California Independent
System Operator Corporation

February 22, 2022

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: California Independent System Operator Corporation
Docket No. ER22- ___-000

Tariff Updates on Application of the Under/Over Delivery Charge for Intertie Schedule Deviations

Dear Secretary Bose:

The California Independent System Operator Corporation (CAISO) submits this tariff amendment filing to address three issues with the "Under/Over Delivery Charge," which is a charge the CAISO assesses for deviations from scheduled intertie transactions.[1] The purpose of the under/over delivery charge is to create robust financial incentives for market participants to deliver their scheduled intertie transactions. These tariff amendments are necessary to ensure the CAISO tariff more fully reflects the policies underlying the CAISO's initial creation of the under/over delivery charge. The CAISO requests an order approving these amendments no later than May 25, 2022. The CAISO intends to implement these revisions on June 1, 2022, but requests the Commission authorize an effective date for the revisions on or before August 1, 2022, subject to the CAISO filing a notice with the Commission within 5 days of the actual effective date.

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[1] The CAISO submits this filing pursuant to Section 205 of the Federal Power Act (FPA), 16 U.S.C. §824d. Capitalized terms not otherwise defined herein have the meaning set forth in the CAISO tariff, and references to specific sections, articles, and appendices are references to sections, articles, and appendices in the current CAISO tariff and as revised or proposed in this filing, unless otherwise indicated.

I. CLARIFYING INTERTIE DEVIATIONS PENALTY RULES

A. Existing Tariff Provisions

On May 22, 2020, the CAISO filed tariff amendments in Docket No. ER20-1890 to enhance its market rules regarding the treatment of energy transactions scheduled at its interties. A major element of the filing was to strengthen the CAISO's non-delivery charge for deviations from scheduled intertie transactions by replacing the "Decline Potential Charge" with a new "Under/Over Delivery Charge." The Commission issued an order accepting the proposed revisions on September 17, 2020.[2] The CAISO ultimately implemented the new under/over delivery charge on February 1, 2021.

Under the tariff revisions, for each fifteen-minute market interval, the CAISO assesses an *under/over delivery charge* to a scheduling coordinator with an intertie transaction if the intertie resource supporting that transaction has a positive *under/over delivery quantity*. The under/over delivery charge equals the intertie resource's under/over delivery quantity multiplied by the *under/over delivery price* for the resource's corresponding intertie in that FMM interval.

The under/over delivery quantity for a fifteen-minute market interval is the difference between the quantity awarded in the hour-ahead scheduling process (HASP) and the final energy profile on the E-Tag.[3] The CAISO excludes three categories of deviations from the under/over delivery quantity: (1) a "Balancing Authority or EIM Transmission Service Provider curtailed the delivery for reliability reasons;" (2) the delivered/undelivered energy is part of a schedule using Existing Transmission Contracts (ETC) or Transmission Ownership Rights (TOR); and (3) the schedule is from a Dynamic System Resource.[4]

The under/over delivery price generally is 50 percent of the highest LMP at the relevant intertie during the fifteen-minute period, subject to a minimum price of $10.[5] The CAISO charges an enhanced under/over delivery price of 75 percent where a scheduling coordinator accepts an award in the automated dispatch system (ADS) and does not deliver the awarded energy. The enhanced price is also subject to a $10 minimum price.

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2 *Cal. Indep. Sys. Operator Corp.*, 172 FERC ¶ 61,234 (2020) (September 17 Order).

3 CAISO tariff sections 11.31.1.1 (determining quantity for hourly block schedules) and 11.31.1.2 (determining quantity for fifteen-minute dispatchable resources).

4 CAISO tariff section 11.31.1.3.

5 CAISO tariff section 11.31.2. Specifically, the CAISO evaluates four separate LMPs in determining the penalty price—the LMP for the fifteen-minute interval and the LMP for the three five-minute RTD intervals corresponding to the FMM interval.

B. Proposed Tariff Clarifications

With experience under this new penalty mechanism, the CAISO has identified the need for several targeted tariff clarifications to ensure the policy intent behind the under/over delivery charge is realized fully. Specifically, the CAISO has identified three ways in which the enhanced 75 percent penalty does not appropriately reflect the policies underlying the under/over delivery charge. The CAISO now proposes targeted tariff amendments to address these three issues.

The first issue is that the enhanced penalty does not apply to over-deliveries. Section 11.31.2 applies the enhanced penalty only if ADS "recognizes a Scheduling Coordinator as accepting an award at an Intertie . . . and the awarded Energy *is not delivered* . . . ."[6] The phrase "is not delivered" means that an over-delivery cannot trigger the enhanced penalty. As the CAISO explained in its initial May filing, deviations from an accepted intertie schedule are particularly harmful because they give the CAISO less time to adjust to the deviation than where a scheduling coordinator notifies the CAISO upfront that it will not deliver on an awarded intertie transaction. The CAISO explained that the enhanced penalty "will incent scheduling coordinators to timely give CAISO system operators the information they need to take actions to better ensure reliability, such as manually dispatching a resource to provide the energy not delivered by a scheduling coordinator under its scheduled intertie transaction."[7] This rationale can apply equally to under- and over-deliveries. Of particular concern is the case where a scheduling coordinator accepts an export transaction in ADS and over-delivers to the intertie at which it seeks to export. The impact on the CAISO from an over-delivered export effectively is the same as an under-delivered import—both leave the CAISO short of its expected supply. The penalty should be the same to recognize that reality. To address this concern, the CAISO now proposes that the enhanced penalty will apply where the "final quantity of the Energy profile on the Intertie transaction's E-Tag is not equal to the quantity accepted in ADS . . . ."[8] This change will create needed symmetry for the enhanced penalty between under- and over-deliveries relative to the quantity accepted in ADS.

The second concern is the enhanced penalty provisions did not contemplate that in a fifteen-minute interval, a scheduling coordinator could deviate from its HASP award both because of a reliability curtailment *and* because it did not secure the energy needed for the intertie transaction. A simple example highlights this scenario. Assume in a fifteen-minute interval a scheduling coordinator is awarded a 100 MW import schedule. The scheduling coordinator then timely notifies the CAISO through ADS it will deliver only 80 MW to the CAISO. Then that import is subject to a 30 MW reliability

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[6] CAISO tariff section 11.31.2 (emphasis added).

[7] *Cal. Indep. Sys. Operator Corp.*, Tariff Amendment to Enhance Intertie Transaction Market Rules, at 24, FERC Docket No. ER20-1890-000 (May 22, 2020).

[8] Amended section 11.31.2.

curtailment, meaning that the energy profile on the final E-Tag shows an import of 50 MW. The CAISO will exclude from the under/over delivery quantity the 30 MW undelivered due to the reliability curtailment, meaning the quantity subject to charge is 20 MW. However, in this scenario the energy profile of 50 MW is still lower than the 80 MW quantity accepted in ADS, and the tariff as currently written suggests that the scheduling coordinator would face the enhanced penalty for the 20 MW subject to the penalty. This is an inappropriate outcome because, absent the reliability curtailment over which it had no control, the scheduling coordinator unquestionably would face the standard 50 percent penalty. The CAISO thus proposes to amend the tariff to clarify that if the deviation between the ADS-accepted quantity and the final energy profile quantity is equal to the curtailment amount, then the scheduling coordinator will face the 50 percent penalty.[9]

The third concern is that the floor price in applying the enhanced penalty is the same as the floor price under the standard penalty scenario. This means that when market prices are low, a scheduling coordinator subject to the enhanced penalty effectively faces the same penalty price as under the standard penalty provisions. Specifically, if the highest price in a fifteen-minute interval is $13.33 or below, then under the current provisions, a scheduling coordinator faces the same penalty regardless of what happens with ADS. When the price is $13.33, the penalty price under the standard penalty scenario is $10 because a 50 percent penalty would be $6.65 and thus the $10 floor price would apply. In the enhanced scenario, the penalty price also would be $10 because 75 percent of $13.33 is $9.99, meaning that the $10 floor applies. Once the market price goes to $13.34, then a 75 percent penalty would be $10.01 and the $10 floor no longer would apply. Even here, the penalty is enhanced by only one cent. These outcomes do not reflect the fundamental policy that accepting a schedule in ADS and then deviating from it should subject a scheduling coordinator to a materially larger penalty because that conduct imposes greater burdens on CAISO operators and increases reliability risks. To address this oversight regarding the effects of the floor price, the CAISO proposes to raise the floor price in the enhanced penalty scenario to $15 so it is proportional to the difference between a 50 percent and 75 percent penalty.[10]

C. Stakeholder Outreach and CAISO Responses to Feedback

The CAISO stakeholder process leading to this filing covered revisions to the under/over delivery charge and several other tariff clarifications that the CAISO will

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9 Amended section 11.31.2 (enhanced penalty applies if energy profile differs from ADS-accepted quantity "for any reason other than a reliability-based curtailment covered by Section 11.31.1.3."

10 Specifically, a 75 percent penalty is 50 percent greater than a 50 percent penalty. Similarly, a floor price of $15 is 50 percent greater than a floor price of $10. As an example, assume the applicable LMP is $40. A 50 percent penalty would be $20 and a 75 percent penalty would be $30. The $30 penalty is 50 percent greater than the $20 penalty.

submit through separate filings. The stakeholder process included posting an issue paper and draft tariff revisions followed by a public stakeholder web conference on July 29, 2021. The CAISO then posted a matrix of responses to stakeholder comments and held an additional web conference on August 18, 2021 to discuss those responses with stakeholders.

The CAISO received two comments from stakeholders regarding the proposed revisions to the under/over delivery charge.

One stakeholder was concerned that exposing over-deliveries to the enhanced penalty would negatively affect parties scheduling within their ETC/TOR rights. This stakeholder pointed out that holders of ETCs/TORs may increase their schedules in the real-time market. Presumably, the final E-Tags would match whatever incremental energy scheduled beyond what was scheduled from the HASP. This stakeholder was concerned that such activity would increase the quantities subject to the enhanced over-delivery penalty. This concern is already addressed by the existing exemption from deviation penalties for "Energy that is either delivered or not delivered as part of a valid ETC Self-Schedule or TOR Self-Schedule."[11] So long as the incremental real-time market schedule is within the ETC/TOR scheduling rights, those quantities would be exempt from the penalties.

A second stakeholder pointed out that external transmission providers can impose reliability limits or derates that affect imports into the CAISO's balancing authority area. This stakeholder explained that compliance with those requirements can lead to deviation penalties even though it is a situation that arguably is outside the scheduling coordinator's control and argued it is appropriate to amend the tariff to provide a penalty exemption. In response to this concern, the CAISO explained that the policy approved by the CAISO's Board was only to exempt penalties caused by reliability curtailments. The intent was not to exempt all deviations that may be outside the scheduling coordinator's control.[12] Thus, the stakeholder's recommendation to create an entirely new exemption is beyond the scope of the CAISO's Section 205 proposal. In any event, the CAISO has committed to consider whether the specific scenario this stakeholder raised meets the existing exemption for "Energy that is not delivered because a Balancing Authority or EIM Transmission Service Provider curtailed the delivery for reliability reasons."[13]

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[11] CAISO tariff section 11.31.1.3.

[12] The CAISO did not find it appropriate to consider broadening the penalty exemption through this tariff clarifications effort.

[13] CAISO tariff section 11.31.1.3(a).

II. EFFECTIVE DATE OF TARIFF REVISONS

The CAISO requests an order approving these amendments no later than May 25, 2022. These amendments are part of the CAISO's 2022 spring release scheduled for June 1, 2022. That implementation date is subject to change based on overall developments with the spring release. To allow for flexibility in implementation, the CAISO respectfully requests the Commission authorize an effective date for such tariff revisions by August 1, 2022, subject to the CAISO filing a notice filed with the Commission within 5 days of the actual effective date.[14] To the extent the ultimate effective date is over 120 days from today, the CAISO also requests waiver of Commission's 120-day notice requirement between the date a rate schedule is filed and the date it must take effect.[15] Waiving requirements will provide the CAISO and market participants with regulatory certainty and ample time to implement the CAISO's planned software release in the spring of 2022 without requiring additional filings with the Commission.

III. COMMUNICATIONS

Correspondence and other communications regarding this filing should be directed to:

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14 *See Cal. Indep. Sys. Operator Corp.,* 172 FERC ¶ 61,263 at Ordering Paragraphs (A) and (C) (2020). The CAISO has included an effective date of 12/31/9998 as part of the tariff records for these two issues submitted in this filing. The CAISO will notify the Commission of the actual effective date of these tariff records within five business days after implementation in an eTariff submittal using Type of Filing code 150 – Report.

15 Specifically, to the extent necessary, the CAISO requests waiver of the 120-day notice requirement contained in section 35.3(a)(1) of the regulations, 18 C.F.R. § 35.3(a)(1), pursuant to section 35.11 of the Commission's regulations, 18 C.F.R. § 35.11.

16 18 C.F.R § 385.203(b)(3).

IV. SERVICE

The CAISO has served copies of this filing on the California Public Utilities Commission, the California Energy Commission, and all parties with scheduling coordinator agreements under the CAISO tariff. In addition, the CAISO has posted a copy of the filing on the CAISO website.

V. CONTENTS OF FILING

Besides this transmittal letter, this filing includes these attachments:

Attachment A	Clean tariff sheets incorporating the tariff clarifications described in this filing, and
Attachment B	Tariff sheets showing in track change redline format the tariff clarifications described in this filing.

VI. CONCLUSION

For the reasons set forth in this filing, the CAISO respectfully requests that the Commission accept the proposed tariff revisions on the timeline proposed.

Respectfully submitted,

<u>/s/ David S. Zlotlow</u>
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Attachment A – Clean Tariff

Under/Over Delivery Charge for Intertie Schedule Deviations

California Independent System Operator Corporation

February 2, 2022

11.31 Under/Over Delivery Charge for Deviations from Intertie Awards

For each FMM interval, the CAISO assesses an Under/Over Delivery Charge to a Scheduling Coordinator with an Intertie transaction if the Intertie resource supporting that transaction has a positive Under/Over Delivery Quantity. The Under/Over Delivery Charge is the product of the Intertie resource's Under/Over Delivery Quantity in that FMM interval and the Under/Over Delivery Price for the resource's corresponding intertie in that FMM interval.

11.31.1 Determining the Under/Over Delivery Quantity

11.31.1.1 Under/Over Delivery Quantity for Hourly Block Schedules

For Self-Schedule Hourly Blocks for Energy and Ancillary Services and Economic Hourly Block Bids for Energy and Ancillary Services, and Economic Hourly Block Bids with Intra-Hour Option for Energy, the Under/Over Delivery Quantity is the absolute value of the difference between the: (1) HASP Block Intertie Schedule or HASP Advisory Schedule, as appropriate; and (2) final quantity of the Energy profile on the Intertie transaction's E-Tag. In the case of an Exceptional Dispatch or other manual Dispatch Instruction, the Under/Over Delivery Quantity is the absolute value of the difference between the: (1) Exceptional Dispatch or manual Dispatch Instruction quantity; and (2) final quantity of the Energy profile on the Intertie transaction's E-Tag.

11.31.1.2 Under/Over Delivery Quantity for Fifteen-Minute Dispatchable Resources

For Intertie transactions not addressed in Section 11.31.1.1, the Under/Over Delivery Quantity is the amount by which the HASP Advisory Schedule exceeds the quantity of the transmission profile of the E-Tag as of forty minutes prior to the Operating Hour. If the transmission profile of the E-Tag as of forty minutes prior to the Operating Hour is greater than or equal to the HASP Advisory Schedule, then there is no Under/Over Delivery Quantity for that Intertie transaction for that FMM interval.

In the case of an Exceptional Dispatch or other manual Dispatch Instruction, the Under/Over Delivery Quantity is the absolute value of the difference between the: (1) Exceptional Dispatch or manual Dispatch Instruction quantity; and (2) final quantity of the Energy profile on the Intertie transaction's E-Tag.

11.31.1.3 Exclusions from the Under/Over Delivery Quantity

The CAISO excludes from the Under/Over Delivery Quantity as calculated under either 11.31.1.1 or 11.31.1.2 any Energy that meets at least one of the following conditions:

(a) Energy that is not delivered because a Balancing Authority or EIM Transmission Service Provider curtailed the delivery for reliability reasons. The reliability-based curtailment must be reflected on the transaction's final E-Tag.

(b) Energy that is either delivered or not delivered as part of a valid ETC Self-Schedule or TOR Self-Schedule.

(c) Energy that is either delivered or not delivered from a Dynamic System Resource.

11.31.2 Determining the Under/Over Delivery Price

If ADS recognizes a Scheduling Coordinator as accepting an award at an Intertie (either because the Scheduling Coordinator actively accepts the award or because the Scheduling Coordinator fails to decline it) and the final quantity of the Energy profile on the Intertie transaction's E-Tag is not equal to the quantity accepted in ADS for any reason other than a reliability-based curtailment covered by Section 11.31.1.3, then the Under/Over Delivery Price is the greater of: (a) 75% of the LMP in the corresponding FMM interval at the intertie where the resource was scheduled; (b) 75% of the highest LMP among the three RTD intervals corresponding to the FMM interval at the intertie where the resource was scheduled; or (c) $15.00.

In all other cases, the Under/Over Delivery Price is the greater of: (a) 50% of the LMP in the corresponding FMM interval at the Intertie where the resource was scheduled; (b) 50% of the highest LMP among the three RTD intervals corresponding to the FMM interval at the Intertie where the resource was scheduled; or (c) $10.00.

11.31.3 Allocation of Under/Over Delivery Charges

For any Trading Day on which the CAISO assesses an Under/Over Delivery Charge, each Scheduling Coordinator receives a credit on its Settlement Statement for its share of the total Under/Over Delivery Charges collected for that day. The CAISO distributes the total charges collected pro rata based on a Scheduling Coordinator's Measured CAISO Demand on that day as a percent of total Measured CAISO Demand for the CAISO Balancing Authority Area on that day. Both the numerator and denominator of the pro rata calculation exclude demand served by ETCs and TORs.

Attachment B – Marked Tariff

Under/Over Delivery Charge for Intertie Schedule Deviations

California Independent System Operator Corporation

February 2, 2022

11.31 Under/Over Delivery Charge for Deviations from Intertie Awards

For each FMM interval, the CAISO assesses an Under/Over Delivery Charge to a Scheduling Coordinator with an Intertie transaction if the Intertie resource supporting that transaction has a positive Under/Over Delivery Quantity. The Under/Over Delivery Charge is the product of the Intertie resource's Under/Over Delivery Quantity in that FMM interval and the Under/Over Delivery Price for the resource's corresponding intertie in that FMM interval.

11.31.1 Determining the Under/Over Delivery Quantity

11.31.1.1 Under/Over Delivery Quantity for Hourly Block Schedules

For Self-Schedule Hourly Blocks for Energy and Ancillary Services and Economic Hourly Block Bids for Energy and Ancillary Services, and Economic Hourly Block Bids with Intra-Hour Option for Energy, the Under/Over Delivery Quantity is the absolute value of the difference between the: (1) HASP Block Intertie Schedule or HASP Advisory Schedule, as appropriate; and (2) final quantity of the Energy profile on the Intertie transaction's E-Tag. In the case of an Exceptional Dispatch or other manual Dispatch Instruction, the Under/Over Delivery Quantity is the absolute value of the difference between the: (1) Exceptional Dispatch or manual Dispatch Instruction quantity; and (2) final quantity of the Energy profile on the Intertie transaction's E-Tag.

11.31.1.2 Under/Over Delivery Quantity for Fifteen-Minute Dispatchable Resources

For Intertie transactions not addressed in Section 11.31.1.1, the Under/Over Delivery Quantity is the amount by which the HASP Advisory Schedule exceeds the quantity of the transmission profile of the E-Tag as of forty minutes prior to the Operating Hour. If the transmission profile of the E-Tag as of forty minutes prior to the Operating Hour is greater than or equal to the HASP Advisory Schedule, then there is no Under/Over Delivery Quantity for that Intertie transaction for that FMM interval.

In the case of an Exceptional Dispatch or other manual Dispatch Instruction, the Under/Over Delivery Quantity is the absolute value of the difference between the: (1) Exceptional Dispatch or manual Dispatch Instruction quantity; and (2) final quantity of the Energy profile on the Intertie transaction's E-Tag.

11.31.1.3 Exclusions from the Under/Over Delivery Quantity

The CAISO excludes from the Under/Over Delivery Quantity as calculated under either 11.31.1.1 or 11.31.1.2 any Energy that meets at least one of the following conditions:

(a) Energy that is not delivered because a Balancing Authority or EIM Transmission Service Provider curtailed the delivery for reliability reasons. The reliability-based curtailment must be reflected on the transaction's final E-Tag.

(b) Energy that is either delivered or not delivered as part of a valid ETC Self-Schedule or TOR Self-Schedule.

(c) Energy that is either delivered or not delivered from a Dynamic System Resource.

11.31.2 Determining the Under/Over Delivery Price

If ADS recognizes a Scheduling Coordinator as accepting an award at an Intertie (either because the Scheduling Coordinator actively accepts the award or because the Scheduling Coordinator fails to decline it) and the final quantity of the Energy profile on the Intertie transaction's E-Tag is not equal to the quantity accepted in ADS for any reason other than a reliability-based curtailment covered by Section 11.31.1.3~~awarded Energy is not delivered~~, then the Under/Over Delivery Price is the greater of: (a) 75% of the LMP in the corresponding FMM interval at the intertie where the resource was scheduled; (b) 75% of the highest LMP among the three RTD intervals corresponding to the FMM interval at the intertie where the resource was scheduled; or (c) $~~10.00~~15.00.

In all other cases, the Under/Over Delivery Price is the greater of: (a) 50% of the LMP in the corresponding FMM interval at the Intertie where the resource was scheduled; (b) 50% of the highest LMP among the three RTD intervals corresponding to the FMM interval at the Intertie where the resource was scheduled; or (c) $10.00.

11.31.3 Allocation of Under/Over Delivery Charges

For any Trading Day on which the CAISO assesses an Under/Over Delivery Charge, each Scheduling Coordinator receives a credit on its Settlement Statement for its share of the total Under/Over Delivery Charges collected for that day. The CAISO distributes the total charges collected pro rata based on a Scheduling Coordinator's Measured CAISO Demand on that day as a percent of total Measured CAISO Demand for the CAISO Balancing Authority Area on that day. Both the numerator and denominator of the pro rata calculation exclude demand served by ETCs and TORs.