



California ISO

Billing, Payment and Credit Enhancements

Issue Paper and Draft Final Proposal
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1.0 Executive Summary

This initiative aims to enhance CAISO's rules around billing, payment and credit, with the goal of reducing the risk of a financial default on market invoices and improving CAISO's ability to pay market participants after a default.

The payments that CAISO makes each week to market participant creditors depend on other market participants paying the amounts they owe on their market invoices. If a market participant defaults on its payment to CAISO, the result could be a loss that must be allocated to other market participants, including WEIM or (in the future) EDAM participants. This loss could be only temporary – a delay of full payment while CAISO works through the legal process for using collateral or otherwise collecting a debt, with the market then paid in full using the amounts collected. Or a loss could be permanent, if CAISO were ultimately unable to collect the full amount due from the defaulting market participant.

It has been more than 22 years since CAISO has needed to spread any default loss to market participants, either temporarily or permanently. But recent events have prompted CAISO to scrutinize its rules and search for possible improvements. This review began in the fall of 2021 as part of an effort to identify lessons from events in other energy markets in Texas and the UK. Specifically, CAISO staff considered the potential impact if California were to endure a period of sustained high energy prices, or if market participants were under other financial distress. We also considered lessons from the 2021 bankruptcy of an entity that served load in the CAISO's balancing authority area. In addition, in the summer of 2022 while we were evaluating these issues, there was a payment default by a small market participant that pointed to other areas for possible improvement.¹

While CAISO's billing and payment rules and its credit policy are fundamentally sound, our review identified several targeted improvements that should further enhance the resilience of the market during periods of financial stress. Except as noted, these changes represent a draft final proposal, which CAISO plans to bring to the ISO Board of Governors and the WEIM Governing Body for approval in November.

The proposed changes fall into four categories: preventing payment defaults from occurring, responding to defaults that have occurred, improving billing and payment rules generally, and improving CAISO's visibility into the financial condition of load-serving entities. The proposed changes in the first three categories are all presented as draft final proposals, because CAISO proposes straightforward rule changes that it anticipates will receive broad support. The proposed change in the fourth category (visibility into the financial condition of load-serving entities), has not yet been completely developed, and therefore is presented as an issue paper.

¹ See CAISO Market Notice dated November 22, 2022.

By way of an overview, the proposed changes are:

Section 2 - Changes to enhance CAISO's ability to prevent market defaults:

- Increasing financial resources available to cover potential defaults. An exception to the minimum capitalization requirement allows a scheduling coordinator that does not meet the minimum standard to qualify instead by posting an additional \$500,000. The proposal would eliminate a related rule that allows certain participants who use this exception to later decrease their posting to \$100,000.
- Improving CAISO's ability under bankruptcy law to use the legal doctrine of recoupment as opposed to setoff to collect amounts due. When a market payment is due to a market participant that has filed for bankruptcy, the doctrine of recoupment would give CAISO a stronger claim to withhold those amounts and apply them to the bankrupt market participant's debts to the market, if it applies. Accordingly, CAISO proposes rules that would ensure its financial relationship with each market participant is governed by a single agreement, which is a requirement for recoupment.

Section 3 - Changes to improve CAISO's ability to respond to a payment default or series of defaults:

- Revising rules about how CAISO would allocate default losses to market participants to eliminate the possibility of allocating losses to a new supplier that enters the market after a default or bankruptcy filing;
- Clarifying rules about the use of funds in CAISO's reserve accounts to cover defaults;
- Providing CAISO with discretion about how it invoices penalties for late payment or late collateral posting, which could otherwise unnecessarily increase the amount of a default that would be charged to the market;
- Authorizing CAISO to invoice Black Start Agreements separately from other market invoices and clarifying that any default would be allocated solely between the parties to the agreement, not spread more broadly to the market; and
- When CAISO invoices trading days in the distant past (*i.e.*, old market reruns), authorizing CAISO to write off small invoices up to a total of \$2,000 rather than continue to pursue collection if CAISO believes the cost of further collection efforts would exceed the benefit to the market, and instead pay the market with funds from the reserve accounts.

Sections 4 and 5 - Changes to update and improve the billing and payment process generally:

- Authorizing CAISO to accept payments and pay by any electronic means specified in the BPM, which could include the FedNow system, in place of the current tariff rules that limit payment to ACH or FedWire, and

- Clarifying various tariff provisions about billing and settlement and correcting drafting errors.

In addition to those proposals, Section 6 serves as an issue paper requesting input about the best way to increase visibility into financial conditions of market participants that serve load. Following stakeholder comment, CAISO plans to propose further tariff changes to address this issue in early 2024.

2.0 Reducing the Risk of Payment Default

If a market participant files for bankruptcy or otherwise becomes insolvent, two protections for the market are, first, any collateral that the distressed market participant has posted with CAISO and, second, CAISO's ability to use that collateral or any amounts that may come due to the market participant to pay its debts to the market. This section proposes enhancements to both of those protections.

2.1 Minimum Participation Requirement for Financial Participants: Tightening an Exception

Since FERC Order No. 741, every ISO and RTO imposes minimum capitalization requirements any market participant to engage directly with CAISO in settlement and billing.² In general, such market participants must have total assets exceeding \$10 million or a tangible net worth exceeding \$1 million. There is an exception for smaller entities that do not meet this requirement but wish to engage directly in settlement and billing. They may post additional cash, above and beyond the collateral required based on market activity. CAISO proposes to adjust this exception to provide that a small entity that satisfies the minimum capitalization requirement only by virtue of posting additional cash must maintain the full cash posting with CAISO unless it is able to meet the minimum capitalization requirement in a different way.

This exception for small participants currently allows smaller market participants to engage directly in settlement and billing by posting an additional \$500,000 cash, but it allows them to later reduce this amount to \$100,000. The reduction is available if the participant maintains an "estimated aggregate liability" less than \$100,000 over a period of six months. See § 12.1(b)(iii)(2)-(3). CAISO proposes to eliminate this second part of the exception, and thus to require entities that avail themselves of the exception to maintain the full \$500,000 posting.

This proposal stems from the September 27, 2022, payment default of a small market participant, which indicated that the current requirement is insufficient to protect the market. The bankruptcy participant, which had been a virtual bidder, ceased operations without filing for bankruptcy. It left CAISO with its collateral, which exceeded its "estimated aggregate liability" during the time it participated in the market, plus the

² That is, to qualify as a scheduling coordinator, EIM scheduling coordinator, CRR entity or participating transmission owner.

\$100,000 posted to meet the minimum participation requirement. But these amounts combined did not cover the full balance due, which exceeded the participant's total postings by \$7,233. CAISO was fortunate to avoid having to spread a loss to the market.³ In other words, the minimum participation requirement of \$100,000 was insufficient to deter a participant from deciding to walk away from its obligations.

In the process of reviewing lessons learned, CAISO has come to conclude that it should not allow a market participant to decrease its posting to \$100,000. One reason is a recognition that this rule could be exploited if a market participant were to invest six months in transacting at low levels in order to reduce its posting requirement, and only then enter larger transactions that leave the CAISO market holding most of the downside risk. Another reason is that CAISO's requirement is lower than other ISOs and RTOs, which generally require \$500,000 for entities that hold CRRs or participate in virtual bidding.

CAISO considered proposing different thresholds depending whether an entity may hold CRRs or engage in virtual bidding, with lower requirements for scheduling coordinators that buy and sell energy only. But CAISO ultimately concluded that such a rule is necessary. Entities that participate directly in settlement and billing overwhelmingly meet the general requirement of \$10 million total assets or \$1 million tangible net worth. Those few participants that appear to rely on the exception have shown an ability to post \$500,000, and, for the most part, are participants in financial transactions. For these reasons, CAISO is proposing to simplify the rule and require that an entity that is authorized to participate directly in settlement and billing only by virtue of the \$500,000 posting must maintain that posting.

2.2 Enhancing CAISO's Ability to Recoup by Designating a Single Agreement to Govern Settlement, Billing and Payment

This section proposes that when a market participant has multiple agreements that could govern its financial relationship with CAISO, tariff rules will designate one of those agreements as controlling with respect to settlement, billing and payment. Such a designation will reduce the risk of further payment defaults after a bankruptcy filing by expanding CAISO's ability to employ the bankruptcy law doctrine of "recoupment" (in contrast to "setoff") to collect unpaid amounts. It would also reduce the risk of unnecessary litigation in a bankruptcy court.

Only some of the multiple types of agreements that a market participant may have with CAISO enable the participant to engage directly with CAISO in the settlement and billing process. Specifically, scheduling coordinators, EIM scheduling coordinators, CRR entities and participating transmission owners transact directly with CAISO. Other types of market participants, such as participating generators, must either engage a

³ CAISO was able to avoid spreading the loss over the market because the shortfall was covered temporarily with funds from the penalty reserve account. Over time, CAISO recouped the amounts due from funds that otherwise would have been paid to the defaulting market participant and used these sums to replenish the penalty reserve account.

scheduling coordinator to handle this process for them, or else enter an additional agreement with CAISO in order to handle billing and payment themselves.

Many market participants have more than one of the types of agreement that enable settlement and billing with CAISO. If such a market participant were to file for bankruptcy, issues could arise regarding which of its multiple agreements governs a particular set of market transactions. Uncertainty about the governing contract could hinder CAISO’s ability to collect amounts due and pay the market. To avoid this possibility, CAISO proposes to amend the tariff to clarify which among the multiple agreements with a market participant that could govern settlements, billing and payment will in fact govern these processes. This change would benefit the market by enhancing CAISO’s ability to collect any late payments.

In particular, this change would help the market by expanding CAISO’s ability to employ recoupment. If a market participant has filed for bankruptcy and defaulted on payments to the market, and then subsequently is due to receive payment from the market, CAISO would seek to use those funds to pay the debt to the market (or to reimburse the reserve account). One of two legal doctrines would govern CAISO’s effort: recoupment or setoff. Recoupment would be preferable for the market because it would authorize CAISO to take action immediately and authorize action in a broader range of possible scenarios, to better protect the market in the future. Recoupment applies, however, only when the financial transactions are governed by a single contract. Otherwise, the law governing setoff would apply, which requires advance authorization from the bankruptcy court before the funds could be used, thus delaying payment. The proposed rule change would support the application of recoupment in this scenario, supporting collection and avoiding unnecessary legal costs.

Accordingly, when a single entity is party to multiple agreements that implicate settlement, billing and payment, the tariff would specify that all of the entity’s settlements and bills will be assigned to one particular agreement. For example, if an entity has both a CRR Entity agreement, which enables them to hold CRRs only, and a Scheduling Coordinator Agreement, the tariff would specify that the more general purpose agreement would govern all settlements, billing and payment of that entity. In this case it would be the Scheduling Coordinator Agreement.

The full set of rules to be included in the tariff would be as follows:

If an entity is party to the following agreements	This agreement will control billing, payment and settlements under either agreement during the period that both are in effect
Scheduling Coordinator Agreement and CRR Entity Agreement	Scheduling Coordinator Agreement
Scheduling Coordinator Agreement and EIM Scheduling Coordinator Agreement	Scheduling Coordinator Agreement
CRR Entity Agreement and EIM Scheduling Coordinator Agreement	EIM Scheduling Coordinator Agreement
Transmission Control Agreement and Scheduling Coordinator Agreement	Scheduling Coordinator Agreement

CRR Entity Agreement and Transmission Control Agreement	Transmission Control Agreement
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If a single entity is party to three or more such agreements, multiple rules would apply to designate a single agreement that controls settlement and billing.

3.0 Enhancing CAISO’s Ability to Respond to Defaults

If a market participant defaults on a weekly invoice and the balance cannot be covered immediately using its collateral, CAISO has two tools to clear the market. First, CAISO may use funds in its reserve accounts. If there are not sufficient funds in a reserve account to clear the market, it must allocate a payment shortfall to market participants. Such an allocation would impose significant administrative costs on CAISO and market participants, as explained below. Accordingly, this section proposes a range of enhancements intended to minimize the number of occasions when CAISO must allocate a shortfall to the market in a situation. It also proposes enhancements to the process for allocating default losses so that this step is handled using the most current data and in a way that minimizes disruption.

3.1 The Reserve Accounts: Clarifying Rules about Replenishment

The tariff requires CAISO to establish a reserve account to hold funds to be used if a market participant defaults as a way to clear the market temporarily, subject to later replenishing the reserve account. This “CAISO reserve account” currently holds approximately \$1.8 million. There is also a “penalty reserve account” with a much smaller balance, which has a similar function.⁴

CAISO Reserve Account

Generally speaking, the CAISO reserve account is replenished either after CAISO collects the default (using the collected funds) or after CAISO determines that it has exhausted reasonable collection possibilities. In the latter case, the account is replenished by allocating the final shortfall to the market and transferring those funds to the account.

This section proposes to clarify the rules about replenishment of the CAISO reserve account to state more clearly that CAISO need not replenish the account, and instead

⁴ See generally Section 11.29.9.6.4, which explains that the penalty reserve account will be funded by penalties collected from market participants that are late in paying or in posting collateral. In contrast to the CAISO reserve account, the penalty reserve account does not have to be replenished after use, and instead can cover a default loss permanently if the default is not collected. See *California Independent System Operator Corp.*, Order Conditionally Accepting Tariff Revisions, 131 FERC ¶ 61,009 (April 6, 2010) PP 30-32. In other words, if CAISO were unable to collect the full payment default to replenish the funds, there would be no need to allocate the net loss to the market if there were sufficient funds in the penalty reserve account to make up the shortfall.

may continue to use the funds to cover the default losses, so long as CAISO expects to collect from the market participant. This would eliminate ambiguous language that could be read to suggest that CAISO must quickly replenish the account by charging losses to market participants, even in situations where CAISO expects collection efforts to succeed later.

The CAISO reserve account and the “penalty reserve account” benefit the market by avoiding the need to allocate a payment shortfall to market participants unnecessarily. Without these accounts, CAISO might need to allocate a payment default to the market and then later – after collection of the amounts due – process payment of the amounts collected. Both steps would incur significant administrative costs for CAISO and for market participants, and neither would be necessary with sufficient funds in a reserve account.

The bankruptcy of Lehman Brothers in 2008 provides a good example of how the CAISO reserve account has been used. A Lehman affiliate failed to pay approximately \$15,000 in CAISO market invoices. Although CAISO was holding collateral to cover the unpaid balance, it needed permission from the bankruptcy court before it could use the funds. Accordingly, CAISO instead used funds in the CAISO reserve account to pay the market, and later obtained authorization from the bankruptcy court to use Lehman’s collateral to repay the CAISO reserve account. This process avoided both an unnecessary shortfall allocation, and the need for market participants to account for a collection of long-overdue funds. This situation – i.e., where CAISO is holding collateral sufficient to cover a payment default, but is not yet authorized to apply the collateral – is likely to recur if there are future bankruptcy filings by market participants.

Consistent with longstanding CAISO practice and tariff language that had been in place since startup, CAISO replenishes the reserve account for any funds used to cover a default. This replenishment is triggered when the CAISO either collects the default amount or concludes that reasonable collection efforts will be fruitless. In the latter case, the CAISO would charge the market by allocating the loss, and transfer the funds collected to the reserve. This allows CAISO to delay the process of allocating a default amount to the market during the time it has reason to believe collection efforts may succeed, including while CAISO is holding collateral sufficient to cover the default but waiting for a ruling from the bankruptcy court that allows it to set off the collateral to pay the debt.

The tariff language governing replenishment of the market reserve account was amended in 2011 as part of a settlement agreement relating to the allocation of default losses. This amendment included language about replenishing the account “on the next practicable invoices,”⁵ which could be misinterpreted to suggest that CAISO must either

⁵ The change that is central to this particular issue is highlighted:

11.29.9.6.2.1 Replenishing the CAISO Reserve Account

If the CAISO has debited the CAISO Reserve Account then:

collect on the default or charge the loss to the market on the first possible invoice available to do so. Such an approach would undermine the effective use of the CAISO reserve account, and contradict how CAISO used the reserve account before, during and after that amendment.

To clarify the rules going forward, CAISO proposes to modify Section 11.29.9.6.2.1(c) to be consistent with the historical use of the account by deleting the reference to “on the next practicable Invoices.” In addition, CAISO proposes to clarify language about the steps it must take to replenish the account by collecting a payment default. Section 11.29.9.6.2 states CAISO shall “as soon as possible take any necessary steps” to replenish the reserve account. This may not be consistent with the general rule regarding CAISO’s effort to collect in Section 11.29.20, which requires CAISO to take commercially reasonable steps. To harmonize these two sections, CAISO proposes to amend the final sentence of Section 11.29.9.6.2 to read as follows:

“CAISO shall as soon as possible ~~thereafter take any necessary steps~~ **begin collection efforts consistent with Section 11.29.20** against the defaulting Scheduling Coordinator or CRR Holder pursuant to Section 12 including making any calculations or taking any other appropriate action **in order** ... to replenish the CAISO Reserve Account.”

Penalty Reserve Account

As noted above, the penalty reserve account does not have to be replenished after use, and instead can cover a default loss permanently if the default is not collected. See *California Independent System Operator Corp.*, Order Conditionally Accepting Tariff Revisions, 131 FERC ¶ 61,009 (April 6, 2010) PP 30-32. In other words, if CAISO were unable to collect the payment default to replenish the funds, there would be no need to

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- (a) If, after the CAISO has debited the CAISO Reserve Account on a Payment Date, the CAISO Bank receives a payment from a CAISO Debtor which has not been (but should have been, if it had been received on a timely basis) credited to the CAISO Clearing Account by 10:00 am on the Payment Date and which required the debiting of the CAISO Reserve Account, such payment shall be credited to the CAISO Reserve Account.
 - (b) The proceeds of any enforcement of Financial Security and/or amounts recovered under proceedings shall be credited to the CAISO Reserve Account.
 - (c) If, after taking reasonable action, the CAISO determines that the default amount (or any part) and/or Interest cannot be recovered **on the next practicable Invoices**, the CAISO shall notify Market Participants of the identity of the defaulting Business Associate together with the unrecoverable amounts and such amounts shall be allocated in accordance with Section 11.29.17 of the CAISO Tariff with corresponding credits to the CAISO Reserve Account.

allocate the net loss to the market if there were sufficient funds in the penalty reserve account to make up the shortfall.

Consistent with this intention and historical practice, CAISO proposes to delete Section 11.29.9.6.4.1(c), which has language suggesting that losses covered by this account must be replenished and charged to the market.

3.2 Use of Reserve Accounts to Prevent Payment Shortfall: Adding Flexibility to Optimize Value to the Market

The value of the reserve accounts is to avoid allocating a default loss to the market unnecessarily, which would require significant administrative costs for both CAISO and affected market participants. This section proposes rules to optimize use of the reserve account during a period when repeated defaults are expected. The goal is to enable CAISO to reduce the number of times it would need to spread default losses to market participants.

As noted above, the CAISO reserve account currently holds approximately \$1.8 million that can be used to help clear the market in the event of a payment default. If, after borrowing from the reserve account to support a clearing, CAISO determines that the default “cannot be recovered,” § 11.29.9.6.2.1(c), then it must allocate the loss to the market in order to reimburse the reserve account. In other words, the funds in the reserve account do not cover market defaults permanently, only temporarily as cash flow measure. This arrangement nevertheless benefits the market by avoiding unnecessary small payment defaults that would otherwise impose substantial administrative costs on CAISO and market participants.

Currently the tariff indicates that use of reserve account funds is mandatory to cover a payment default. See tariff §§ 11.29.13.4 (reserve account) and 11.29.9.6.4.1 (penalty reserve). While this rule has served the market well to date, it could become disadvantageous if the amount of a payment default were to exceed the balance of the reserve accounts, which has not happened since the crisis of 2000-01. In such a case, use of a reserve account would not result in full payment to the market, but instead only reduce the amount of the shortfall that has to be allocated. While this would provide some benefit to market participants by reducing the amount of the current default, it would also exhaust the full balance of the reserve accounts and leave no funds remaining to help prevent further payment shortfalls. If further payment defaults were expected, which could be the case in the event a market participant had filed for bankruptcy,⁶ the market would be better overall off if the reserve accounts were used

⁶ Unless a bankrupt debtor obtains special permission to continue paying CAISO in the ordinary course of business, defaults would be possible for up to two years after the bankruptcy filing date, as pre-petition trading days are recalculated, if those recalculations result in charges to the debtor. While CAISO should be holding collateral from the bankrupt debtor that it can eventually access to pay these charges, there could be a delay in obtaining permission from the bankruptcy court to use the collateral, resulting in temporary shortfalls.

only when they can cover the full payment default. This use of the funds would avoid a short-payment and reduce the administrative burden associated with allocating a shortfall.

For these reasons, CAISO proposes the following additional tariff rules:

- When the amount of a payment default or combined defaults on a particular payment day exceeds the combined balances in the reserve accounts, the use of those reserve accounts to help clear the market should not be mandatory, but rather at the discretion of CAISO.
- When the amount of a payment default or combined defaults on a particular payment day exceeds the balance of the penalty reserve account, the use of the funds in the penalty reserve account should be discretionary.

The tariff would also require CAISO, in exercising its discretion, to use reasonable diligence to determine what use of reserve account funds would most benefit the market overall.

The proposed new rules would also preclude CAISO from drawing down the balance in the CAISO reserve account below \$1,000 when it is using funds to cover a market invoice default. Preserving this minimum balance would help ensure that funds are available to clear the market in the scenario discussed below in Section 6.1 of this paper.

3.3 Refining Rules about Allocating Default Losses

In 2010 and 2011, in response to a complaint at FERC, CAISO agreed to amend its tariff rules about allocating any market losses that may result from a payment default. Until then, the tariff had allocated default losses entirely to market creditors, meaning participants that were due money on the payment date when the default occurred. Payments to these market creditors were reduced pro rata to cover the shortfall. To implement the settlement agreement, CAISO amended the tariff in 2011 to allocate losses more broadly across the entire market, including net debtors, based on each market participant's overall activity level. This rule requires CAISO to calculate on a quarterly basis allocation percentages that show how any default losses would be allocated during the coming quarter. See Section 11.29.17.

If it became necessary to allocate a loss, CAISO would follow a two-step process. It would initially allocate any shortfall to market creditors pro rata, consistent with its historic practice. Then, on a subsequent settlement statement, CAISO would issue charges and credits to re-allocate the loss to the entire market according to the allocation percentages calculated pursuant to Section 11.29.17.

Avoiding Allocations to New Market Participants

CAISO proposes to adjust the rules about allocating default losses to the market to ensure that new market participants that enter the market after a bankruptcy filing or

other payment default will not be allocated default losses for trading days before they joined the market.

In reviewing scenarios with sustained financial stress on the market, CAISO has identified a possible gap in this process that stems from the fact that losses are allocated according to the percentages for “the most current calendar quarter.” Section 11.29.17.2.1. This rule could in some circumstances spread default losses to new market participants that have entered the market after the defaulting market participant stopped paying or filed for bankruptcy. These new participants would be at risk of sharing a default loss, albeit a small part, even if the defaulting market participant filed for bankruptcy before the new participant joined the market, and even if the defaulting participant was solvent – post-bankruptcy filing – by the time the new supplier entered the market.

The risk arises because of CAISO’s settlement cycle, in which settlements are subject to adjustment for up to two years after a trading day. Even the later recalculation settlement statements, long after a bankruptcy proceeding has been filed, are subject to a default risk because they involve transactions on a pre-petition trading date. If a defaulting market participant were to receive a charge on a later recalculation statement, such as the T+11M, T+21M or T+24M, and had not obtained special approval from the bankruptcy court to pay pre-petition invoices from the CAISO, it could default on these later recalculation invoices. Under the currently effective rules, a portion of the default amounts could be allocated to market participants who joined after the defaulting participant filed for bankruptcy or left the market. This potential seems undesirable, however small the risk that it may occur, and regardless how low the percentage allocation to this participant.

To address the potential problem and improve incentives for new suppliers to enter the market during a period of financial distress, CAISO proposes to revise the rule that losses will be allocated according to the percentage shares for “the most current calendar quarter.” See § 11.29.17.2.1. Default losses should be allocated using the allocation percentages in effect on the earliest date for which the defaulting market participant failed to pay its obligations. This would be the payment date when the market participant first defaulted or, if the market participant that filed for bankruptcy, the last full trading date before the bankruptcy petition is filed, if that date was earlier.

Under the proposed rule, all default losses resulting from a bankruptcy or other insolvency would be allocated according to the default loss percentages that were in effect at the time the bankruptcy was filed or the other insolvency began. This rule is also consistent with the intentions of the 2011 amendment, but will avoid the possibility that losses might be allocated to new participants who joined the market after those events.

New Allocation Percentages

CAISO calculates new loss allocation percentages for each market participant on the first business day of each quarter, as required by Section 11.29.17.2.7. The tariff specifies that the percentages will be calculated using market and settlement data from the most recent four quarters for which data is available from the second settlement statement. See Section 11.29.17.2.6(a)(iv). Through 2020, this meant the data would

exclude only the quarter that just ended because the second settlement statement was issued after 12 business days. This changed, however, after the settlement timeline revision in 2021, and the data set now excludes the two most recent quarters. The change occurred because the second settlement statement is now issued at T+70B, which takes more than 90 calendar days, and thus is not available for more than a quarter.

After gaining experience with the new settlement timelines, CAISO notes that while the T+70B settlements produce more accurate data than the initial settlements at T+9B, the initial settlement statements are reasonably accurate. Accordingly, in order to use more current data in the allocation percentages, CAISO proposes to change Section 11.29.17.2.6(a)(iv) as follows:

For each payment default that occurs in any subsequent calendar quarter in which Section 11.29.17.2.1 is in effect, the applicable Default Look-Back Period will be **a total of four quarters**: the most recent ~~three~~^{four} (3) full calendar quarters for which T+70B data are available, **plus the following quarter using T+9B data from that quarter.**

Conforming changes would be necessary elsewhere in Section 11.29.17.2.

Rules about Use of Funds Collected

CAISO proposes to clarify the rules that govern how, after a payment default has been allocated to the market, CAISO should distribute any amounts that it later collects from the defaulting market participant. Currently, this issue is addressed in several tariff sections, including Sections 11.29.17.3, 11.29.13.8, 11.29.13.10, 11.29.9.6.2.

CAISO proposes to clarify these sections so that they consistently provide the following priorities. Any collections should be used and distributed to pay defaults caused by the debtor from whom the funds are collected, using the following priorities for apply the funds:

- First to any CAISO GMC that was not collected as a result of this debtor's defaults and then to any other internal accounts, such as the balancing accounts for CRRs or RAIM;
- Second to the CAISO reserve account, to the extent it was drawn down to cover a payment default by that market participant (but not to the CAISO penalty reserve account at this point);
- Third, to market participants that were allocated part of the shortfall on that invoice, beginning on the oldest unpaid invoice first.

To the extent CAISO collects small amounts, less than \$5,000, it will have discretion to hold those amounts to await further collections, to reduce administrative costs of distributions, consistent with section 11.29.17.3 (1).

3.4 Penalties may be Invoiced Separately to Avoid Increasing Default Amount

This section proposes to authorize CAISO to invoice “late payment” penalties separately from the remainder of the market when doing so would reduce the size of an expected payment default that would have to be spread to the market.

The tariff imposes penalties on market participants that are late either paying a market invoice or in posting collateral.⁷ While these penalties serve as an incentive for timely payments and postings, they could also exacerbate a payment default because the amount of the penalties can accumulate rapidly when a market participant that has not filed for bankruptcy stops paying and responding to collateral calls. Accumulated penalties could increase the amount of a future payment default, which could result in CAISO spreading a loss to the market unnecessarily.

The risk of penalties causing a default loss that would not occur otherwise arises only in a specific situation. Ordinarily, when the total penalties assessed to an insolvent market participant are small, there should be enough funds in the penalty reserve account to cover the default. Such a default would not affect the market, even indirectly, because the proceeds from the charges, covered by funds from the penalty reserve, end up being returned to that fund. However, if the total amount of penalties that results from a series of defaults exceeds the balance of the penalty reserve fund, then the amount of the default will eventually have to be charged to other market participants. Regardless how small the amount of the loss that is charged to the market, it will result in administrative costs for both CAISO and each market participant.

To avoid this possibility, CAISO proposes that if a market participant has defaulted on its most recent market invoice, then CAISO will have discretion to handle any further penalties differently. Specifically, CAISO may record these additional penalties but settle and invoice them separately from other market activities, similar to the authorization to invoice separately certain other charges under Section 11.29.10.3. As a result, the full amount of any default loss would be borne by the penalty reserve account rather than market participants. The concept of issuing a separate invoice is discussed further in the next section.

3.5 Separate Invoices: Clarify Significance and Use for Black Start Agreements

CAISO is authorized to issue certain invoices for market activity separately from other market invoices. See sections 11.29.10.3 and 11.29.7.3.6. The use of separate invoices stems from the legacy method of allocating default losses to market creditors exclusively, without re-allocating them to the entire market. The purpose of separate invoices is to ensure that any default loss would affect only a certain segment of the market – specifically, the corresponding creditors for the charges on the separate

⁷ The penalty for paying invoices late is imposed by section 11.29.14(c). The penalty for posting collateral late is imposed by Section 12.5.2(c). These penalties are never less than \$1,000. See Section 11.29.14.

invoice. For example, in the section just above, CAISO proposes that in certain circumstances late payment penalties would be invoiced separately from the market to ensure that default losses on late payment penalties are allocated entirely to the penalty reserve account. This would avoid the possibility that unpaid penalties would cause (or exacerbate) a shortfall that would have to be spread to the market.

On a related note, a sentence in Section 11.29.17 could be read as undermining the authorization to invoice certain charges separately. This sentence dates back to the 2011 tariff amendment about allocation of default losses, and indicates that all default losses will be re-allocated to the entire market. To reconcile this section with CAISO's authority to issue separate invoices, CAISO proposes to add the highlighted language:

Except to the extent a payment default is for an invoice that was separate from market invoices under Section 11.29.10.3, eEach payment default amount allocated to CAISO Creditors through a shortfall allocation under this Section 11.29.17.1 that remains unpaid by the defaulting CAISO Debtor will be allocated as set forth in Section 11.29.17.2.

Another situation where separate invoicing may be appropriate involves Black Start Agreements. The financial obligations that arise under Black Start Agreements are "reliability services costs" that are chargeable to and recovered by the transmission owner in whose service territory the black start generator is located. Recognizing this, the Black Start Agreements reflect that the generator will look exclusively to the transmission owner for payment of the black start services (as opposed to the energy the generator may also provide). To support this arrangement, the CAISO proposes to add invoices for black start resources to the list of charges that may be invoiced separately. To the extent that separate invoicing is consistent with the Black Start Agreement, this would involve CAISO issuing an invoice to the transmission owner for the black start services and an offsetting payment advice to the black start generator. Both the invoice and the payment advice would be separate from other market invoices so that, in the event of a default by the transmission owner, CAISO would allocate the payment shortfall to the black start generator and not to the rest of the market.

3.6 Out-of-Cycle Invoices: Options to Avoid Inefficient Collections and Pay Market from Reserve Account

This section proposes an efficiency enhancement in the unusual situation where CAISO issues invoices after the ordinary two-year settlement cycle has completed and market participants default on those invoices. CAISO proposes that it should have the option if necessary to write off small invoices instead of pursuing collection if it concludes that collection efforts may not benefit the market.

If a market participant defaults on a market invoice and the shortfall is small enough to be covered by the reserve accounts, CAISO must pursue reasonable collection efforts and either collect the payment in full or, after concluding it cannot, allocate the remaining shortfall to the market. See § 11.29.20 (requires "commercially reasonable efforts" to collect from defaulting market participant) and § 11.29.9.6.2.1(c) (if after taking

reasonable action CAISO determines that the default “cannot be recovered,” it must allocate the shortfall to the market and repay the reserve account). In ordinary circumstances, these rules make sense.

Occasionally, however, CAISO must invoice a settlement adjustment long after all scheduled recalculations have concluded. See *generally* § 11.29.7.3.2 (unscheduled directed recalculation settlement statements). A recent example involved invoices directed in litigation over “Amendment 60,” see FERC Docket ER04-835, which required settlement adjustment to trading days more than a decade old. In this type of situation, collection can become more difficult for a variety of reasons, including the fact that some market participants have terminated their agreements with CAISO and ceased operating. While these companies remain liable to pay, the time required in this situation to collect on small invoices can in some cases be better used. The tariff currently requires CAISO to choose between two undesirable options: collection efforts that will not benefit the market because their cost exceeds the low amounts at stake, or allocating the small shortfall to the market, which would impose significant administrative costs on both CAISO and market participants.

To offer a more efficient option in this unlikely scenario, CAISO proposes to amend the tariff to provide that, if CAISO issues invoices that reflect settlement statements issued after the last scheduled recalculation, currently at T+24M, then CAISO has the option, after pursuing commercially reasonable collection efforts, of writing off invoices that total less than \$2000 and paying creditors using any available funds from the reserve accounts. The authority to make payment to creditors from the reserve account, without a need to later replenish the reserve account, would be new. If this option were invoked, a market notice would be required. The tariff would also state that CAISO should exercise this option only if it believes that it would reduce administrative costs for CAISO and market participants collectively that would exceed the value of the funds used from the reserve account to pay the invoices.

4.0 New Payment Options, Such as FedNow

To enable CAISO to adapt more readily to new payment systems, such as FedNow, this section proposes to revise current tariff rules about the means for payment. It would authorize payment by any electronic means specified in the Business Practice Manual.

The tariff currently requires that all payments on market invoices must be made by either FedWire or ACH. See Sections 11.1.3(d) and 11.29.9.3; accord Section 11.29.3(c) (prepayments). In July 2023 the the Federal Reserve began offering FedNow, which is a real-time payment service designed to provide speed, efficiency and safety of payments around the clock. FedNow payments will settle instantaneously, thereby potentially providing economic benefits for CAISO and its customers by allowing time-sensitive payments to be made whenever needed and providing more flexibility to manage cash flows. The launch of FedNow could lead to additional market related services from other financial institutions that could benefit the CAISO market.

CAISO Finance is reviewing the FedNow service to determine the risks and opportunities related to market clearing and collateral payments. To the extent that CAISO decides to authorize the use of FedNow or similar services, it desires to avoid legal uncertainty about whether the tariff authorizes payments by these means, and afford flexibility to modify the approved means of payment. Accordingly, CAISO proposes to amend the tariff sections referenced above to clarify that payment to and from a market participant may be made by any electronic means that is authorized in the Business Practice Manual. Initially, the Business Practice Manual would continue the current practice of allowing payment by FedWire and ACH.

5.0 Other Tariff Clarifications and Corrections

The section proposes to clarify or correct tariff language related to the billing and payment process. None of these proposals would substantively change CAISO rules or policy.

5.1 Imbalances Resulting from Invoices Less than \$10

This section proposes to expressly authorize CAISO to use the reserve account to resolve cash imbalances that result from the rule eliminating invoices and payment advices in amounts under ten dollars.

CAISO issues invoices (and payment advices) every Wednesday based on each recipient's net amount payable (or receivable) across all settlement statements issued during the relevant days. Any invoice or payment advice in an amount less than ten dollars is adjusted to zero, and no payment is due to or from that market participant. See Section 11.29.7.2.1. This rule was adopted to avoid inefficient payments at a time when the tariff permitted payment only by Fedwire, which cost more than \$10 to send.

Without this rule eliminating small invoices, the cash flow on any payment date should always net to zero, assuming CAISO receives payment in full. As a result of eliminating small invoices, however, cash flow can be slightly out of balance, with either a deficiency or a surplus. CAISO's practice has been to fund any shortfall from the reserve account, as required by the tariff. See Section § 11.29.9.6.1 ("If required, the CAISO shall instruct the CAISO Bank to transfer amounts from the CAISO Reserve Account to enable the CAISO Clearing Account to clear."); *accord* § 11.29.9.6.2. When the imbalance results in CAISO receiving more funds than necessary to clear the market, CAISO places these funds in the reserve account. Though not expressly addressed in the tariff, this latter practice effectively balances the inflows and outflows, which is consistent with the purpose of the reserve account to resolve short-term cash flow issues.

CAISO proposes to clarify the tariff rules to more clearly authorize this practice, including the transfer to the reserve account of any excess received in the CAISO Clearing Account.

5.2 Definition of “Settlement Statement”

CAISO proposes to adjust the defined term “Settlement Statement” to add references to new settlement statements added in 2021, and to reflect the fact that FERC may direct CAISO to issue settlement statements. The current definition pre-dates CAISO’s 2021 tariff amendment that changed the timelines for settlement recalculations. It also lacks an express reference to the fact that FERC may authorize additional recalculation settlement statements. See tariff 11.29.7.3.2.

Draft revision

Any one of the following: Initial Settlement Statement T+3B, **Initial Settlement Statement T+9B**, Recalculation Settlement Statement T+12B, Recalculation Settlement Statement T+55B, **Recalculation Settlement Statement T+70B**, Recalculation Settlement Statement T+9M, **Recalculation Settlement Statement T+11M** Recalculation Settlement Statement T+18M, **Recalculation Settlement Statement T+11M, Recalculation Settlement Statement T+21M, Recalculation Settlement Statement T+24M**, Recalculation Settlement Statement T+33M, Recalculation Settlement Statement T+36M, Unscheduled Reissue Recalculation Settlement Statement, or any other Recalculation Settlement Statement authorized by the CAISO Governing Board **or FERC**.

5.3 Basis of Billing and Payment

The tariff currently includes two separate sections with similar statements to the effect that settlement statements form the basis for the billing and payment process. Using varying language to describe the same issue could pose a legal risk. To mitigate that risk, CAISO proposes to delete the first of the two sections, Section 11.29.1, and to clarify the language of the other, Section 11.29.7.2.

The section that would be deleted currently reads as follows:

11.29.1 Billing and Payment Process Based on Settlement Statement

The billing and payment process shall be based on the issuance of Initial Settlement Statement T+9B and Recalculation Settlement Statements.

This concept is reflected in Section 11.29.7.2, which uses more expansive language. Thus the deletion of Section 11.29.1 should have no negative effect.

In addition, CAISO proposes the following clarifications to Section 11.29.7.2 to more accurately reflect that the second settlement statement, issued at T+70B, recalculates all charges instead of showing incremental changes. In other words, it adjusts the initial settlement statement, but not necessarily each charge in that statement:

The Initial Settlement Statement T+9B and any Recalculation Settlement Statement will constitute the basis for billing in accordance with the CAISO Tariff. The Initial Settlement Statement T+9B will constitute the basis for billing ~~for all charges~~ in the first instance. The Recalculation Settlement Statements will

constitute the basis for billing for adjustments to ~~charges set forth in the Initial Settlement Statement T+9B.~~

5.4 Clarification of Terminology: Settlement versus Billing and Payment

CAISO proposes to clarify the terminology in certain sections about settlement that currently use the term “pay,” and use instead terms that more accurately describe the settlement function such as “credit,” “debit” or “charge.”

Section 11 of the tariff addresses two distinct CAISO functions. One is settlements, meaning the calculation of settlements and charges that appear on settlement statements. The other concept is billing, which is addressed mainly in Section 11.29. While settlements and billing are related in the sense that settlements are in input into the billing process, the two processes are different. Settlement is a matter of accounting whereas billing involves cash flow. The issuance of a settlement credit does not, by itself, cause cash to flow. For example, a market participant with an accounting credit may have more charges than credits for that payment date. In technical terms, payments result from invoices and payment advices, which reflect the net of several settlement statements.

Certain provisions in Section 11 that concern the settlements function use the term “payment” where the words “credit,” “debit” or “charge” would be more appropriate. A good illustration of the issue in Section 11.14, about neutrality. The CAISO issues neutrality charges or credits on each settlement statement to ensure that the settlement statements for a given trading day will net to zero. Section 11.14, however, refers to these settlements adjustments as “payments.” To avoid confusion or the possibility of unnecessary litigation, CAISO proposes to clarify these provisions as illustrated by these proposed changes to Section 11.14:

11.14 Neutrality

The CAISO shall be authorized to ~~issue~~ **levy** additional charges or ~~make additional payments~~ **credits** as special adjustments in regard to:

- (a) amounts required to reach an accounting trial balance of zero in the course of the Settlement process in the event that the charges calculated as due from CAISO Debtors are lower than ~~credits payments~~ calculated as due to the CAISO Creditors for the same Trading Day, which includes any amounts required to round up any invoice amount expressed in dollars and cents to the nearest whole dollar amount. These charges will be allocated amongst the Scheduling Coordinators who traded on that Trading Day pro rata to their Measured Demand in MWh of Energy for that Trading Day on a monthly basis. In the event that the charges due from CAISO Debtors are higher than the ~~credits issued payments due to CAISO Creditors~~, the CAISO shall ~~allocate a credit payment to the Scheduling Coordinators who traded on that Trading Day pro rata to their Measured Demand in MWh of Energy for that Trading Day on a monthly basis; and~~

This will also require changes to Section 11.1.3 and how the term “receive” is used in the Section 11. Assuming the concept is acceptable, CAISO will prepare a draft of the proposed changes during the review of tariff language. In the meantime, CAISO seeks stakeholder input on this proposed change.

5.5 Deletion of Extraneous Language

This section proposes to delete extraneous language that survived erroneously from an earlier era. Specifically, CAISO proposes to remove the phrase “on a monthly basis,” which appears twice in the phrase “Energy for that Trading Day on a monthly basis.” In each case, the language should read simply “Energy for that Trading Day,” because the referenced charge is daily.

The revised language is in Section 11.14, which could also be affected by the proposed change described just above in Section 5.4:

These charges will be allocated amongst the Scheduling Coordinators who traded on that Trading Day pro rata to their Measured Demand in MWh of Energy for that Trading Day ~~on a monthly basis~~. In the event that the charges due from CAISO Debtors are higher than the payments due to CAISO Creditors, the CAISO shall allocate a payment to the Scheduling Coordinators who traded on that Trading Day pro rata to their Measured Demand in MWh of Energy for that Trading Day ~~on a monthly basis~~.

Along the same lines, Section 11.29.7.3 provides that amounts debited or credited on an unscheduled directed settlement statement will be included on the next invoices or payment advices. The phrase at the end is unnecessary and should be deleted, as indicated:

11.29.7.3.5 Where an Unscheduled Directed Recalculation Settlement Statement indicates that the accounts of Scheduling Coordinators, CRR Holders, Black Start Generators, or Participating TOs should be debited or credited to reflect alterations to Settlements previously made under the CAISO Tariff, for those Scheduling Coordinators, CRR Holders, Black Start Generators, or Participating TOs affected by the additional Recalculation Settlement Statement, the CAISO will reflect the amounts to be debited or credited in the next scheduled weekly Invoice or Payment Advice ~~for the end of the month~~.

6.0 Issue Paper Topic: Visibility into Financial Condition of Load-Serving Customers

In 2021, an entity that served load in the CAISO balancing authority area filed for bankruptcy. CAISO had no advance notice about the financial difficulties facing this entity, which was insolvent and beyond rescue before CAISO learned of the issues. Such lack of notice poses a unique credit risk if a market participant serves retail

load because, in contrast to other type of market participants, significant time may be required to terminate service. Retail customers must be transferred to a different load-serving utility, which takes time and thus increases the risk of a payment default that could be spread to the market.

The urgent work required to avoid a default in 2021 likely could have been avoided if CAISO had the same level of visibility into the financial condition of the load-serving entity that it has currently into the financial condition of most other companies, including those that are publicly traded or have credit ratings. Though both types of disclosure are imperfect, they provide updates about the financial condition of a company at least quarterly, with more frequent updates about certain material developments.

Updates quarterly or more often would have provided CAISO with advance notice in 2021 of the load-serving entity's significant losses that dated back to the third quarter of 2020, almost three full financial quarters before its bankruptcy, as well as cash flow issues related to the Covid-19 pandemic. Advance notice would have allowed CAISO more time to address a potential default by taking actions earlier in the process, such as increasing collateral requirements for the relevant scheduling coordinator.

For these reasons, CAISO is seeking comment on how to best ensure that it can obtain financial disclosure about all load-serving customers in the CAISO balancing authority area, comparable to the disclosure provided by publicly traded companies or companies with credit ratings.

CAISO recognizes that financial disclosure can impose a burden on its market participants. Accordingly, it seeks comment on a way to require such disclosure under its tariff while minimizing any additional burden on market participants. We note that one possibility would be to expand the scope of Section 12.1.1.5, which currently requires market participants that have an unsecured credit limit to notify CAISO about any "material change in financial condition."⁸

⁸ From Section 12.1.1.5: "Examples of a Material Change in Financial Condition may include, but are not limited to:

- a) A credit agency or Moody's Analytics equivalent rating downgrade to below investment grade;
- b) Being placed on a negative credit watch list by a major rating agency;
- c) A bankruptcy filing;
- d) Insolvency;
- e) The filing of a material lawsuit that could significantly and adversely affect past, current, or future financial results;
- f) Restatement of one or more financial statements for a prior year in a way that reduces the amount of unsecured credit that was previously provided;
- g) A default in another organized market for which any cure period has expired; or
- h) Any change in the financial condition of the Market Participant that exceeds a five (5) percent reduction in the Market Participant's Tangible

7.0 WEIM Decisional Classification

CAISO staff believes that the WEIM Governing Body has joint authority with the Board of Governors with respect to the tariff amendments proposed here.

The Board and the WEIM Governing Body have joint authority over any

proposal to change or establish any CAISO tariff rule(s) applicable to the EIM Entity balancing authority areas, EIM Entities, or other market participants within the EIM Entity balancing authority areas, in their capacity as participants in EIM. This scope excludes from joint authority, without limitation, any proposals to change or establish tariff rule(s) applicable only to the CAISO balancing authority area or to the CAISO-controlled grid.

Charter for EIM Governance § 2.2.1. All of the tariff rule changes proposed in this initiative would be “applicable to EIM Entity balancing authority areas, EIM Entities, or other market participants within EIM Entity balancing authority areas, in their capacity as participants in EIM.” None of the proposed tariff rules would be applicable “only to the CAISO balancing authority area or to the CAISO-controlled grid.” Accordingly, the items that require approval from the Board fall entirely within the scope of joint authority.

Stakeholders are encouraged to submit a response to the WEIM classification of this initiative as described above in their written comments, particularly if they have concerns or questions.

8.0 Next Steps

CAISO will hold a call to discuss this paper on Tuesday, October 3, 2023 at 1:00 pm. Written comments will be due by October 17, 2023.

Event	Date
Stakeholder call to discuss this paper	October 3, 2023
Comments due	October 17, 2023
Phase 1 Decision during Meeting of WEIM Governing Body and Board and Governors	November 7-9, 2023
Phase 2 begins, focused on visibility into financial condition of load (Section 6)	January 2024

Net Worth or Net Assets for the Market Participant’s preceding fiscal year, calculated in accordance with generally accepted accounting practices.”