resource as follows:

FMM Binding Interval	Time of Operating Hour	Logic Used to Determine FMM Binding Award for Hourly Block Resources
1	00 –15	MIN (HASP schedule, ADS accepted award, E-Tag transmission profile)
2	15 –30	MIN (HASP schedule, ADS accepted award, E-Tag transmission profile)
3	30 –45	E-Tag energy profile
4	45 –00	E-Tag energy profile

In the discussion in the Straw Proposal and in the presentation in the stakeholder meeting, CAISO discusses the use of the E-Tag submitted at T-40 minutes in the process of setting binding FMM awards for hourly block resources. PG&E requests CAISO clarify:

- If the E-Tag submitted at T-40 minutes is used in determining the FMM binding awards for an hourly block resource, why is the logic used to determine the FMM binding award different between intervals 1-2 and intervals 3-4?
- In the settlement worksheet, in intervals 1 and 2, the FMM Binding Award is given by MIN (HASP schedule, ADS accepted award, E-Tag submitted at T-40 transmission profile) while in the intervals 3 and 4, the FMM Binding Award is given by E-Tag submitted at T-20 energy profile. Is the spreadsheet correct in using the E-Tag submitted at T-40 in intervals 1 and 2 and the E-Tag submitted at T-20 in intervals 3 and 4? The Straw Proposal and Presentation seem to indicate that only the E-Tag submitted at T-40 would be used, PG&E would welcome clarification on the E-Tag requirements and their use in setting FMM Binding Awards.

2- PG&E requests CAISO provided additional clarity on the determination of Under/Over delivery quantity

In the Sections 7.4 & 7.5 and on slide 41 of the presentation, the CAISO explains how to determine the under and over delivery quantity to address both declines and tagging deviations and proposes to determine the under/over delivery quantity as follows:

Bid Option	Determination of Under/Over Delivery Quantity
Self-Schedule Hourly Block **Economic Hourly Block**	Absolute Value (HASP Schedule –after the fact E-Tag Energy Profile)
Economic Hourly Block with Intra-Hour Option (once-change) **Economic (fifteen-minute dispatchable)** **Economic Variable Energy Resource**	Absolute Value (FMM Schedule –after the fact E-Tag Energy Profile)
Dynamic	Excluded from under/over delivery charge

In Section 7.2, the CAISO states that BAAs (Balancing Authority Areas) curtailment of tags will be excluded from the over/under delivery quantity determination. PG&E believes the formulas in above table don’t make the distinction between changes made to the E-Tag by a SC (Scheduling Coordinator) and changes made to E-Tags by a BAA. This should be clarified. In the following, we will discuss the over/under delivery quantity for a Self-Scheduled Hourly Block Resource or an Economic Hourly Block resource. Similar issues can be raised for the other resources in the table but with respect to the FMM schedule.

- If only the SC has submitted or made changes to the E-Tag, we understand the over/under delivery quantity will be equal to the absolute value between the HASP schedule and the final E-Tag Energy Profile.
- However, if the last change to the E-Tag was made by a BAA, we see two ways to that the ISO could potentially define the over/under delivery quantity:
  - The ISO could set the over/under delivery quantity to zero since the last change to the E-Tag Energy Profile was made for reliability reasons by a BAA. This assumes that the last change to the E-Tag was the most restrictive and any prior changes to the E-Tag submitted by an SC would be subsumed by the change made by the BAA.
  - Alternatively, the over/under delivery quantity could be defined by the absolute value of the difference between the HASP schedule and the final E-Tag that was submitted by the SC for the resource before the BAA adjusted the E-Tag. The difference between the SC's E-Tag and the BAA's E-Tag would not contribute to the determination of the under/over delivery quantity since that last delta to the E-tag energy profile was made for reliability reasons.

The CAISO should clarify how it will calculate the under/over delivery quantity when the BAA changes the E-Tag.

3- <u>PG&E supports changing the decline charge to incentivize delivery of intertie resources and eliminating the 10% threshold, but requests additional details on how the new charges were determined.</u>

Considering the curtailments will be excluded from counting towards under/over delivery charge, the CAISO having now the ability to distinguish the change to an E-Tag between a curtailment (submitted by a BAA operator) and an adjustment (submitted by a SC), PG&E supports the decline charge to be changed to incentivize delivery of intertie resources. In that respect, PG&E supports eliminating the 10% threshold and charges over a month and implementing a charge to be applied without threshold and per 15-min interval to all intertie resources (the dynamic resources being excluded).

In the Section 7.6 of the straw proposal, the CAISO proposes the under/over delivery charge to be applied is equal to 50% of the RTD LMP. Considering the charge to be applied will be per interval (15 min), PG&E believes the CAISO should clarify why 50% of the RTD will reflect the impact the intertie deviation had on the real-time market:

- What is the rationale to set the percentage of the price to be paid at 50%?
- Why does CAISO consider the RTD LMP is the correct price to reflect the impact of deviation?
- Why does CAISO consider the RTD is the correct price to be applied for any of the 4 intervals?
- Is the charge to be applied should be the same for all intervals?