



Market Settlement Timeline

Revised Straw Proposal

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1 Executive Summary

The CAISO proposes to change its market settlement timeline to reduce market participant financial exposure by producing initial settlement statements that will approximate more the final settlement, allow sufficient time for the CAISO and market participants to resolve disputes, and reduce CAISO and market participant administrative costs associated with low-value settlement re-calculation efforts.

The CAISO's current settlement timeline is compressed, which places potentially avoidable burdens on the CAISO and market participants. The compressed timeline causes the CAISO to publish initial statements of lower financial quality and to sometimes delay the publication of its settlement statements. These inefficiencies impact market participants because they must bear a financial burden of varying magnitude for many business days.

The CAISO and market participants also devote a large level of effort to correct data, re-calculate, process, and validate relatively small financial adjustments associated with optional re-calculations long after the settlement trade date has passed.

To resolve these issues, the CAISO proposes to calculate and publish two settlement statements within 70 business days after a trade date and re-align the due dates for settlement quality meter data.

- The CAISO proposes to consume available settlement quality meter data seven business days after a trade date and publish the initial statement nine business days after a trade date, allowing the CAISO to incorporate price corrections and quality meter data into its initial settlement statement.
- The CAISO proposes to accept final meter data 52 business days after a trade date and publish the last required settlement statement 70 business days after a trade date.

Under certain defined circumstances, the CAISO proposes to re-calculate and publish three settlement statements between 70 business days after a trade date and 24 months after a trade date, reducing the normal settlement life cycle from 36 months to 24 months.

- The CAISO proposes to optionally re-calculate and publish settlement statements 12 months after a trade date, 21 months after a trade date, and 24 months after a trade date.

Finally, the CAISO proposes to only consider settlement disputes for disputed revenues or charges greater than \$100.00 unless the dispute is an approved place-holder dispute.

2 Stakeholder Comments and Changes to this Proposal

Arizona Public Service, Bonneville Power Administration, Idaho Power Company, NV Energy, Northern California Power Agency, Seattle City Light, and Southern California Edison are concerned that the compressed timeline for submittal of meter data at T+4B is insufficient to provide quality meter data including non-participating transmission owner (PTO) wheeling data. They are concerned that a shortened meter data submittal timeline may increase the instances where estimated meter was used, resulting in a less accurate initial statement than intended. Arizona Public Service suggested revising the submittal date to T+5B or T+6B. Idaho Power Company believes T+5B provides participants more time to compile accurate meter data. Seattle City Light proposed publishing the initial statement at T+10B to support meter data submittal at T+7B while NV Energy advised publishing the initial statement at T+9B with meter data submittal at T+6B. The CAISO agrees to revise the timeline for meter data submission to T+7B at 10:00 am Pacific Time to allow for accurate meter data to be used to calculate the initial statement. In order to allow entities to submit meter data at T+7B, the CAISO now proposes to publish the initial statement on T+9B.

Arizona Public Service, Northern California Power Agency, PacifiCorp, Powerex, and Puget Sound Energy requested a sample payment calendar reflecting the proposed timelines. Northern California Power Agency, Powerex, and Puget Sound Energy requested the timelines for the transitional period based upon implementation date. The CAISO agrees that a sample payment calendar better illustrates the proposed timelines and posted the sample calendar¹ on the initiative webpage. The CAISO will also provide a sample calendar for the transitional period in its draft final proposal, when the proposed timeline changes are more certain.

Bonneville Power Administration, Nevada Energy, PacifiCorp, and Pacific Gas and Electric suggested extending the dispute period for the initial statement to allow sufficient time to review settlement charges based upon actual meter data and price corrections. Bonneville Power Administration and Pacific Gas and Electric suggested extending the dispute period for recalculation statements to 29 business days where the reduction in statements will result in larger settlement changes that require more time to verify. The CAISO recognizes the need to extend the dispute review period for the initial statement and agrees to revise the timelines to allow 22 business days to submit disputes on the initial statement. Extension of the dispute period for the initial statement

¹ Sample Payment Calendar – Market Settlements Timeline Straw Proposal
<http://www.caiso.com/Documents/SamplePaymentsCalendar-MarketSettlementsTimeline-StrawProposal.pdf>

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also requires the CAISO to revise the first recalculation statement publishing date from T+60B to T+70B. The CAISO maintains its proposal for a dispute period of 22 business days for recalculation statements.

Pacific Gas and Electric, Powerex, and Southern California Edison request the CAISO to provide impact to calculation of estimated aggregate liability (EAL) and financial security requirements. Southern California Edison submitted an additional request to provide clarity regarding FERC Order 741 requirements. The CAISO believes this initiative would not change any features of its billing and payment process that were necessary to satisfy Order No. 741. The CAISO has been working to quantify the net effect of these changes on financial security requirements. While this work is not complete, it appears that the initiative may increase overall outstanding liability to the market, in terms of the number of days that dollars are outstanding. The CAISO believes that even if this indeed turns out to be the case, FERC would likely find the initiative is nevertheless just and reasonable. The CAISO will provide more detail on this topic in the draft final proposal.

Bonneville Power Administration, Northern California Power Agency, and Puget Sound Energy requested the CAISO to justify the length of time between the last required statement, revised from T+60B to T+70B, and the first optional statement at T+12M. Stakeholders also asked the CAISO for information on the financial impact as well as the reason(s) for the lag between T+70B and T+12M. The proposed timeline allows sufficient time to make corrections and ensure issues are resolved for customers on the T+12M statement. This timeline includes dispute submittal by the customer (extended to 22 days), dispute determination by the CAISO, and time to implement software changes for known issues and policy clarification proceedings.

Puget Sound Energy is concerned that the optional statement timelines are too long. It believes it would be more beneficial to shorten the overall settlement cycle to T+18M and introduce an additional timeline at T+6M. The CAISO appreciates the need to expedite final settlement. However, the final optional statement is intended to resolve disputes submitted against incremental changes reflected on the previously published statement. If the T+18M statement is deemed the final statement, the preceding statement would publish at T+15M. CAISO believes T+15M is not sufficient time to complete policy proceedings and software changes required to resolve complex issues.

Arizona Public Service believes distribution of penalty proceeds for inaccurate or late actual settlement quality meter data (SQMD) is unfair and annual distribution conflicts with FERC Order 890-A2. Arizona Public Service urges the CAISO to revise the annual practice to monthly. The CAISO does not agree that the annual distribution conflicts with Order 890-A2. This order pertains to unreserved use penalty that is not analogous to the variety of scenarios that create rules of conduct penalties under the CAISO tariff. The CAISO also disagrees that changing the first meter data submittal due date from

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T+8B to T+4B would result increase penalty assessment. Currently, the CAISO's penalty assessment is based on data submitted at T+48B, not data submitted at T+8B. The CAISO believes penalties will likely decrease under this proposal because the proposal provides four additional days to submit SQMD at T+52B.

Boston Energy Trading and Marketing LLC and Shell Energy North America (US), L.P. both find value in statement publication at T+3B. Shell Energy North America (US), L.P. has requested continued publication at T+3B as an advisory statement to review financial exposure. In the absence of settlement statement at T+3B, Boston Energy Trading and Marketing LLC requests the CAISO to publish the various rates assessed to load serving entities. The CAISO understands that the statement published at T+3B provides preliminary financial insight. The CAISO also recognizes that T+3B reflects inaccuracies this initiative is attempting to resolve by providing a more accurate statement at T+9B. Preservation of the T+3B statement (even as advisory) does not reduce the overall burden of reducing data and publication volume. Additionally, market results including pricing, energy schedules, and awards are immediately available to participants to consume for analysis and validation using open access same-time information system (OASIS) and customer market results interface (CMRI).

Bonneville Power Administration, Idaho Power Company, Northern California Power Agency, Portland General Electric, Southern California Edison, NV Energy, PacifiCorp, Puget Sound Energy, Seattle City and Light, and Six Cities all requested the CAISO to justify the \$100 minimum threshold for dispute processing. The CAISO performed additional analysis to re-evaluate the materiality of a threshold for approved, non-placeholder disputes with charges or credits less than or equal to \$100. Since 2014, approved, non-placeholder disputes with a value of less than \$100 make up only .02% of all dispute dollars allocated. The CAISO maintains its proposal because these disputes have a very low overall settlement impact, while consuming a disproportionate share of resources for the CAISO to evaluate.

Bonneville Power Administration, Boston Energy Trading and Marketing LLC, Northern California Power Agency, PacifiCorp, Puget Sound Energy, Southern California Edison, and Six Cities all requested the CAISO to clarify the definition of a placeholder dispute. The CAISO added clarifications in this revised straw proposal.

Bonneville Power Administration and Portland General Electric both objected to the \$100 minimum threshold for disputes due to their respective requirements to resolve all disputes with their third-parties. The CASIO maintains its proposal to not process disputes less than or equal to \$100 in order to reduce the administrative effort associated with low-value settlement re-calculations, thereby saving overall costs.

Idaho Power Company requests the CAISO to consider improvements to the current dispute process, such as a process for customers to understand why a dispute was denied. In this revised straw proposal, the CAISO provides a written response stating

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the reason for dispute denial. The CAISO also notes that its staff is available for questions and explanations regarding any denied disputes. Customers can schedule a meeting for an explanation through their customer service representative.

Puget Sound Energy requested deadlines for dispute resolution. Per the ISO Tariff Section 11.29.8.5, the CAISO will reach a dispute determination no later than 31 days after the end of the dispute period for each settlement statement. The CAISO is committed to resolving disputes by the next settlement statement; in 2018 and 2019 the CAISO resolved disputes by the next settlement statement at a rate of 95% and 97%.

Arizona Public Service, Bonneville Power Administration, and Powerex provided various comments principally targeting implementation details. Northern California Power Agency requested the CAISO to provide the payment calendar via API as a solution to easily consume the various timeline dates. The CAISO will work with stakeholders on these items in the implementation stage of the initiative.

The CAISO made the following changes to address stakeholder comments:

- In **Section 6.3.1**, the CAISO modified timelines for meter data submittal including non-PTO wheeling data, publication and dispute periods for initial and first recalculation statement. It also provided additional details about dispute scope, billing, and invoicing.
- In **Section 6.3.2**, the CAISO includes specifics for disputes, justification for T+12M timeline in support of quarterly release lead time, and unscheduled recalculation statements.
- In **Section 6.3.3**, the CAISO clarifies the definition of a placeholder dispute, and additional analysis of dispute data.
- In **Section 6.3.3**, the CAISO specifies that determination and resolution of placeholder disputes will be maintained as currently defined.
- In **Appendix A**, the CAISO provides a comparison table of current and proposed timelines.

3 Objective and Scope

The objectives of this initiative are to:

- Reduce market participant financial exposure by producing initial settlement statements that will closely approximate the final settlement.
- Allow sufficient time for the CAISO and market participants to resolve disputes

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- Reduce CAISO and market participant administrative costs associated with low-value settlement re-calculation efforts.

This initiative does not propose to change the timelines established for invoicing charges from the Federal Energy Regulatory Commission (FERC), North American Electric Reliability Corporation (NERC), Western Electricity Coordinating Council (WECC), and reliability coordinator services, or charges for transferred frequency response, generator interconnection process (GIP) forfeited deposit, and reliability coordinator services including hosted advance network application (HANA) services because these items are invoiced separately and are not subject to re-calculation.

4 Stakeholder engagement

4.1 Energy Imbalance Market Governing Body

This initiative proposes to change the schedule for issuing settlement statements and invoices. Staff believes that the EIM Governing Body has an advisory role with respect to the proposed changes.

The rules that govern decisional classification were amended in March 2019 when the Board adopted changes to the Charter for EIM Governance and the Guidance Document. An initiative proposing to change rules of the real-time market now falls within the primary authority of the EIM Governing Body either if the proposed new rule is EIM-specific in the sense that it applies uniquely or differently in the balancing authority areas of EIM Entities, as opposed to a generally applicable rule, or for proposed market rules that are generally applicable, if “an issue that is specific to the EIM balancing authority areas is the primary driver for the proposed change.” Neither test is satisfied here. The proposed tariff changes are generally applicable to the entire real-time market, as well as all market time frames, and thus are not EIM-specific. Moreover, EIM issues are not the primary driver for the proposed changes, but rather a desire to improve the settlement process for benefit of all participants by making settlement statements more accurate, thus reducing market participant’s financial exposure and allowing sufficient time to resolve disputes before the next statement, among other benefits.

This EIM classification reflects the current state of this initiative and may change as the stakeholder process moves ahead. If any stakeholder disagrees with this proposed classification, please include in your written comments a justification of which classification is more appropriate.

4.2 Schedule

The schedule for stakeholder engagement is provided below. The CAISO will present its proposal to the Energy Imbalance Market Governing Body at their October 30, 2019 meeting and to the Board of Governors' at their November 13-14, 2019 meeting.

| Date | Event |
|----------------------|---|
| June 11, 2019 | Publish issue paper and straw proposal |
| June 13, 2019 | Stakeholder conference call on issue paper and straw proposal |
| June 27, 2019 | Stakeholder comments due |
| August 15, 2019 | Publish revised straw proposal |
| August 22, 2019 | Stakeholder conference call on revised straw proposal |
| September 6, 2019 | Stakeholder comments due |
| September 19, 2019 | Publish draft final proposal |
| September 26, 2019 | Stakeholder conference call |
| October 10, 2019 | Stakeholder comments due |
| October 30, 2019 | Energy Imbalance Market Governing Body meeting |
| November 13-14, 2019 | Board of Governors meeting |

Stakeholders are encouraged to attend the stakeholder conference call on August 22, 2019 and provide written comments on the revised straw proposal and call discussion to initiativecomments@caiso.com by September 6, 2019.

5 Issues

5.1 The current settlement timeline is too compressed causing various inefficiencies

The CAISO's current settlement timeline is compressed, which places a potentially avoidable burden on the CAISO and market participants. The compressed timeline causes the CAISO to publish initial statements of lower financial quality and to sometimes delay the publication its settlement statements. These inefficiencies impact market participants because they bear the burden of large variations in their financial exposure over many business days and they must manually trigger the processing and validation of delayed statements under an even more compressed timeline.

The CAISO calculates and publishes three settlement statements per trade day within the first 55 business days after each trade day. Under this timeline, the CAISO publishes an initial statement before it has received settlement quality meter data and before it has incorporated all market price corrections. Lacking this information, these statements have a lower financial quality. The CAISO then publishes a subsequent settlement statement 9 business days later, incorporating these and other data

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corrections which are required to produce a quality statement. The CAISO publishes this subsequent settlement statement, widely recognized as CAISO’s first quality settlement statement, 12 business days after the settlement trade date. Market participants can submit settlement disputes to the CAISO up to 14 business days later. The CAISO then has a relatively limited amount of time, 30 business days, to process all disputes and produce a more accurate last required settlement statement 55 business days after the trade date.

Figure 1 below displays these milestones on a timeline.

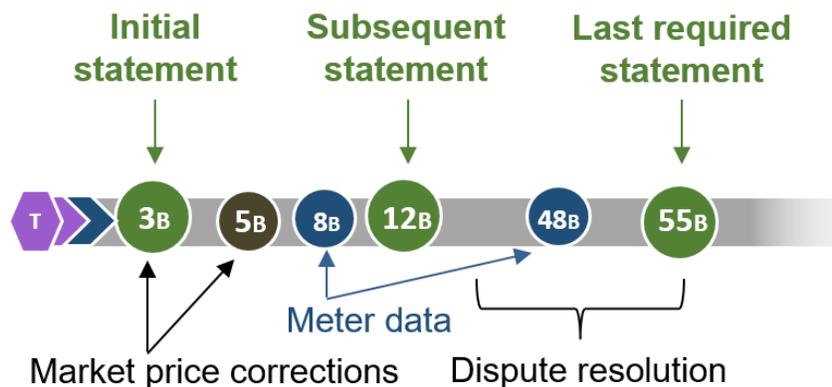


Figure 1: Current required settlement timeline key milestones

The compressed timeline often causes the CAISO to delay the publication of settlement statements which impacts market participants’ ability to process and validate each statement in a timely manner. The initial statement’s three business day turn-around is extremely tight and the CAISO often faces having to make a choice between publishing the statement on time and waiting for data corrections that are necessary to avoid significant inaccuracies. Many data corrections cannot be completed within the three business days following the settlement trade date. For this reason, the CAISO delayed initial settlement statement publication 8% of the time in 2018. When this delay occurs, market participants become more pressed for time to process and validate their statements.

The compressed timeline means that the CAISO cannot incorporate all market price corrections, high market impact data issue corrections, market software defect corrections, scheduling coordinator submitted meter data, market participant submitted estimated load values, and intertie meter data. As a result, the initial statement is often of lower financial quality because it does not closely approximate final settlement.

A lower financial quality initial statement places a financial burden on market participants. First, market participants may need to float a financial obligation for at

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least nine business days because, as they have reported to CAISO staff, they do not trust the initial statement enough to settle with their customers. Market participants settle with the CAISO three business days after the settlement trade date, but may wait for the higher quality subsequent statement nine business days later to settle with their customers. This causes market participants to bear the financial settlement burden for at least nine business days until it bills its customers. Second, market participants must bear varying magnitudes of financial burden. There is a large financial swing between the initial and subsequent settlement statements because of the corrections that occur between the two statements. If the CAISO can produce a higher quality initial statement before 12 business days (i.e., the current timeline for a statement that reasonably approximates final settlement), market participants may not have to float a financial obligation of varying magnitudes for so long.

5.2 CAISO and market participants devote a large effort to reconcile small financial adjustments

The CAISO and market participants devote a large level of effort to correct data, re-calculate, process, and validate relatively small financial adjustments associated with optional re-calculations long after the settlement trade date has passed. Every time the CAISO re-calculates settlement statements, all market participants consume, process, validate, and store the results.

The CAISO calculates and publishes four optional settlement statements per trade day from 55 business days to three years after each trade day. Under this timeline, the CAISO publishes its first optional settlement statement nine months after each trade day, followed by three more at 18 months, 33 months, and 36 months. Market participants can submit disputes to the new settlement statements 22 business days after the CAISO publishes each statement.

Figure 2 below displays these milestones on a timeline.

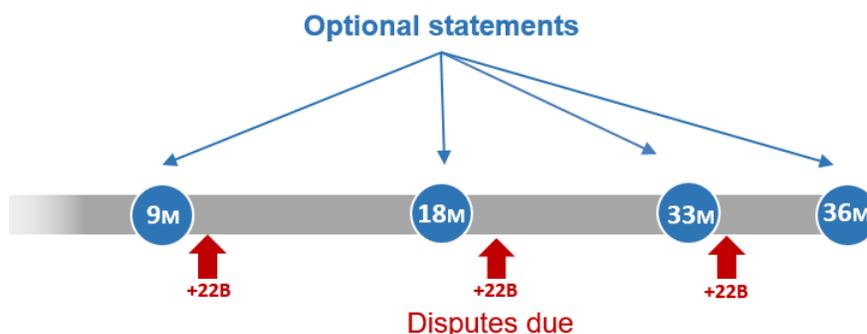


Figure 2: Current optional settlement timeline key milestones

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The CAISO finds that it must consistently re-calculate settlement statements three times over a three year period for each settlement trade date. When the CAISO first implemented the current settlement timeline it anticipated that it would rarely re-calculate settlement statements beyond 55 business days after the settlement trade date.² However, due to the need to revise transmission revenue requirements, correct market software defects, and resolve complex disputes, the CAISO must consistently execute otherwise optional re-calculations.

Table 1 below, observe that the CAISO publishes most optional re-calculations.

| Statement | Number of trade dates | Statements published | Percent published |
|-----------|-----------------------|----------------------|-------------------|
| T+9M | 2455 | 2450 | 99.8% |
| T+18M | 2181 | 2071 | 95.0% |
| T+33/35M | 1732 | 1656 | 95.6% |
| T+36M | 1637 | 369 | 22.5% |

Table 1: Optional Statement Publication Frequency October 2011 through March 2019

The CAISO and market participants incur a potentially high cost for a relatively low amount of re-settled revenues beyond 55 days after the settlement trade date. While there are valid reasons for these re-calculations, re-settlements beyond 55 days after the settlement trade date only impact 2% of market transactions. The optional re-calculations expose the CAISO to produce up to 52 settlement statements per week for market participants to consume, process, validate, and store.

Table 2 below, observe that only 2% of market transactions are re-settled on all the optional statements combined.

| Month | Required Settlement Statements | | | | | Optional Settlement Statements | | | | |
|------------|--------------------------------|-----------|-----------|-----------|--------------------|--------------------------------|-----------|----------------|-----------|--------------------|
| | Initial (%) | T+12B (%) | T+55B (%) | Total (%) | Total (\$ Million) | T+9M (%) | T+18M (%) | T+33 / 35M (%) | Total (%) | Total (\$ Million) |
| March 2014 | 92.28% | 5.10% | 2.05% | 99.42% | \$732.18 | 0.30% | 0.22% | 0.06% | 0.58% | \$4.24 |
| March 2015 | 85.94% | 7.27% | 2.85% | 96.07% | \$438.68 | 2.29% | 0.72% | 0.92% | 3.93% | \$17.95 |
| March 2016 | 83.15% | 10.01% | 5.01% | 98.17% | \$325.80 | 0.53% | 1.29% | - | 1.83% | \$6.06 |
| March 2017 | 86.02% | 9.15% | 3.05% | 98.22% | \$361.39 | 1.70% | 0.08% | - | 1.78% | \$6.54 |
| March 2018 | 87.31% | 9.40% | 3.28% | 100.00% | \$561.79 | - | - | - | - | - |

Table 2: Market revenues to re-settle associated with each re-calculation

² The CAISO had expected to trigger optional T+9M, T+18M, T+33M, and T+36M statements on rare occasion where a regulatory decision may require retroactive resettlement of a trade date, software defect is detected and corrected, or a long-standing policy issue requires resettlement. However, they have become regular occurrences.

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Market participants often submit low-dollar settlement disputes to the CAISO that result in both parties devoting a disproportionate level of effort to process and validate. Twenty three percent (23%) of all settlement disputes are for less than \$100. The CAISO expends significant effort and resources to process these disputes on the same timeline that it processes other major disputes. It then re-calculates settlement statements, which all market participants must then consume, process, validate, and store.

Table 3 below, observe that 23% of all settlement disputes are for less than \$100 and almost a third of those are later found to be invalid.

| Year | Number of disputes | Number of disputes less than or equal to \$100 | Percent of disputes less than or equal to \$100 | Percent of disputes less than or equal to \$100 that were <i>approved</i> | Percent of disputes less than or equal to \$100 that were <i>not approved</i> |
|------|--------------------|--|---|---|---|
| 2014 | 2065 | 519 | 25% | 76% | 24% |
| 2015 | 2300 | 637 | 28% | 72% | 28% |
| 2016 | 1909 | 369 | 19% | 72% | 28% |
| 2017 | 2012 | 432 | 21% | 75% | 25% |
| 2018 | 1056 | 167 | 16% | 62% | 38% |
| 2019 | 425 | 88 | 21% | 55% | 45% |
| | 9767 | 2212 | 23% | 72% | 28% |

Table 3: Low-value disputes January 2014 through March 2019

6 Proposal

6.1 Introduction

In order to increase settlement statement quality and timeliness, reduce market participant financial exposure, and reduce CAISO and market participant administrative costs associated with low-value settlement re-calculation efforts, the CAISO proposes the following changes to be implemented in spring 2020:

- In **Section 6.3.1**, the CAISO proposes to re-align, consolidate, and extend its required settlement timeline.
- In **Section 6.3.2**, the CAISO proposes to re-align and shorten its optional settlement timeline.
- In **Section 6.3.3**, the CAISO proposes to limit settlement disputes that the CAISO will consider based on the magnitude of the disputed revenues or charges.

6.2 Background

This section summarizes the CAISO’s current settlement timelines.

In its *Settlement Process Timeline Change* initiative, the CAISO developed and implemented the current settlement process timeline which is comprised of a **required** initial settlement statement, two **required** re-calculation statements, and four **optional** recalculation statements. The CAISO calculates and publishes the initial settlement statement three business days after each trade day. It calculates and publishes the two mandatory re-calculation statements twelve business days and fifty-five business days after each trade day, respectively. It calculates and publishes the four optional re-calculation statements nine months, eighteen months, thirty-three/thirty-five months, and thirty-six after each trade day, respectively.

The CAISO intended the initial settlement statement would financially clear the large portion of the financial obligations of market participants as soon as possible based upon market awards and estimated meter data. It intended the two required subsequent re-calculation statements to incrementally improve the quality of the financial obligation settlement based on more accurate settlement quality meter data, after-the-fact intertie schedules, after-the-fact corrections, and dispute resolutions. It intended the fourth optional re-calculation statements to adjust market participants’ financial obligations to reflect settlement adjustment based on complex software defect resolutions, participant dispute resolutions identified on prior recalculation statements, good faith negotiations, and FERC mandated adjustments.

Figure 3 below displays all of these milestones on a timeline.

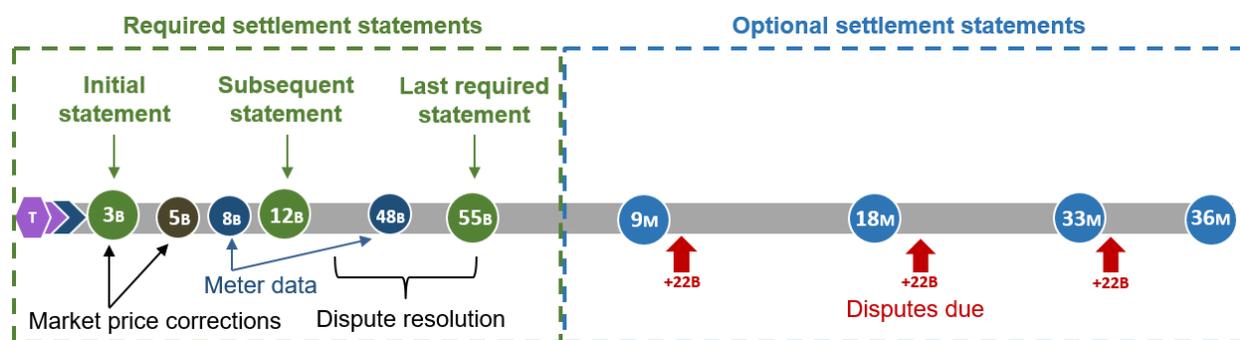


Figure 3: Current required and optional settlement statement timeline

6.3 Proposals

6.3.1 Proposal to re-align, consolidate, and extend the required settlement timeline within 70 business days after a trade date

The CAISO proposes to calculate and publish two settlement statements within 70 business days after a trade date and re-align the due dates for settlement quality meter data. The CAISO intends these changes to increase initial and subsequent settlement statement quality and timeliness within its required settlement timeline.

The CAISO proposes to consume available settlement quality meter data including non-PTO wheeling data at 10:00 am seven business days after a trade date and publish the initial statement nine business days after a trade date, allowing the CAISO to incorporate price corrections, non-PTO wheeling data, and quality meter data into its initial settlement statement. Market participants can submit disputes related to the initial statement up to 22 business days later.

The CAISO proposes to accept final meter data 52 business days after a trade date and publish the last required settlement statement 70 business days after a trade date. The re-alignment of the initial and last required settlement statements will allow the CAISO 10 more business days to resolve complex disputes and improve the accuracy of the last required statement. Market participants can submit disputes related to the last required statement up to 22 business days later.

Figure 4 below displays the proposed milestones on a timeline.

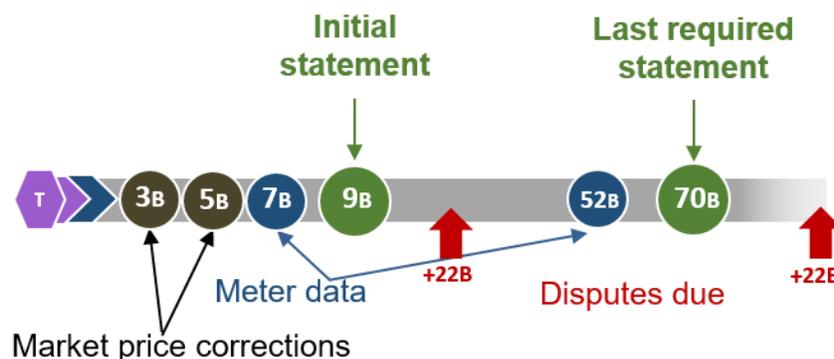


Figure 4: Proposed required settlement timeline key milestones

The CAISO would improve the quality of initial statements published at seven business days by using polled meter data for generation within the CAISO balancing authority

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area. CAISO staff anticipates that most Energy Imbalance Market participants will submit meter data for both generation and load for the first statement, because they currently submit this data within eight business days. In addition, the CAISO could incorporate any meter data submitted by scheduling coordinators, including intertie schedule quantities, if available. The CAISO will continue to use the existing meter estimation methodology for resources where polled or submitted meter data is not available for inclusion on the initial statement. The meter estimation process cannot reflect differences that were observed in real-time because it only reflects scheduled quantities. However, the proposal does provide participants the opportunity to increase the accuracy of their initial statement by allowing them to submit meter data by 10:00 am Pacific Time seven days after the trade date.

Allowing a nine day window, rather than the current three day window, would also allow the CAISO to activate calculation of unaccounted for energy, real-time imbalance energy offset adjustments, allocation of real-time market bid cost uplift adjustments, and metered sub-system deviations. The extension also (a) allows the CAISO sufficient time to include market price corrections and polled meter data, (b) allows the CAISO sufficient time to mitigate large market impacts due to market disruptions without creating publication delays, and (c) provides participants the opportunity to submit quality meter, and intertie data for inclusion on the initial statement. The gains in accuracy by inclusion of polled meter data, scheduling coordinator submitted data, market transaction and price corrections, and un-accounted-for energy assessment should allow the CAISO to more quickly produce settlement statements that closely approximate final settlements, thus reducing financial swings between the initial and final settlement statements.

The initial and T+70B statements are fully disputable. Scheduling coordinators have the opportunity to review the statement and submit disputes for any identified discrepancy or error within 22 business days.

The CAISO intends to maintain publication of weekly invoices each Wednesday with payments due 4 business day later on the following Tuesday. Weekly billing for the initial statement shall include the trading days Friday through Thursday published in the previous week. The T+70B recalculation statement shall include the trading days as the T+9B initial statements. Billing periods for recalculation statements subsequent to the T+70B statement shall remain monthly based upon publication see Appendix A for sample payment calendar.

The CAISO proposes to clarify tariff provisions for flexibility in publishing settlement statements and weekly invoices in the event the CAISO encounters a processing issue. Consistent with the current practice, invoices will be considered timely if published by 5:00 a.m. Thursdays. For weekly invoices published after 5:00 a.m. on Thursdays, the invoice due dates will be adjusted to be 4 business days from that invoice date.

6.3.2 Proposal to re-align and shorten the optional settlement timeline beyond 70 business days after a trade date

The CAISO proposes to have the option to calculate and publish three settlement statements between 70 business days after a trade date and 24 months after a trade date, reducing the normal settlement life cycle from 36 months to 24 months. The CAISO intends these changes to reduce CAISO and market participant administrative efforts associated with low-value settlement re-calculations.

The CAISO proposes to publish the first optional statement at T+12M to accommodate dispute resolution for a T+70B recalculation statement via quarterly charge code change. A pre-defined quarterly release schedule was established previously as requested by stakeholders for charge code configuration modifications. The quarterly cycle provides certainty and sufficient time for stakeholder to modify their respective shadow settlement systems and business processes. Lead time for a charge code configuration release is 145 days to include changes for business practice manual, configuration design, and testing.

Figure 5 below illustrates the timeline for T+70B dispute resolution via quarterly charge code configuration release.

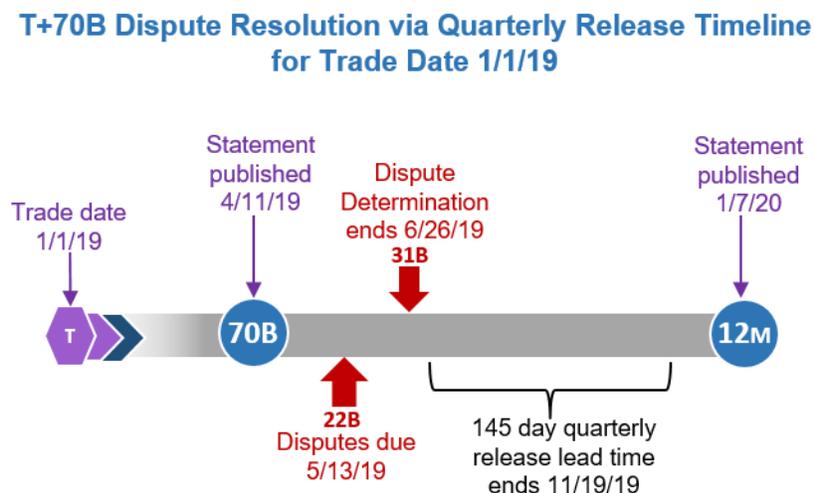


Figure 5: Dispute resolution quarterly release lead time

Subsequent to the T+12M optional statement, the CAISO proposes to have the option to re-calculate and publish settlement statements 21 months after a trade date, and 24 months after a trade date. Like today, market participants have the opportunity to

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review incremental changes for T+12M, T+21M, and unscheduled recalculation statements and submit a dispute for any identified discrepancy or error within 22 business days. However, the T+24M is not subject to dispute unless directed by CAISO Governing Board or FERC. Therefore all market participants can reasonably expect to close their financial books at that time. Any settlement adjustments after the 24 month statement must be directed by the CAISO Board of Governors or ordered by the Federal Energy Regulatory Commission.

Figure 6 below displays the proposed milestones on a timeline.

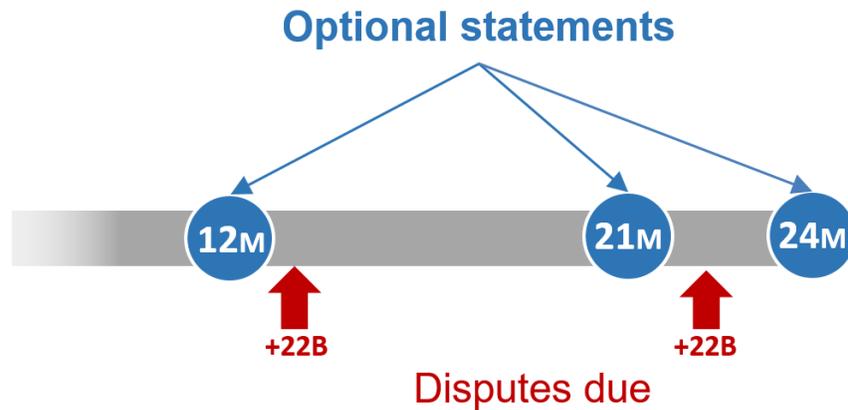


Figure 6: Proposed optional settlement timeline key milestones

The CAISO will trigger optional re-calculations using the same criteria it uses today: settlement adjustments based on complex software defect resolutions, participant dispute resolutions identified on prior recalculation statements, good faith negotiations, and FERC mandated adjustments. Additionally, The CAISO intends to maintain both the unscheduled reissue and unscheduled directed recalculation settlements statements with no revisions to the established criteria for unscheduled statements. Timing for the unscheduled directed statements is proposed as between the T+70B and T+12M statement and between T+12M and T+21M.

6.3.3 Proposal to limit settlement disputes that the CAISO will consider

The CAISO proposes to only consider settlement disputes for disputed revenues or charges greater than \$100.00 unless the dispute is an approved place-holder dispute. The CAISO intends this change to reduce CAISO and market participant administrative efforts associated with low-value settlement re-calculations. The CAISO does not propose any changes to the determination and resolution for placeholder disputes as currently defined. Section 5.4 of the Settlements and Billing Business Practice Manual states “The CAISO Tariff allows Placeholder Disputes in cases where a dispute issue

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regularly recurs on future versions of Initial and Recalculation Settlement Statements. A Placeholder Dispute preserves a Business Associate's right to dispute an item on a Settlement Statement that affect calculations in subsequent Settlement Statements."

Placeholder disputes will have no minimum threshold for submission.

Market Participants should not submit disputes less than \$100. In addition, if during the CAISO's dispute determination, it finds that the actual dispute value is less than \$100.00, the CAISO will deny the dispute.

Since 2014, 23% of all settlement disputes are for less than \$100.00 and almost a third of those are later found to be invalid. Approve, non-placeholder disputes make up only .02% of all awarded dispute dollars. The average amount for a single Scheduling Coordinator has ranged between \$142 and \$338 dollars per year. Both the CAISO and market participants spend considerable effort to perform analysis, submit, and validate settlement statements. The CAISO believes it is reasonable for it and market participants to focus efforts on disputes that have higher magnitude impacts on the market as a whole.

Appendix A

The table below reflects current and proposed settlement timelines.

| Current Settlement Timelines | | Proposed Settlement Timelines | |
|--|-------------|--|-------------|
| Publish Initial Statement | 3B | Receive End-Use Meter Data, Manual Submission of non-PTO Wheeling Data | 6B |
| | | Publish Initial Statement | 9B |
| | | End of T+22B SC Review Period/Dispute Submittal Deadline | 31B |
| Publish Weekly Invoice | Wednesday | Publish Weekly Invoice | Wednesday |
| Weekly Invoice Due Date | 4B | Weekly Invoice Due Date | 4B |
| Receive End-Use Meter Data, Manual Submission of non-PTO Wheeling Data | 8B | n/a | n/a |
| Publish 1st Recalculation Statement | 12B | | |
| End of T+14B SC Review Period/Dispute Submittal Deadline | 26B | | |
| Receive End-Use Meter Data (to include non-PTO load) | 48B | Receive End-Use Meter Data (to include non-PTO load) | 52B |
| Publish 2nd Recalculation Statement | 55B | Publish 1st Recalculation Statement | 70B |
| End of T+22B SC Review Period/Dispute Submittal Deadline | 77B | End of T+22B SC Review Period/Dispute Submittal Deadline | 92B |
| Meter Data Resubmittal Deadline (to include non-PTO load) T+8M | 172B - 168B | Receive End-Use Meter Data (to include non-PTO load) T+11M | 234B - 230B |
| Publish 3rd Recalculation Statement T+9M | 194B | Publish 2nd Recalculation Statement T+12M | 256B |
| End of T+22B SC Review Period/Dispute Submittal Deadline | 216B | End of T+22B SC Review Period/Dispute Submittal Deadline | 278B |
| Publish 4th Recalculation Statement T+18M | 383B | Publish 3rd Recalculation Statement T+21M | 446B |
| End of T+22B SC Review Period/Dispute Submittal Deadline | 405B | End of T+22B SC Review Period/Dispute Submittal Deadline | 468B |
| Publish 5th Recalculation Statement T+33M | 693B | n/a | n/a |
| End of T+22B SC Review Period/Dispute Submittal Deadline | 715B | | |
| Publish 6th Recalculation Statement T+36M | 759B | Publish 4th Recalculation Statement T+24M | 512B |
| Unscheduled Directed Reissue Statement | 9M - 18M | Unscheduled Directed Reissue Statement | 70B - 12M |
| Unscheduled Directed Reissue Statement | 18M - 33M | Unscheduled Directed Reissue Statement | 12M - 24M |