



June 1, 2009

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

Re: California Independent System Operator Corporation,  
Docket No. ER09-\_\_\_\_\_  
Payment Acceleration

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d, and Section 35.15 of the regulations of the Federal Energy Regulatory Commission ("Commission" or "FERC"), 18 C.F.R. § 35.15, the California Independent System Operator Corporation ("CAISO") hereby submits for filing an original and five copies of proposed amendments to the CAISO Tariff to implement acceleration of the CAISO's payment timeline.

Adoption of a payment acceleration program will significantly shorten the time period in which the CAISO invoices and settles market transactions. Under current processes, the time between the Trading Day on which the market transactions occur and the date of the initial Settlement Statement on which the Scheduling Coordinators first know the binding charge or payment for such transactions is 38 Business Days. Currently the monthly invoicing is 38 Business Days from the last day of the month and the invoice is not due until 43 Business Days after the last Trading Day of the month. Thus, the average cash clearing schedule totals over 80 calendar days.<sup>1</sup> This time delay increases the amount of outstanding market charges and payments, and exposes Market Participants to increased credit risk. The CAISO mitigates this risk by requiring Market Participants to meet credit requirements described in CAISO Tariff Section 12. The CAISO has considered various options to lower the overall market's credit exposure and reduce the amount of the credit requirements. As a critical first step towards achieving those goals, the CAISO proposes changes to shorten the payment calendar. Payment acceleration will shorten the timeframe for the CAISO's release of its Initial Settlement Statement for each Trading Day from 38 to 7 Business Days and decrease the payment timeline from 38 Business Days after the last Trading Day of the

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<sup>1</sup> Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definition Supplement, Appendix A to the CAISO Tariff.

month through semi-monthly invoicing. Thus, the average cash clearing schedule would decrease from approximately 80 to 25 calendar days. The CAISO also proposes to increase certainty in final payments by implementing a sunset provision that will permit adjustments to Settlement Statements for 36 months after the Trading Day, and thereafter only by direction of the CAISO Board of Governors (“Board”) or order of the Commission.

The CAISO proposes an effective date of October 1, 2009 for payment acceleration. The CAISO requests that the Commission approve the proposed tariff revisions, without modification, suspension, or hearing, and grant all appropriate waivers to allow the tariff provisions to go into effect on that date.

## **I. EXECUTIVE SUMMARY**

The purpose of the payment acceleration program is to shorten the time period in which the CAISO invoices and settles market transactions. Stakeholders almost universally concurred with this goal during the stakeholder process and provided extensive input on the design and features of the payment acceleration proposal. The CAISO believes that this comprehensive stakeholder process has led to development of a proposal that has widespread stakeholder support.

Currently, the average cash clearing schedule totals over 80 calendar days. This lengthy time period causes an increased amount of market charges and payments to be outstanding, and exposes Market Participants to increased credit risk. The CAISO has considered various options to lower the overall market’s credit exposure and reduce the amount of the credit requirements Market Participants must meet under CAISO Tariff Section. The payment acceleration program is a critical first step towards achieving those goals. The proposed tariff changes will shorten the payment calendar by shortening the timeframe for the CAISO’s release of its Initial Settlement Statement for each Trading Day from 38 to 7 Business Days and decrease the payment timeline from 38 Business Days after the last Trading Day of the month through semi-monthly invoicing. This will decrease the average cash clearing schedule from approximately 80 to 25 calendar days. The CAISO also proposes to increase certainty in final payments by implementing a sunset provision that will permit adjustments to Settlement Statements for 36 months after the Trading Day, and thereafter only by direction of the Board or order of the Commission.

The key features of the payment acceleration program that the CAISO proposes in this filing are:

- An Initial Settlements Statement will be published seven Business Days after each Trading Day (T+7B) using actual Meter Data (CAISO polled and Scheduling Coordinator) submitted five Business Days after the Trading Day, or if actual Meter Data is not available then estimated Settlement Quality Meter Data either submitted by the Scheduling Coordinator or estimated by the CAISO. This initial statement will also serve as the credit run to

determine Market Participant credit requirements under Section 12.

- A Recalculation Settlement Statement will be published at 38 Business Days after the Trading Day (T+38B) using actual Settlement Quality Meter Data submitted by Scheduling Coordinators no later than forty-three calendar days (T+43), as well as SQMD for CAISO polled meter data.
- A Recalculation Settlement Statement will be published at 76 Business Days after the Trading Day (T+76B). It will include any changes to SQMD, and any corrections due to valid issues identified through the billing dispute process that were not included on previous statements.
- Additional Recalculation Settlement Statements will be published at 18 months after the Trading Day (T+18M), 35 months after the Trading Day (T+35M), and 36 months after the Trading Day, if necessary, to reflect, for example, the submission of corrected Settlement Quality Meter Data by a Scheduling Coordinator, meter data issues identified through the audit process, adjustments due to billing disputes, the settlement of any good faith negotiations or alternative dispute resolution, or other errors identified by the CAISO.
- Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO will have the opportunity to review and validate the settlement statements and submit disputes as follows: (i) a dispute for any item in an Initial Settlement Statement T+7B, except for Scheduling Coordinator or CAISO Estimated Settlement Quality Meter Data, no later than 14 Business Days from the publication date of an Initial Settlement Statement T+7B; (ii) a dispute that identifies discrepancies or error for any item contained in a Recalculation Settlement Statement T+38B no later than 18 Business Days from the publication date of that statement; (iii) a dispute regarding Incremental Changes contained in a Recalculation Settlement Statement T+76B no later than 12 months from the relevant Trading Day (T+12M), based only on Incremental Changes between the Recalculation Settlement Statement T+38B and the Recalculation Settlement Statement T+76B; (iv) a dispute regarding Incremental Changes contained in a Recalculation Settlement Statement T+18M no later than 19 months from the Trading Day (T+19M), based only on Incremental Changes between the Recalculation Settlement Statement T+76B and the Recalculation Settlement Statement T+18M; (v) a dispute regarding Incremental Changes contained in a Recalculation Settlement Statement T+35M no later than seven calendar days from the publication date of a Recalculation Settlement Statement T+35M, based only on Incremental Changes between Recalculation Settlement Statements T+18M and Recalculation Settlement Statements T+35M, Meter Data issues identified through the audit process, or any good faith negotiation or dispute resolution settlement.

- The CAISO will prepare and send to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO two Invoices or Payment Advices in each calendar month.
- There will be two billing periods in each calendar month, one from the first to the fifteenth day of the month and one from the sixteenth to the last of day of the month. The CAISO will publish Invoices and Payment Advices for the first semi-monthly billing period in a month on the seventh Business Day after the Trading Day that is the fifteenth day of the month. The CAISO will publish Invoices and Payment Advices for the second semi-monthly billing period in a month on the seventh Business Day after the Trading Day that is the end of the month.
- Interest will be applied to any deviations through the second Recalculation Invoice - Recalculation Settlement Statement T+76B. Interest will be calculated separately for the two billing periods. The rate of interest will be the interest rate calculated in accordance with 18 C.F.R. § 35.19a of the Commission's rules and regulations.
- A sunset provision will prohibit the submission of disputes on Recalculation Settlement Statement T+36M and will permit adjustments thereafter only by direction of the Board or order of the Commission.

The CAISO believes that its payment acceleration proposal contains appropriate features and provisions to enhance the settlement process and reduce credit risk for Market Participants. During the stakeholder process the CAISO considered other possible design elements but determined not to adopt them.

Based on the stakeholder comments and the significant challenges to bifurcation of settlements for each market, the CAISO did not include this suggested design approach in its proposal. The CAISO determined that the most significant drawback to settlement bifurcation is the impact on the implementation of convergence bidding (also known as virtual bidding) that the CAISO will evaluate and discuss with stakeholders after one year of operations under the new market. Bifurcating the market would be inapposite to a convergence design.

The CAISO also opted not to implement weekly invoicing at this time. The CAISO explained that its future plans are ultimately to invoice on a weekly basis, but recommended that the initial deployment of payment acceleration utilize semimonthly invoicing as a means of shortening the initial implementation of the payment acceleration program and serving as a reasonable transition to a weekly cycle.

The CAISO proposal includes interest through Recalculation Settlement Statement T+76B. The CAISO believes that interest is appropriate to compensate Scheduling Coordinators for the time value of money and to remove the financial incentive to submit unreasonable estimates of meter data. The CAISO considered

applying interest to settlement statements issued subsequent to Recalculation Settlement Statement T+76B but determined not to take that approach because the CAISO anticipates that the amount of interest associated with adjustments to Incremental Changes from statement to statement will likely be very small; whereas calculating interest for each time segment would require implementation of a detailed manual process to track the interest calculations and any disputes that arise related to the underlying adjustment or the interest itself. In weighing these factors, the CAISO does not at this time believe that the application of interest to adjustments to Incremental Changes on any additional Recalculation Settlement Statement is warranted.

The CAISO submits that the payment acceleration program as designed will provide substantial benefit to the market and Market Participants. It will significantly shorten the time period in which the CAISO invoices and settles market transactions, will reduce credit risk, and will increase certainty in final payments by implementing a sunset provision. The CAISO believes that these enhancements to the settlement process may also encourage resource availability from out-of-state resources.

The CAISO requests that the Commission approve the proposed tariff revisions, without modification, suspension, or hearing, and grant all appropriate waivers to allow the tariff provisions to go into effect on October 1, 2009.

## **II. BACKGROUND AND STAKEHOLDER PROCESS**

The CAISO's current payment calendar allows for an extended time period from the Trading Day on which market transactions are executed to the Payment Date on which the transactions are settled. This time delay increases the amount of market charges and payments that are outstanding at any one time and adds credit risk to market participation. This increased risk may hinder resource availability from out-of-state resources, challenge credit management, and expose Market Participants to additional risk in the event of defaults or bankruptcies. Mitigating this risk is a priority of the CAISO, as discussed in the CAISO's *Five-Year Strategic Plan 2008-2012*.<sup>2</sup>

The CAISO initiated a stakeholder process in the second quarter of 2008 to consider ways in which the payment timeline could be accelerated. The stakeholder process involved multiple meetings and conference calls with stakeholders, a series of technical workshops, the CAISO's preparation and issuance of several whitepapers discussing the design and features of payment acceleration, and numerous opportunities for stakeholders to provide input into the development of the proposal.<sup>3</sup>

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<sup>2</sup> The *Five-Year Strategic Plan 2008-2012* is posted on the CAISO's Website at <http://www.caiso.com/1fa4/1fa4c0d125c80.pdf>.

<sup>3</sup> The complete payment acceleration stakeholder record can be found on the CAISO's Website at <http://www.caiso.com/docs/2005/03/23/2005032307323521863.html>. This record includes the CAISO's whitepapers (initial and revised), comments submitted by stakeholders during the stakeholder process, stakeholder meeting presentations, and the draft tariff language for payment acceleration.

The CAISO began the stakeholder process by publishing a whitepaper in May 2008 to outline the credit issues under the existing payment calendar and describe the CAISO's initial proposal to address those issues. On August 19, 2008, the CAISO conducted a stakeholder meeting to present its proposal and obtain feedback. Stakeholders responded with extensive comments on the topic. Almost all stakeholders expressed support for the goals the project, with questions and issues focused primarily on invoicing frequency, the settlement timeline, the use of estimated meter data, and the implementation process and deployment schedule. On September 18, 2008, the CAISO conducted a conference call with stakeholders to review and discuss options for meter data submission and estimation for payment acceleration.

In response to stakeholder feedback, the CAISO on October 8, 2008 issued a feasibility analysis that evaluated the benefits and drawbacks of modifications suggested by stakeholders to the CAISO's payment acceleration proposal in several areas. Three key areas discussed were: (1) the suggestion by Calpine Corporation ("Calpine") to bifurcate the Day-Ahead Market and Real-Time Market for settlement purposes; (2) Calpine's suggestion for weekly invoicing; and (3) the suggestion of Southern California Edison Company ("SCE") to add an interest component to account for differences between estimated and actual meter data.

The CAISO's feasibility analysis was discussed with stakeholders at a stakeholder meeting on October 16, 2008. The suggestion to bifurcate the markets drew considerable stakeholder comment at the stakeholder meeting and in written comments submitted to the CAISO on October 24, 2008. The proposal was generally supported by Modesto Irrigation District ("MID"), Powerex, Sacramento Municipal Utility District, EPIC Energy, Mirant, JP Morgan, Northern California Power Authority ("NCPA"), ACES Power Marketing, Inc. ("APM"), and Automated Power Exchange ("APX"). It was opposed by SCE, Pacific Gas and Electric ("PG&E") Company, Six Cities,<sup>4</sup> and San Diego Gas & Electric Company ("SDG&E").

Calpine's suggestion that the CAISO move to weekly invoicing with payment acceleration also received comments from other stakeholders. EPIC and Powerex agreed with Calpine that monthly invoicing does not meet the objective of payment acceleration. Their comments supported accelerating cash clearing by invoicing more frequently, on a weekly or semi-monthly basis.

SCE's suggestion to apply interest charges or payments to all differences between the Initial Settlement Statement and subsequent true-ups was supported in the feasibility analysis. Six Cities, JP Morgan, and PG&E agreed that any settlement proposal based upon estimated data should include interest provisions on deviations between initial and true-up statements. MID, Dynegy, NCPA, and APX opposed interest payments as an unnecessary complication that does not need to be introduced in the near term. Mirant and SDG&E favored deferring the application interest charges

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<sup>4</sup> Six Cities are the Southern California Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside.

to see if experience with the new framework indicates a significant shortfall between initial and true-up statements. APM suggested that a tolerance band should be established for implementing an interest penalty.

Based on a comprehensive evaluation of participant feedback through the Stakeholder Process, the CAISO issued a straw proposal for payment acceleration on November 3, 2008. The straw proposal presented three design options with different features on the settlement timeline, market bifurcation, meter data estimation, the timing of the credit run, the application of interest, and the frequency of invoices. Each option included a sunset provision for market adjustments.

The CAISO recommended the adoption of option #1 in the straw proposal. Option #1 provided for:

- Publication of a semi-monthly invoice on the first and third Tuesday of each month that would include any statements published at the time of invoicing.
- Payment of all invoices due within five Business Days after the invoice publishes, following current standards.
- Publication of an initial Settlements Statement seven Business Days after each Trading Day (T+7B) using available Meter Data (CAISO polled + Scheduling Coordinator submitted) at T+5B and estimate remaining obligations. This initial statement would also act as the credit run.
- Publication of the second statement (first true-up) 38 Business Days after the Trading Day (T+38B) using actual Settlement Quality Meter Data ("SQMD") submitted by Scheduling Coordinators no later than forty-three calendar days (T+43), as well as SQMD for CAISO polled meter data.
- Publication of the third statement (second true-up) 76 Business Days after the Trading Day (T+76B). It will include any changes to SQMD, and any corrections due to valid issues identified through the billing dispute process.
- Publication of a fourth statement (third true-up) only for adjustments due to billing disputes based on the second true-up statement, the submission of corrected SQMD, or other errors identified by the CAISO. It will publish 18 months after the Trading Day (T+18M). Based on this statement, billing disputes may only address incremental changes between the T+76B and T+18M statements, and these must be submitted by T+19M.
- Publication of a fifth statement (fourth true-up) 35 months after the Trading Day (T+35M) only for adjustments due to valid billing disputes from the T+18M statement, meter data issues identified through the audit process, or any good faith negotiations or alternative dispute resolution settlements not included on a previous statement.

The CAISO opted not to adopt Calpine's suggestion to implement weekly invoicing in the straw proposal. The CAISO explained that its future plans are ultimately to invoice on a weekly basis, but recommended that the initial deployment of payment acceleration utilize semimonthly invoicing as a means of shortening the initial implementation of the payment acceleration program and serving as a reasonable transition to a weekly cycle.

Based on the feasibility analysis and in response to stakeholder comment, the CAISO did modify its initial payment acceleration proposal to include interest in its recommended approach in the straw proposal. The CAISO believes that the addition of interest is appropriate to compensate Scheduling Coordinators for the time value of money and to remove the financial incentive to submit unreasonable estimates of meter data for the Initial Settlement Statement T+7B. The CAISO recommended that interest, calculated using the FERC-approved interest rate, will be applied to any deviations between the initial (T+7B) and first true-up statement to account for the use of estimated meter data. Since all following true-ups will be calculated using SQMD, the CAISO did not propose that interest apply to those subsequent true-ups (T+76B, T+18M, T+35M).

The CAISO presented the straw proposal and its recommendation to stakeholders at a meeting on November 6, 2008. Stakeholders submitted written comments on November 13, 2008 and another stakeholder meeting was then held on November 17, 2008. At that meeting, the CAISO primarily discussed and clarified the details and logistics for meter data estimation, semi-monthly invoicing, and the application of interest.

On November 24, 2008, the CAISO issued its final proposal for payment acceleration. The comments expressed almost universal support for the objectives and overall design of the final payment acceleration proposal. The most significant change from the straw proposal to the final proposal related to the timing of the invoices. Rather than invoicing on fixed days of the month -- the first and fifteenth -- the CAISO recommended in the final proposal that the semi-monthly invoices be issued on floating dates. The timing of the invoices would be based on the settlements calendar. The first semi-monthly invoice would include Trading Days 1 to 15 of the month and be issued on the seventh Business Day after Trading Day 15. The second semi-monthly invoice would include Trading Day 16 to the end of the month and be issued on the seventh Business Day after the last Trading Day in the month.

Based on the stakeholder comments and the significant challenges to bifurcation of settlements for each market identified in the feasibility analysis, the CAISO did not include this suggested design approach in the final proposal. The CAISO determined that the most significant drawback to settlement bifurcation is the impact on the implementation of convergence bidding (also known as virtual bidding) that the CAISO will evaluate and discuss with stakeholders after one year of operations under the new market. Bifurcating the market would be inapposite to a convergence design. The feasibility analysis also raised concerns with the impact bifurcation would have on the

calculation of Bid Cost Recovery payments to Generators and Bid Cost Recovery charges to Demand, and how the CAISO would settle these charges for the Day-Ahead Market. Other drawbacks included how to address outages and large deviations in generation and load between the Day-Ahead and the Real-Time markets, and the potential for bifurcation to result in a non-trivial amount of load being cleared in the real time instead of the Day-Ahead Market by, in particular, Scheduling Coordinators (up to 500 MW per hour) exempt from under scheduling charges that would be able to purchase load from the CAISO on credit until T+50 business days. This scenario could increase the credit exposure to the market instead of decreasing it.

In addition, the transition to a weekly cycle takes into account the concern of some stakeholders with the billing cycle change and the ability to pay on a weekly basis. It will afford the CAISO and stakeholders to gain experience under the shortened payment timeline before considering any further acceleration.

On December 4, 2008, the CAISO held a stakeholder conference call to discuss the final proposal. Following that call, stakeholders submitted additional written comments.

The payment acceleration proposal was presented to the Board on December 16, 2008 and the Board authorized this filing.

Following Board approval of payment acceleration, the CAISO on January 14, 2009 initiated a series of workshops to discuss and obtain continued input from stakeholders on the technical details of implementing payment acceleration. Further workshops were held on February 24, 2009 and April 29, 2009. Stakeholders submitted written comments following each of these workshops. As the result of the these workshops, the CAISO and stakeholders have agreed to deploy payment acceleration on October 1, 2009, following a three-month dry run scheduled for June through August, 2009. The dry run will allow full integration testing with payment acceleration functionality, simulate the payment acceleration timeline for data availability from other CAISO upstream systems, simulate the meter data submission process for Market Participants, produce settlements statements and invoices for testing purposes, and produce an Initial Settlements Statement, a Recalculation Settlement Statement, and at least two invoices for Market Participant review.

The CAISO posted draft tariff language for payment acceleration on May 6, 2009. Stakeholders submitted comments on the draft language on May 15, 2009, and these comments were discussed during a stakeholder conference call on May 19, 2009.

### **III. PAYMENT ACCELERATION PROGRAM**

Under the payment acceleration program, the CAISO will continue to calculate the amounts for each charge type payable to, and the amounts owed by, each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each Settlement Period of that Trading Day in order to arrive at a net amount payable

for each charge type by that entity per Trading Day. Each of these amounts will appear in the Settlement Statements that the CAISO will provide to the entity. The components of the Grid Management Charge will be included in an Initial Settlement Statement T+7B, and a Recalculation Settlement Statement with the other types of charges referred to in CAISO Tariff Section 11.

#### **A. Billing and Payment Process**

The overall billing and payment process for payment acceleration is set forth in amended Tariff Section 11.29. It consists of the issuance of an Initial Settlement Statement T+7B and the Recalculation Settlement Statements for each Trading Day. Payments or charges for the items will then be due five Business Days after issuance of the Invoices and Payment Advices issued in accordance with Section 11.29.10.

The settlements cycle contemplated by the payment acceleration proposal begins with publication of an Initial Settlement Statement on the seventh Business Day after the Trading Day (T+7B), followed by issuance of a Recalculation Settlement Statement on the thirty-eighth Business Day from the Trading Day (T+38B) and a Recalculation Settlement Statement on the seventy-sixth Business Day after the Trading Day (T+76B). If further adjustments are necessary, the CAISO will issue a Recalculation Settlement Statement eighteen calendar months after the Trading Day (T+18M), a Recalculation Settlement Statement thirty-five calendar months after the Trading Day (T+35M), a Recalculation Settlement Statement thirty-six calendar months after the Trading Day (T+36M) if necessary, and any other Recalculation Settlement Statement authorized under Section 11.29.7.3. The CAISO will provide notice to the market if a Recalculation Settlement Statement T+18M, a Recalculation Settlement Statement T+35M, a Recalculation Settlement Statement T+36M, or any additional Recalculation Settlement Statement is required for a Trading Day.

##### **1. Initial Settlement Statement T+7B (Sections 11.29.7.1, 11.29.7.1.1, 11.29.7.2, and 11.29.8.4.1) and Settlement Quality Meter Data (Sections 10.2.1.3, 10.2.13.2, 10.3.6, 10.3.6.1, and 11.15)**

As described in Sections 11.29.7.1.1 and 11.29.7.2, the Initial Settlement Statement T+7B will constitute the basis for billing for all charges in the first instance. Under Section 11.1.5, the Initial Settlement Statement T+7B calculation will be based on Settlement Quality Meter Data (actual or estimated). Section 10.2.1.3 provides that Scheduling Coordinators may obtain Settlement Quality Meter Data relating to the CAISO Metered Entities they represent by directly accessing the SQMD Systems as specified in the applicable Business Practice Manual. For CAISO Metered Entities, Revenue Quality Meter Data obtained by successfully polled meters will be validated, estimated, and edited by the CAISO to produce Actual Settlement Quality Meter Data, which will be made available to Scheduling Coordinators within five business days from the Trading Day (T+5B) pursuant to Section 10.2.1.3(a).

Sections 10.3.6 and 10.3.6.1 require that Scheduling Coordinators submit Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated SQMD for each Settlement Period for the metered Entities they represent no later than noon on the fifth Business Day after the Trading Day (T+5B). In the absence of Actual Settlement Quality Meter Data, Scheduling Coordinators may submit Scheduling Coordinator Estimated Settlement Quality Meter Data using interval metering when available, sound estimation practices, and other available information including, but not limited to, bids, schedules, forecasts, temperature data, operating logs, recorders, and historical data. Scheduling Coordinator Estimated Settlement Quality Meter Data must be complete and be a good faith estimate that reasonably represents Load and/or Generation quantities for each Settlement Period, with noncompliance being subject to sanction under Section 37.5.2.1 of the CAISO's market behavior rules.

In the event Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter Data is not received from a Scheduling Coordinator or CAISO Metered Entity within five business days from the Trading Day (T+5B), Section 10.3.6.1 provides that the CAISO will estimate Settlement Quality Meter Data for the outstanding metered Demand or Generation for the Initial Settlement Statement Calculation T+7B. Consistent with Section 11.1.5, the CAISO Estimated Settlement Quality Meter Data for metered Generation will be based on total Expected Energy and dispatch of that resource as calculated in the Real-Time Market and as modified by any applicable corrections to the Dispatch Operating Point for the resource. The CAISO Estimated Settlement Quality Meter Data for metered Demand will be based on Scheduled Demand by LAP. This value will be increased by 15 percent if the total actual system Demand in Real Time, as determined by the CAISO each hour, is greater than 15 percent of the total estimated meter demand (TEMD) at T+5B. However, Participating Load will not be subject to the 15 percent increase. The schedule for Participating Load that results from the Day-Ahead Market is assumed to be what will be consumed in Real-Time since it is price responsive. Essentially, the day ahead schedule for Participating Load becomes the demand forecast for Participating Load. Therefore, it is unnecessary to apply the 15 percent demand increase to Participating Load.

Under Section 11.29.7.1.1, the Initial Settlement Statement T+7B will be produced using available Settlement Quality Meter Data (either actual or Scheduling Coordinator estimated) and CAISO Estimated Settlement Quality Meter Data. The settlement statement will include the following:

- (a) the amount payable or receivable by the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge referred to in Section 11 for each Settlement Period in the relevant Trading Day;
- (b) the total amount payable or receivable by that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for all Settlement Periods in that Trading Day after the amounts payable and the amounts receivable under (a) have been netted off pursuant to Section 11.29;

- (c) the components of each charge in each Settlement Period except for information contained in the Imbalance Energy report referred to in Section 11.29.7.1.1; and
- (d) a breakdown of the components of the Imbalance Energy Charge.

The CAISO will provide an Initial Settlement Statement to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each Trading Day within seven Business Days of the Trading Day, covering all Settlement Periods in that Trading Day.

**2. Recalculation Settlement Statement T+38B (Sections 11.29.7.2 and 11.29.8.4.2) and Settlement Quality Meter Data (Sections 10.2.1.3(c) and 10.3.6.2)**

As provided in Section 11.29.7.2, the Recalculation Settlement Statement T+38B will constitute the basis for billing adjustments to charges set forth in the Initial Settlement Statement T+7B, including adjustments to correct for the differences between estimated Settlement Quality Meter Data used in the Initial Settlement Statement and actual Settlement Quality Meter Data that subsequently becomes available.

For purposes of this reconciliation, Section 10.3.6.2 requires Scheduling Coordinators to submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO no later than midnight on the forty-third calendar day after the Trading Day (T+43C). In the event that the CAISO does not receive Actual Settlement Quality Meter Data for a Scheduling Coordinator Metered Entity within that timeline, the CAISO will consider the data to be late and subject to sanctions provided for in Section 37.5. Further, any Scheduling Coordinator Estimated Settlement Quality Meter Data submitted on behalf of the Scheduling Coordinator Metered Entities that is not replaced with Actual Settlement Quality Meter Data by 43 calendar days after the Trading Day (T+43C) will be considered late and subject to sanctions provided for in Section 37.5. However, Scheduling Coordinator Estimated Settlement Quality Meter Data will be used in the Recalculation Settlement Statement in the absence of Actual Settlement Quality Meter Data.

Under Section 10.3.6.2, the CAISO will not estimate a Scheduling Coordinator Metered Entity Settlement Quality Meter Data for any outstanding metered Demand and/or Generation for use in a Recalculation Settlement Statement Calculation. Any CAISO Estimated SQMD not replaced by the Scheduling Coordinator with Actual SQMD by 43 calendar days after the Trading Day (T+43C) will be set to zero. For CAISO Metered Entities, Section 10.2.1.3(c) provides that, if the CAISO is notified in accordance with Section 10.2.13.2 that the revenue quality meter for a CAISO Metered Entity requires repair, the CAISO will produce Settlement Quality Meter Data for that entity using the estimation procedures referred to in Section 10.2.9, which will be made

available to the Scheduling Coordinator for the CAISO Metered Entity within 43 calendar days from the Trading Day (T+43C) and will be used in the Recalculation Settlement Statement T+38B calculation.

### **3. Recalculation Settlement Statement T+76B (Section 11.29.8.4.3)**

Each Settlement Statement contains transactional data for one Trading Day. Any Settlement Adjustments for that Trading Day that are necessary after Recalculation Settlement Statement T+38B is issued will be published on a subsequent Recalculation Settlement Statement. The Recalculation Settlement Statement subsequent to Recalculation Settlement Statement T+38B for the relevant Trading Day is Recalculation Settlement Statement T+76B, which is published 76 Business Days from the original Trading Day. The type of adjustments that could be reflected on Recalculation Settlement Statement T+76B include the resolution of valid disputes pertaining to data appearing on Recalculation Settlement Statement T+38B or corrections to reported Meter Data.

### **4. Additional Recalculation Settlement Statements (Sections 11.29.7.2, 11.29.7.3, and 11.29.8.4.4 to 11.29.8.4.6)**

The CAISO will not issue Recalculation Settlement Statements in addition to Recalculation Settlement Statements T+38B and T+76B unless necessary. In the event additional Settlement Statement Recalculation adjustments or corrections for a given Trading Day (or set of Trading Days) are needed after Recalculation Settlement Statement T+38B is published, the CAISO will publish Recalculation Settlement Statement T+18M, Recalculation Settlement Statement T+35M, and Recalculation Settlement Statement T+36M, as necessary under Sections 11.29.7.2 and 11.29.7.3, and will issue a notice to advise Market Participants of such additional Recalculation Settlement Statements.

### **5. Sunset Provision**

Under the revised Section 11.29.7.3, the CAISO will not issue any Recalculation Settlement Statements other than Recalculation Settlement Statement T+38B, Recalculation Settlement Statement T+76B, Recalculation Settlement Statement T+18M, Recalculation Settlement Statement T+35M, and Recalculation Settlement Statement T+36M, unless directed to do so by the Board or pursuant to a FERC order. That Section, in conjunction with Section 11.29.8.3.6 that prohibits the submission of disputes on Recalculation Settlement Statement T+36M, establish a necessary and appropriate sunset provision in the CAISO Tariff.

The purpose of the sunset provision is to provide more finality to the settlement of market transactions than exists in the current CAISO Tariff. One of the goals of payment acceleration is to expedite the timing of the Initial Settlement Statement, provide more certainty as to the dates for issuance of necessary Recalculation

Settlement Statements, require Market Participants to identify any billing disputes in a timely manner, narrow the scope of any billing disputes of subsequent statements, and provide a cut-off date by which Market Participants should have finality as to the cost consequences of a particular Trading Day. At the same time, however, the CAISO recognizes that it is not possible to foresee every possible circumstance under which a recalculation could be necessary. Moreover, as a regulated entity, the CAISO must provide for the possibility of Commission action requiring a modification to prior Settlement Statements. Accordingly, the proposed sunset provision permits no further adjustments for a Trading Day following the issuance of Recalculation Settlement Statement T+38B unless required by the Board or the Commission.

If an additional Recalculation Settlement Statement is ordered by the Board, the CAISO will arrange to have the Recalculation Settlement Statement carried out as soon as is reasonably practicable following the CAISO Governing Board's order, subject to the availability of staff and computer time, software compatibility, appropriate data and other resources. Under Section 11.29.7.3.2 (as currently provided for in the CAISO Tariff), the cost of an additional Recalculation Settlement Statement will be borne by the Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO requesting it, unless the additional Recalculation Settlement Statement is needed as a result of a clerical oversight or error on the part of the CAISO staff. Where an additional 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, Section 11.29.7.3.3 provides that the CAISO will reflect the amounts to be debited or credited in the next scheduled semi-monthly Invoice or Payment Advice for the end of a month.

## **B. Confirmation and Validation**

Section 11.29.8.2.1 provides that each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO has the opportunity to review the terms of the Initial Settlement Statement T+7B that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO will be deemed to have validated each Initial Settlement Statement T+7B unless it raises a dispute or reports an exception within fourteen Business Days from the date of issuance. Once validated, an Initial Settlement Statement is binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO, except to the extent that a Recalculation Settlement Statement is necessary. The notice of dispute, if any, must state clearly the Trading Day, the issue date of the Initial Settlement Statement T+7B, the item disputed, the reasons for the dispute, and the amount claimed (if appropriate). The notice of dispute must be accompanied with all available evidence reasonably required to support the claim.

Similarly, Section 11.29.8.2.2 provides that each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO has the opportunity to review the terms of any Recalculation Settlement Statement T+38B that it receives. The

Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO will be deemed to have validated each Recalculation Settlement Statement T+38B unless it raises a dispute or reports an exception within 18 Business Days from the date of issuance. Once validated, a Recalculation Settlement Statement T+38B is binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, except to the extent that the CAISO performs a subsequent Recalculation Settlement Statement.

Under Section 11.29.8.3, each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may review only the Incremental Changes that appear on any additional Recalculation Settlement Statement that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO is deemed to have validated the Incremental Changes on each Recalculation Settlement Statement unless it raises a dispute or reports an exception regarding those Incremental Changes within time periods set forth in Sections 11.29.8.3.1 through 11.29.8.3.6. Once validated, the Incremental Changes on a Recalculation Settlement Statement shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO, except to the extent the CAISO performs an additional Recalculation Settlement Statement pursuant to Section 11.29.7.3. The notice of dispute must state clearly the Trading Day, the issue date of the Recalculation Settlement Statement, the item disputed, the reasons for the dispute, and the amount claimed (if appropriate). It must also be accompanied with all available evidence reasonably required to support the claim. The only Recalculation Settlement Statement that cannot be disputed is the one issued on T+36M.

### **C. Disputes**

Under Section 11.29.8.3.1, each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit a dispute for any item in an Initial Settlement Statement T+7B, except for Scheduling Coordinator or CAISO Estimated Settlement Quality Meter Data, no later than 14 Business Days from the publication date of an Initial Settlement Statement T+7B. Valid disputes regarding data appearing on an Initial Settlement Statement T+7B will be reflected in a later Recalculation Settlement Statement for that Trading Day. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on an Initial Settlement Statement T+7B, it may initiate a good faith negotiation of the dispute with the CAISO no later than 30 days after the date of the CAISO's response to the dispute.

Under Section 11.29.8.3.2, each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit a dispute that identifies discrepancies or error for any item contained in a Recalculation Settlement Statement T+38B no later than 18 Business Days from the publication date of that statement. Valid disputes regarding data appearing on a Recalculation Settlement Statement T+38B will be reflected in a later Recalculation Settlement Statement for that Trading Day. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO

disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+38B, it may initiate a good faith negotiation of the dispute with the CAISO no later than 30 days after the date of the CAISO's response to the dispute.

Under Section 11.29.8.3.3, each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit disputes regarding Incremental Changes contained in a Recalculation Settlement Statement T+76B no later than 12 months from the relevant Trading Day (T+12M). A dispute can only be based on Incremental Changes between the Recalculation Settlement Statement T+38B and the Recalculation Settlement Statement T+76B. Valid Disputes regarding data appearing on a Recalculation Settlement Statement T+76B will be reflected on a later Recalculation Settlement Statement for that Trading Day. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+76B, it may initiate good faith negotiation of the dispute with the CAISO no later than 30 days after the date of the CAISO's response to the dispute.

Section 11.29.8.3.4 provides that each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit disputes regarding Incremental Changes contained in a Recalculation Settlement Statement T+18M no later than 19 months from the Trading Day (T+19M). A dispute can only be based on Incremental Changes between the Recalculation Settlement Statement T+76B and the Recalculation Settlement Statement T+18M. Valid Disputes regarding data appearing on a Recalculation Settlement Statement T+18M will be reflected on a later Recalculation Settlement Statement. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+18M, it may initiate a good faith negotiation with the CAISO no later than thirty 30 days after the date of the CAISO's response to the dispute.

Section 11.29.8.3.5 provides that each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit disputes regarding Incremental Changes contained in a Recalculation Settlement Statement T+35M no later than seven calendar days from the publication date of a Recalculation Settlement Statement T+35M. A dispute must only be based on (i) Incremental Changes between Recalculation Settlement Statements T+18M and Recalculation Settlement Statements T+35M, (ii) Meter Data issues identified through the audit process, or (iii) any good faith negotiation or dispute resolution settlement. Valid disputes regarding data appearing on a Recalculation Settlement Statement T+35M will be reflected on the Recalculation Settlement Statement T+36M. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+35M, it may pursue the dispute only through the dispute resolution process in Section 13.

As previously mentioned, Section 11.29.8.3.6 provides that a Recalculation Settlement Statement T+36M will not be subject to either a dispute by a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO, or adjustment by CAISO, except as directed by the CAISO Board of Governors or by an order of FERC.

#### **D. Invoices and Payment**

One of the key objectives of payment acceleration is to shorten the time period in which the CAISO invoices and settles market transactions. Under the payment acceleration proposal, the CAISO will prepare and send to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO two Invoices or Payment Advices in each calendar month. There will be two billing periods in each calendar month, one from the first to the fifteenth day of the month and one from the sixteenth to the last of day of the month. The CAISO will publish Invoices and Payment Advices for the first semi-monthly billing period in a month on the seventh Business Day after the Trading Day that is the fifteenth day of the month. The CAISO will publish Invoices and Payment Advices for the second semi-monthly billing period in a month on the seventh Business Day after the Trading Day that is the end of the month.

Each Invoice or Payment Advice will include one semi-monthly billing period and up to five other billing periods. The other billing periods will correspond to the dates on which the Recalculation Settlement Statements are published. Any Invoice and/or Payment Advice for a billing period corresponding to a Recalculation Settlement Statement will be reflected on the next scheduled semi-monthly Invoice or Payment Advice for the end of the month.

Each Invoice or Payment Advice will show amounts which are to be paid by or to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO, the Payment Date (the date on which such amounts are to be paid or received), and details of the CAISO Clearing Account to which any amounts owed by Scheduling Coordinators, CRR Holder, Black Start Generator or Participating TO are to be paid. Each billing period will be represented separately on the Invoice and/or Payment Advice but the net Invoice and/or Payment Advice for a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO will reflect the entity's net financial obligations in all billing periods. Payments or charges for the items referred to in an Invoice or Payment Advice (except for the charges payable under long-term contracts) for each Trading Day in each calendar month will be due five Business Days after the date on which the semi-monthly Invoice and/or Payment Advice is issued.

#### **E. Interest**

Section 11.29.10.2 provides for interest to be applied to any deviations through the second Recalculation Invoice - Recalculation Settlement Statement T+76B. Interest is calculated separately for the billing period from the first to the fifteen day of the month and for the billing period from the sixteenth to the last of day of the month. The rate of

interest is the interest rate calculated in accordance with 18 C.F.R. § 35.19a of the Commission's rules and regulations.

In stakeholder comments submitted on the CAISO's draft tariff modifications for payment acceleration, SCE expressed support for extending the application of interest through Recalculation Settlement Statement T+35M instead of ending it with Recalculation Settlement Statement T+76B. SCE believes that interest should be applied throughout the payment cycle in order to achieve just and reasonable settlements. During the development of the payment acceleration proposal, the CAISO considered applying interest to settlement statements issued subsequent to Recalculation Settlement Statement T+76B but determined not to take that approach because the CAISO anticipates that the amount of interest associated with adjustments to Incremental Changes from statement to statement will likely be very small. However, calculating interest for each time segment would require implementation of a detailed manual process to track the interest calculations and any disputes that arise related to the underlying adjustment or the interest itself. In weighing these factors, the CAISO does not at this time believe that the application of interest to adjustments to Incremental Changes on any additional Recalculation Settlement Statement is warranted.

#### **F. Payment Calendar**

Under Section 11.29.24, the CAISO will continue to prepare a draft CAISO Payments Calendar in September each year for the following calendar year. The Payments Calendar will show for each Trading Day:

- a. The date by which Scheduling Coordinators are required to provide Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter data for all their Scheduling Coordinator Metered Entities for each Settlement Period in the Trading Day;
- b. The date on which the CAISO will issue Initial Settlement Statements T+7B and Invoices and Payment Advices to Scheduling Coordinators or CRR Holders, Black Start Generators and Participating TOs for that Trading Day;
- c. The date by which Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs are required to notify the CAISO of any disputes in relation to their Initial Settlement Statements T+7B pursuant to Section 11.29.8.2;
- d. The date on which the CAISO will issue Recalculation Settlement Statements T+38B, T+76B, T+18M, T+35M, and T+36M, and Invoices and Payment Advices to Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs for that Trading Day;

- e. The dates by which Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs are required to notify the CAISO of any disputes in relation to their Recalculation Settlement Statements T+38B, T+76B, T+18M and T+35M.
- f. The date and time by which CAISO Debtors are required to have made payments into the CAISO Clearing Account in payment of Invoices for that Trading Day;
- g. The dates and times on which CAISO Creditors will receive payments from the CAISO Clearing Account of amounts owing to them for that Trading Day; and
- h. In relation to Reliability Must-Run Charges and RMR Payments, the details set out in paragraph 3 of Appendix N, Part J.

**G. Meter Data**

**1. Provision of Meter Data, Including Estimated Data**

In order to implement the payment acceleration program, the CAISO needed to make certain corresponding changes to Section 10 of the CAISO Tariff which identifies the requirements associated with the provision of Meter Data. The CAISO revised Section 10.2.1.3 to expedite the provision of Actual Settlement Quality Meter Data and to provide for Scheduling Coordinator Estimated Settlement Quality Meter Data and CAISO Estimated Settlement Quality Meter Data.

As previously discussed, the CAISO also made conforming changes to Section 10.3.6 to require Scheduling Coordinators to provide either actual (polled) or estimated SQMD in accordance with the new Section 10.3.6.1 and the Payments Calendar. In addition, the revised provision specifies that the Meter Data is to be provided by noon on the fifth Business Day after the Trading Day.

Section 10.3.6.1 has been added to the Tariff to identify certain methodologies Scheduling Coordinators may choose to use in order to provide Scheduling Coordinator Estimated Settlement Quality Meter Data, including using interval metering when available, sound estimation practices, and other available information including, but not limited to, bids, schedules, forecasts, temperature data, operating logs, recorders, and historical data.

Section 10.3.6.2 is also a new section that specifies the timing of Settlement Quality Meter Data submission for Recalculation Settlement Statement T+36B. Specifically, Scheduling Coordinators must submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO no later than 24:00 midnight on the forty-third calendar day after the Trading Day (T+43C) for the Recalculation Settlement Statement. Under Section 10.3.6.3, Scheduling

Coordinators may continue to submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO for use in Recalculation Settlement Statements subsequent to T+36B according to timelines established in the CAISO Payment Calendar.

Conforming changes were made to Sections 10.2.13.2 and 10.3.10.1

## **2. Meter Data Retention**

The CAISO proposes to modify Section 10.1.2 to shorten the time period the CAISO is required to maintain a record of all Revenue Quality Meter Data and Settlement Quality Meter Data provided to it, as well as the Settlement Quality Meter Data it produces. Currently, the CAISO is required to retain the meter data for a period of 18 months on site at the CAISO's facilities and for a period of 10 years in the CAISO's archive storage facilities. Based on adoption of an accelerated payment calendar and sunset provision, the CAISO proposes to shorten the retention requirement to a period which, at least, allows for the re-run of data as required by the CAISO Tariff and any adjustment rules of the Local Regulatory Authority governing the Scheduling Coordinators and their End-Use Customers and the Commission. This change is also consistent with the requirements of Section 11.1(c).

## **H. Other Conforming Changes and Definitions**

Implementation of the payment acceleration program requires additional conforming changes to the CAISO Tariff. These are reflected in Sections 11.1.4, 11.1.5, 11.23, 13.5.2, 37.9.3.3, and 37.11.1.

To facilitate payment acceleration, the CAISO is also proposing revisions to the Master Definition Supplement in Appendix A to add certain terms, modify certain terms, and eliminate other terms that have been superseded.

## **V. TRANSITIONAL ISSUES**

The CAISO is proposing that the new payment acceleration timelines apply to Trading Days following the effective date of this filing. Accordingly, transactions for Trading Days prior to the effective date will continue to be settled under the terms of the currently effective metering and settlement provisions of the CAISO Tariff.

To accommodate this need to have two settlement timelines in effect for a transitional period and to provide the CAISO with authority in the CAISO Tariff to process the necessary metering data, produce Settlement Statements, and handle any billing inquiries, the CAISO proposes to incorporate the existing provisions of Section 10 and Section 11 into a separate Appendix H. This appendix would apply to the existing metering and settlement provisions of the currently effective CAISO Tariff to all market transactions that occur prior to the effective date for payment acceleration.

## **VI. EFFECTIVE DATE AND REQUEST FOR WAIVER**

The CAISO proposes an effective date of October 1, 2009 for the proposed tariff provisions to coincide with the deployment date for payment acceleration supported by Market Participants. The CAISO requests that the Commission grant all necessary waivers, including a waiver of Section 35.3 of the Commission's Regulations, to permit the proposed tariff sheets to become effect on these dates, which is more than 120 days after this filing. Making the filing at this time is directed by the Board and hopefully will permit the CAISO, Market Participants, stakeholders, and the Commission to resolve the issues prior to the implementation of the payment acceleration program and provide greater certainty to the CAISO Markets.

## **VII. EXPENSES**

No expense or cost associated with this filing has been alleged or judged in any judicial proceeding to be illegal, duplicative, unnecessary, or demonstratively the product of discriminatory employment practices.

## **VIII. COMMUNICATIONS**

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

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## **IX. SERVICE**

The CAISO has served copies of this filing on the Public Utilities Commission of the State of California, the California Energy Commission, and all parties with Scheduling Coordinator Agreements under the CAISO Tariff. In addition, the CAISO has posted a copy of the filing on the CAISO Website.

**X. CONTENTS OF THIS FILING**

This filing comprises:

This Transmittal Letter

Attachment A: Clean Tariff Sheets from the Tariff

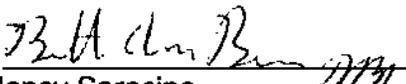
Attachment B: Blacklined Tariff Sheets showing changes from the Tariff

Attachment C: CAISO Payment Acceleration Project Implementation Plan, May 29, 2009

Attachment D: Memorandum to the CAISO Board of Governors Re: Decision on Payment Acceleration

**XI. CONCLUSION**

The CAISO respectfully requests that the Commission approve the proposed payment acceleration proposal, without modification, suspension, or hearing by the earliest date allowed by law with an effective date of October 1, 2009.

  
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**Attachment A – Clean Sheets**  
**Payment Acceleration Amendment**  
**ER09-\_\_\_-000**  
**Fourth Replacement CAISO Tariff**  
**June 1, 2009**

**10 METERING.**

**10.1 General Provisions.**

**10.1.1 Role of the CAISO.**

The CAISO is responsible for establishing and maintaining the Revenue Meter Data Acquisition and Processing System (RMDAPS) and the Settlement Quality Meter Data Systems (SQMDS). RMDAPS will acquire Revenue Quality Meter Data for use in the CAISO's Settlement and billing process, and SQMDS acquires Scheduling Coordinators' Settlement Quality Meter Data. The CAISO is also responsible for the following for CAISO Metered Entities:

- (a) setting standards and procedures for the registration, certification, auditing, testing and maintenance of revenue quality meters and Meter Data servers; and
- (b) establishing procedures for the collection, security, validation and estimation of Meter Data.

**10.1.2 Meter Data Retention by the CAISO.**

The CAISO will maintain a record of all Revenue Quality Meter Data and Settlement Quality Meter Data provided to it, as well as the Settlement Quality Meter Data it produces, for a period of 18 months on site at the CAISO's facilities and for a period which, at least, allows for the re-run of data as required by this CAISO Tariff and any adjustment rules of the Local Regulatory Authority governing the Scheduling Coordinators and their End-Use Customers and FERC. The CAISO will, on reasonable notice, provide a Scheduling Coordinator with access to Settlement Quality Meter Data (actual or Scheduling Coordinator estimated) provided that the Scheduling Coordinator requesting access represented the entity for which that data was provided at the time the data was provided to the CAISO.

**10.1.3 Netting.**

**10.1.6 Failure of CAISO Facilities or Systems.**

In the event facility and/or systems failures impact the CAISO's ability to accept, collect, and process Revenue Quality Meter Data or Settlement Quality Meter Data, alternative measures may be required by the CAISO, CAISO Metered Entities, and Scheduling Coordinator Metered Entities. These measures are described in the applicable Business Practice Manual.

**10.2 Metering for CAISO Metered Entities.**

CAISO Metered Entities' revenue quality meters will be directly polled by the CAISO's RMDAPS as specified in this CAISO Tariff and Business Practice Manuals.

**10.2.1 Responsibilities of CAISO Metered Entities.**

**10.2.1.1 Duty to Provide Revenue Quality Meter Data.**

CAISO Metered Entities shall ensure that Revenue Quality Meter Data from their meters directly connected to the CAISO Controlled Grid or at interconnections thereto, including interconnections between utility Service Areas which have separate UFE calculations, is made available to the CAISO RMDAPS in accordance with the requirements of this Section 10 and the Business Practice Manuals.

**10.2.1.2 Format for Data Submission.**

CAISO Metered Entities must ensure that the Meter Data obtained by the CAISO directly from their revenue quality meters is raw, unedited and unaggregated Meter Data in kWh and kVarh values, as specified in the applicable Business Practice Manual. The CAISO will be responsible for the Validation, Estimation and Editing of that Meter Data in order to produce Settlement Quality Meter Data.

**10.2.1.3 Provision of and Access to Settlement Quality Meter Data.**

Scheduling Coordinators may obtain Settlement Quality Meter Data relating to the CAISO Metered Entities they represent by directly accessing the Settlement Quality Meter Data Systems as specified in the applicable Business Practice Manual.

- (a) For CAISO Metered Entities, Revenue Quality Meter Data obtained by successfully polled meters will be validated, estimated and edited by the CAISO to produce Settlement Quality Meter Data (actual), which will be made available to Scheduling Coordinators within five (5) Business Days from the Trading Day (T+5B) and will be used in the Initial Settlement Statement T+7B calculation.
- (b) In the event that Revenue Quality Meter Data remains unavailable at noon on the fifth Business Day after the Trading Day (T+5B) due to unsuccessfully polled meters or facility and/or systems failures, the CAISO will estimate Settlement Quality Meter Data for CAISO Metered Entities for any outstanding metered Demand and/or Generation for the Initial Settlement Statement T+7B calculation as provided in Section 11.1.5.
- (c) If the CAISO is notified in accordance with Section 10.2.13.2 that the revenue quality meter for a CAISO Metered Entity requires repair, the CAISO will produce Settlement Quality Meter Data (actual) for that entity using the estimation procedures referred to in Section 10.2.9, which will be made available to the Scheduling Coordinator for the CAISO Metered Entity within forty-three (43) calendar days from the Trading Day (T+43C) and will be used in the Recalculation Settlement Statement T+38B calculation.

**10.2.13 Maintenance of Metering Facilities.**

**10.2.13.1 Duty to Maintain Metering Facilities.**

CAISO Metered Entities must maintain their Metering Facilities so that those Metering Facilities continue to meet the standards prescribed by the CAISO Tariff and the applicable Business Practice Manuals.

**10.2.13.2 Repairs.**

If a revenue quality meter of a CAISO Metered Entity requires repairs to ensure that it operates in accordance with the requirements of the CAISO Tariff and the applicable Business Practice Manuals, the CAISO Metered Entity must immediately notify the CAISO of the need for repairing that meter and must ensure that those repairs are completed in accordance with the applicable Business Practice Manual. During periods for which no Revenue Quality Meter Data is available from a meter which has a current Certificate of Compliance, the CAISO will create and provide access to Settlement Quality Meter Data for use in the Settlement Statement calculations, as provided in Section 10.2.1.3.

**10.2.14 Installation of Additional Metering Facilities.**

**10.2.14.1 CAISO Requirement to Install Additional Metering.**

If the CAISO determines that there is a need to install additional Metering Facilities on the CAISO Controlled Grid pursuant to Section 10.2.2, it will notify the relevant CAISO Metered Entity of that need and will process the CAISO Metered Entity's Proposal for Installation in accordance with the applicable Business Practice Manual.

**10.2.14.2 CAISO Metered Entities' Election to Install Additional Metering.**

In accordance with Section 10.2.2, a CAISO Metered Entity may choose to install additional metering, including Backup Meters. If a CAISO Metered Entity installs such additional metering, such metering must, unless the CAISO agrees otherwise:

**10.3.3 Loss Factors.**

Where a Scheduling Coordinator Metered Entity is connected to a UDC's Distribution System, the responsible Scheduling Coordinator shall adjust the Meter Data by an estimated Distribution System loss factor to derive an equivalent CAISO Controlled Grid level measure. Such estimated Distribution System loss factors shall be approved by the relevant Local Regulatory Authority prior to their use.

**10.3.4 Load Profile Authorization.**

Scheduling Coordinators shall be responsible for obtaining all necessary authorizations of Approved Load Profiles from Local Regulatory Authorities having jurisdiction over the use of profiled Meter Data and shall use Approved Load Profiles in any Settlement process in which Load profiles are used to allocate consumption to Settlement Periods.

**10.3.5 Communication of Meter Data.**

Each Scheduling Coordinator shall submit Settlement Quality Meter Data for Scheduling Coordinator Metered Entities to the CAISO in accordance with Section 11.29.24.1, Section 37.5, and applicable Business Practice Manuals.

**10.3.6 Settlement Quality Meter Data Submission.**

Scheduling Coordinators shall submit to the CAISO Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter Data, as provided in Section 10.3.6.1(a), for Scheduling Coordinator Metered Entities they represent for each Settlement Period in an Operating Day according to the timelines established in Section 10.3.6.1 and the CAISO Payments Calendar and as provided in the applicable Business Practice Manual. Scheduling Coordinators must also submit Settlement Quality Meter Data (actual and Scheduling Coordinator estimated) on demand as provided in the applicable Business Practice Manual.

**10.3.6.1 Timing of Settlement Quality Meter Data Submission for Calculation of Initial Settlement Statement T+7B.**

Scheduling Coordinators must submit Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO no later than noon on the fifth Business Day after the Trading Day (T+5B) for the Initial Settlement Statement T+7B calculation.

- (a) In the absence of Actual Settlement Quality Meter Data, Scheduling Coordinators may submit Scheduling Coordinator Estimated Settlement Quality Meter Data using interval metering when available, sound estimation practices, and other available information including, but not limited to, bids, schedules, forecasts, temperature data, operating logs, recorders, and historical data. Scheduling Coordinator Estimated Settlement Quality Meter Data must be a good faith estimate that reasonably represents Demand and/or Generation quantities for each Settlement Period.
- (b) When Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter Data is not received by the CAISO for a Scheduling Coordinator Metered Entity within five (5) Business Days from the Trading Day (T+5B), the CAISO will estimate the entity's Settlement Quality Meter Data for any outstanding metered Demand and/or Generation for use in the Initial Settlement Statement T+7B calculation, as provided in Section 11.1.5.

**10.3.6.2 Timing of Settlement Quality Meter Data Submission for Recalculation Settlement Statement T+38B.**

Scheduling Coordinators must submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO no later than midnight on the forty-third calendar day after the Trading Day (T+43C) for the Recalculation Settlement Statement T+38B.

- (a) When Actual Settlement Quality Meter Data is not received by the CAISO for a Scheduling Coordinator Metered Entity by forty-three calendar days after the Trading Day (T+43C), the Settlement Quality Meter Data will be considered late and subject to sanctions pursuant to Section 37.5.

- (b) Any Scheduling Coordinator Estimated Settlement Quality Meter Data submitted by a Scheduling Coordinator on behalf of the Scheduling Coordinator Metered Entities it represents that is not replaced with Actual Settlement Quality Meter Data by forty-three calendar days after the Trading Day (T+43C) will be considered late and subject to sanctions pursuant to Section 37.5. In the absence of Actual Settlement Quality Meter Data, Scheduling Coordinator Estimated Settlement Quality Meter Data will be used in the Recalculation Settlement Statements.
- (c) The CAISO will not estimate a Scheduling Coordinator Metered Entity's Settlement Quality Meter Data for any outstanding metered Demand and/or Generation for use in a Recalculation Settlement Statement calculation. Any previous CAISO Estimated Settlement Quality Meter Data that the Scheduling Coordinator does not replace with Actual Settlement Quality Meter Data by forty-three (43) calendar days after the Trading Day (T+43C) will be set to zero.

**10.3.6.3 Timing of Settlement Quality Meter Data Submission for Recalculation Settlement Statements after the Recalculation Settlement Statement T+38B.**

Scheduling Coordinators may continue to submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO for use in Recalculation Settlement Statements subsequent to the Recalculation Settlement Statement T+38B according to timelines established in the CAISO Payment Calendar.

need not be recertified provided such meters are maintained so as to meet the standards and accuracy requirements prescribed by any relevant Local Regulatory Authority or, if no such standards have been prescribed by that Local Regulatory Authority, such requirements as referred to in the Business Practice Manuals and this Section 10. Recertification is not required by the CAISO upon an election by a Scheduling Coordinator Metered Entity to change its Scheduling Coordinator from which it takes service.

**10.3.10 Requirement for Audit and Testing.**

**10.3.10.1 Audit and Testing by Scheduling Coordinator.**

Each Scheduling Coordinator shall at least annually conduct (or engage an independent, qualified entity to conduct) audits and tests of the Metering Facilities of the Scheduling Coordinator Metered Entities that it represents and the Meter Data provided to the Scheduling Coordinator in order to ensure compliance with all applicable requirements of any relevant Local Regulatory Authority. Scheduling Coordinators shall undertake any other actions that are reasonable necessary to ensure the accuracy and integrity of the Settlement Quality Meter Data (actual or Scheduling Coordinator estimated) provided by them to the CAISO.

**10.3.10.2 Audit and Testing by CAISO.**

Subject to any applicable Local Regulatory Authority requirements, the Metering Facilities and data handling and processing procedures of Scheduling Coordinators and Scheduling Coordinator Metered Entities are subject to audit and testing by the CAISO or a CAISO Authorized Inspector. Subject to any applicable Local Regulatory Authority requirements, the CAISO will have the right to either conduct any audit or test it considers necessary or to witness such audit or test carried out by the Scheduling Coordinator, Scheduling Coordinator Metered Entity or a CAISO Authorized Inspector engaged by the Scheduling Coordinator, Scheduling Coordinator Metered Entity or the CAISO to carry out those audits or tests.

**11.1.3 Financial Transaction Conventions and Currency.**

The following conventions have been adopted in defining sums of money to be remitted to or received by the CAISO:

- (a) Where the CAISO is to receive a sum of money in accordance with this CAISO Tariff, this is defined as a “charge.”
- (b) Where the CAISO is required to pay a sum of money in accordance with this CAISO Tariff, this is defined as a “payment.”
- (c) All financial transactions are denominated in United States dollars and cents.
- (d) All payments by the CAISO to Business Associates shall be made by Fed-Wire.  
All payments to the CAISO by Business Associates shall be made by Fed-Wire

**11.1.4 [NOT USED]**

**11.1.5 Settlement Quality Meter Data for Initial Settlement Statement T+7B Calculation.**

The CAISO’s Initial Settlement Statement T+7B shall be based on the Settlement Quality Meter Data (actual or Scheduling Coordinator estimated) received in SQMDS. In the event Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter Data is not received from a Scheduling Coordinator or CAISO Metered Entity, the CAISO will estimate Settlement Quality Meter Data for that outstanding metered Demand or Generation for the Initial Settlement Statement T+7B calculation.

- (a) CAISO Estimated Settlement Quality Meter Data for metered Generation will be based on total Expected Energy and dispatch of that resource as calculated in the Real-Time Market and as modified by any applicable corrections to the Dispatch Operating Point for the resource.

- (b) CAISO Estimated Settlement Quality Meter Data for metered Demand will be based on Scheduled Demand by the appropriate LAP. This value will be increased by fifteen percent (15%) if the total actual system Demand in Real Time, as determined by the CAISO each hour, is greater than fifteen percent (15%) of the sum of the value of Scheduling Coordinator submitted metered Demand, CAISO polled estimated Settlement quality metered Demand, and Scheduled Demand for unsubmitted metered Demand at the fifth Business Day after the Trading Day (T+5B). CAISO Estimated Settlement Quantity Meter Demand for Participating Load will not be increased by fifteen percent (15%).

**11.2 Settlement of Day-Ahead Market Transactions.**

All transactions in the IFM and RUC as specified in the Day-Ahead Schedule, AS Awards and RUC Awards, respectively, are financially binding and will be settled based on the Day-Ahead LMP, ASMP or RUC Price for the relevant Location for the specific resource identified in the Bid. The CAISO will settle the costs of Demand, capacity, Energy and Ancillary Services as separate Settlement charges and payments for each Settlement Period of the Day-Ahead Schedule, Day-Ahead AS Award or RUC Award, as appropriate.

**11.23 Penalties for Uninstructed Imbalance Energy.**

Effective December 1, 2004, the CAISO shall not charge any Uninstructed Deviation Penalties pursuant to this Section 11.23 until FERC issues an order authorizing the CAISO to charge Uninstructed Deviation Penalties pursuant to this section. Beginning with Settlement Statements for the first Trading Day for which FERC authorizes the CAISO to charge Uninstructed Deviation Penalties pursuant to this section, the CAISO shall charge Scheduling Coordinators Uninstructed Deviation Penalties for Uninstructed Imbalance Energy resulting from resource deviations outside a Tolerance Band from their Dispatch Operating Point, for dispatched resources, or their Day-Ahead Schedule otherwise. Publishing of Uninstructed Deviation Penalty results will not occur on the Initial Settlement Statement T+7B but rather will occur on the Recalculation Settlement Statement T+38B. The Uninstructed Deviation Penalty will be applied as follows:

- (a) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval. The Uninstructed Deviation Penalty for positive Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval in which the CAISO has not declared a staged System Emergency;
- (b) The Uninstructed Deviation Penalty will apply to pre-Dispatched Bids from Non-Dynamic System Resources identified, when such a pre-Dispatch Instruction is issued more than forty (40) minutes prior to the relevant Operating Hour, subject to the following conditions: i) the Uninstructed Deviation Penalty will only apply to the pre-Dispatched amount of the Bid that is declined or not delivered, ii) the Uninstructed Deviation Penalty will not apply to a portion of a pre-Dispatched Bid that is subsequently not delivered at the direction of a Balancing Authority,

**11.24.4 Allocation of Revenue Collected Under the Interim Scheduling Charge.**

Any revenues collected with the assessment of the Interim Scheduling Charge shall be treated as "Other Revenues" as described in Part C of Schedule 1 of Appendix F. The Interim Scheduling Charge revenues will be used to offset the revenue requirement associated with the Market Usage Charge.

**11.25 [NOT USED]**

**11.26 [NOT USED]**

**11.27 Voltage Support and Black Start Charges.**

The CAISO shall calculate, account for and settle charges and payments for Voltage Support and Black Start as set out in Sections 11.10.1.4, 11.10.1.5, 11.10.7, 11.10.8, and the applicable Business Practice Manual.

**11.28** The CAISO shall calculate, charge and disburse all collected default Interest in accordance with the CAISO Tariff.

**11.29 Billing and Payment Process.**

The CAISO will calculate for each charge the amounts payable by the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each Settlement Period of the Trading Day, and the amounts payable to that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for each Settlement Period of that Trading Day and shall arrive at a net amount payable for each charge by or to that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for that Trading Day. Each of these amounts will appear in the Settlement Statements that the CAISO will provide to the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO.

The components of the Grid Management Charge will be included in an Initial Settlement Statement T+7B, and any Recalculation Settlement Statement with the other types of charges referred to in Section 11.

**11.29.1** The billing and payment process shall be based on the issuance of Initial Settlement Statement T+7B and the Recalculation Settlement Statements.

**11.29.2** Payments or charges for the items referred to in Section 11.1.2 (except for the charges payable under long-term contracts) for each Trading Day in each calendar month shall be made five (5) Business Days after issuance of the Invoices and Payment Advices issued in accordance with Section 11.29.10. Payments for FERC Annual Charges will be made in accordance with Section 11.19.

**11.29.3 Prepayments.**

- (a) A Scheduling Coordinator or CRR Holder may choose to pay at an earlier date than the Payment Date specified in the CAISO Payments Calendar by way of prepayment provided it notifies the CAISO by electronic means before submitting its prepayment.
- (b) Prepayment notifications must specify the dollar amount prepaid.
- (c) Prepayments must be made by Scheduling Coordinators or CRR Holder via Fed-Wire into their CAISO prepayment account designated by the CAISO. The relevant Scheduling Coordinator or CRR Holder shall grant the CAISO a security interest on all funds in its CAISO prepayment account.

**11.29.4.2 At the CAISO's Bank.**

In the event of failure of any electronic transfer system affecting the CAISO Bank, the CAISO shall use reasonable efforts to establish alternative methods of remitting funds to the CAISO Creditors' Settlement Accounts by close of banking business on that Payment Date, or as soon as possible thereafter. The CAISO shall notify the CAISO Debtors and the CAISO Creditors of occurrence of the system failure and the alternative methods and anticipated time of payment.

**11.29.5 General Principles for Production of Settlement Statements.**

**11.29.5.1 Basis of Settlement.**

The basis of each Settlement Statement shall be the debiting or crediting of an account in the name of the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO in the general ledger set up by the CAISO to reflect all transactions, charges or payments settled by the CAISO.

**11.29.5.2 Right to Dispute.**

All Scheduling Coordinators, CRR Holders, Black Start Generators or Participating TOs shall have the right to dispute any item or calculation set forth in any Initial Settlement Statement T+7B Recalculation Settlement Statement T+38B, or Incremental Changes in Recalculation Settlement Statements T+76B, T+18M, and T+35M in accordance with this CAISO Tariff, but not those set forth in Recalculation Settlement Statement T+36M.

**11.29.5.3 Data Files.**

Settlement Statements relating to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall be accompanied by data files of supporting information that includes the following for each Settlement Period of the Trading Day:

- (a) the aggregate quantity (in MWh) of Energy supplied or withdrawn by the Scheduling Coordinator Metered Entities represented by the Scheduling Coordinator;

When actual verified Meter Data is available and all of the disputes raised by Scheduling Coordinators, CRR Holders, Black Start Generators, and Participating TOs during the validation process described in Section 11.29.8 have been determined, the CAISO shall recalculate the amounts payable and receivable by the affected Scheduling Coordinators, CRR Holders, Black Start Generators, and Participating TOs or by all Scheduling Coordinators, CRR Holders, Black Start Generators, and Participating TOs, if applicable, as soon as reasonably practical and shall show any required adjustments as a debit or credit in the next Settlement Statement.

**11.29.7 Settlements Cycle.**

**11.29.7.1 Timing of the Settlements Process.**

The CAISO will publish: (i) Initial Settlement Statements T+7B on the seventh Business Day from the relevant Trading Day (T+7B), (ii) Recalculation Settlement Statements on the thirty-eighth Business Day from the relevant Trading Day (T+38B), (iii) Recalculation Settlement Statements on the seventy-sixth Business Day after the Trading Day (T+76B), (iv) Recalculation Settlement Statements on the Business Day eighteen (18) calendar months from the relevant Trading Day (T+18M) if necessary, (v) Recalculation Settlement Statements on the Business Day thirty-five (35) calendar months from the relevant Trading Day (T+35M) if necessary, (vi) Recalculation Settlement Statements on the Business Day thirty-six (36) calendar months from the relevant Trading Day (T+36M) if necessary, and (v) any other Recalculation Settlement Statement authorized under Section 11.29.7.3. The CAISO will issue a notice to the market if a Recalculation Settlement Statement T+18M, Recalculation Settlement Statement T+35M, Recalculation Settlement Statement T+36M, or any additional Recalculation Settlement Statement is required for a Trading Day.

**11.29.7.1.1 Initial Settlement Statement T+7B.**

The CAISO shall provide to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for validation an Initial Settlement Statement T+7B for each Trading Day within seven (7) Business Days of the relevant Trading Day, covering all Settlement Periods in that Trading Day. Each Initial Settlement Statement T+7B will be produced using available Settlement Quality Meter Data (either actual or estimated) and CAISO Estimated Settlement Quality Meter Data. The Initial Settlement Statement T+7B will include the following:

- (a) the amount payable or receivable by the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge referred to in Section 11 for each Settlement Period in the relevant Trading Day;
- (b) the total amount payable or receivable by that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for all Settlement Periods in that Trading Day after the amounts payable and the amounts receivable under (a) have been netted off pursuant to Section 11.29; and
- (c) the components of each charge in each Settlement Period except for information contained in the Imbalance Energy report referred to in this Section 11.29.7.1.1; and
- (d) a breakdown of the components of the Imbalance Energy charge (the Imbalance Energy report).

**11.29.7.1.2 Recalculation Settlement Statements.**

The CAISO shall provide to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO Recalculation Settlement Statements in accordance with the CAISO Tariff and the CAISO Payments Calendar. Recalculation Settlement Statements shall be in a format similar to that of the Initial Settlement Statement T+7B and shall include the same granularity of information provided in the Initial Settlement Statement T+TB as amended following the validation procedure.

**11.29.7.2 Basis for Billing and Payment.**

The Initial Settlement Statement T+7B and any Recalculation Settlement Statement shall constitute the basis for billing in accordance with this CAISO Tariff. The Initial Settlement Statement T+7B shall constitute the basis for billing for all charges in the first instance. The Recalculation Settlement Statement T+38B shall constitute the basis for billing for adjustments to charges set forth in the Initial Settlement Statement T+7B. Each Scheduling Coordinator, CRR Holder, Black Start Generator, and Participating TO shall pay any net debit and shall be entitled to receive any net credit shown in an Invoice or Payment Advice on the Payment Date, whether or not there is any dispute regarding the amount of the debit or credit.

**11.29.7.2.1 Elimination of Invoices under \$10.00.**

Invoices and Payment Advices due to or from any Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO for amounts less than \$10.00 will be adjusted to \$0.00 and no amount will be due to or from that Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO for that Invoice or Payment Advice.

**11.29.7.3 Additional Recalculation Settlement Statements.**

The CAISO shall issue no Recalculation Settlement Statements other than to Recalculation Settlement Statements T+38B, Recalculation Settlement Statements T+76B, Recalculation Settlement Statements T+18M, Recalculation Settlement Statements T+35M, and Recalculation Settlement Statements T+36M, unless directed by the CAISO Governing Board or pursuant to a FERC order.

**11.29.7.3.1** If an additional Recalculation Settlement Statement is ordered by the CAISO Governing Board, the CAISO shall arrange to have the Recalculation Settlement Statement carried out as soon as is reasonably practicable following the CAISO Governing Board's order, subject to the availability of staff and computer time, compatible software, appropriate data and other resources.

**11.29.7.3.2** The cost of an additional Recalculation Settlement Statement shall be borne by the Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO requesting it, unless an additional Recalculation Settlement Statement was needed due to a clerical oversight or error on the part of the CAISO staff.

**11.29.7.3.3** Where an additional 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 this CAISO Tariff, for those Scheduling Coordinators, CRR Holders, Black Start Generators, or Participating TOs affected by the additional Recalculation Settlement Statement, the CAISO shall reflect the amounts to be debited or credited in the next scheduled semi-monthly Invoice or Payment Advice for the end of the month.

**11.29.7.3.4** Re-runs, post closing adjustments and the financial outcomes of CAISO ADR Procedures and any other dispute resolution may be invoiced separately from monthly market activities. The CAISO shall provide a Market Notice at least thirty (30) days prior to such invoicing identifying the components of such Invoice or Payment Advice.

**11.29.8 Confirmation and Validation.**

**11.29.8.1 Confirmation.**

It is the responsibility of each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO to notify the CAISO if it fails to receive a Settlement Statement on the date specified for the publication of such Settlement Statement in the CAISO Payments Calendar. Each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall be deemed to have received its Settlement Statement on the dates specified, unless it notifies the CAISO to the contrary.

**11.29.8.2 Validation of Initial Settlement Statement T+7B and Recalculation Settlement Statement T+38B.**

**11.29.8.2.1 Validation of Initial Settlement Statement T+7B.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall have the opportunity to review the terms of the Initial Settlement Statement T+7B that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall be deemed to have validated each Initial Settlement Statement T+7B unless it has raised a dispute or reported an exception within fourteen (14) Business Days from the date of issuance. Once validated, an Initial Settlement Statement T+7B shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, except to the extent that the CAISO performs a Recalculation Settlement Statement.

The notice of dispute, if any, shall state clearly the Trading Day, the issue date of the Initial Settlement Statement T+7B, the item disputed, the reasons for the dispute, and the amount claimed (if appropriate) and shall be accompanied with all available evidence reasonably required to support the claim.

**11.29.8.2.2 Validation of Recalculation Settlement Statement T+38B.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall have the opportunity to review the terms of the Recalculation Settlement Statement T+38B that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall be deemed to have validated each Recalculation Settlement Statement T+38B unless it has raised a dispute or reported an exception within eighteen (18) Business Days from the date of issuance. Once validated, a Recalculation Settlement Statement T+38B shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, except to the extent that the CAISO performs a subsequent Recalculation Settlement Statement.

The notice of dispute, if any, shall state clearly the Trading Day, the issue date of the Recalculation Settlement Statement T+38B, the item disputed, the reasons for the dispute, and the amount claimed (if appropriate) and shall be accompanied with all available evidence reasonably required to support the claim.

**11.29.8.3 Validation of Additional Recalculation Settlement Statements.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall have the opportunity to review the Incremental Changes, including the CAISO's implementation of a prior accepted dispute, that appear on or are omitted from any Recalculation Settlement Statement T+76B, Recalculation Settlement Statement T+18M or Recalculation Settlement Statement T+35M that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall be deemed to have validated the Incremental Changes on each Recalculation Settlement Statement unless it has raised a dispute or reported an exception regarding those Incremental Changes within time periods set forth in Sections 11.29.8.4.1 through 11.29.8.4.6 from the date of issuance. Once validated, the Incremental Changes on a Recalculation Settlement Statement T+76B , Recalculation Settlement Statement T+18M, or Recalculation Settlement Statement T+35M shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, except to the extent that the CAISO performs an additional Recalculation Settlement Statement pursuant to Section 11.29.7.3.

The notice of dispute shall state clearly the Trading Day, the issue date of the Recalculation Settlement Statement, the item disputed, the reasons for the dispute, and the amount claimed (if appropriate) and shall be accompanied with all available evidence reasonably required to support the claim. The only Recalculation Settlement Statement that cannot be disputed is Recalculation Settlement Statement T+36M.

**11.29.8.4 Disputes or Exceptions.**

**11.29.8.4.1 Dispute of Initial Settlement Statement T+7B.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit a dispute that identifies discrepancies or errors for any item in an Initial Settlement Statement T+7B, except for CAISO or Scheduling Coordinator Estimated Settlement Quality Meter Data, no later than fourteen (14) Business Days from the publication date of an Initial Settlement Statement T+7B. Valid disputes regarding data appearing on an Initial Settlement Statement T+7B will be reflected in a later Recalculation Settlement Statement for that Trading Day. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on an Initial Settlement Statement T+7B, it may initiate a good faith negotiation of the dispute with the CAISO no later than thirty (30) days after the date of the CAISO's response to the dispute.

**11.29.8.4.2 Dispute of Recalculation Settlement Statement T+38B.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit a dispute that identifies discrepancies or errors for any item in a Recalculation Settlement Statement T+38B no later than eighteen (18) Business Days from the publication date of the Recalculation Settlement Statement T+38B. Valid disputes regarding data appearing on a Recalculation Settlement Statement T+38B will be reflected in a later Recalculation Settlement Statement for that Trading Day. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+38B, it may initiate a good faith negotiation of the dispute with the CAISO no later than thirty (30) days after the date of the CAISO's response to the dispute.

**11.29.8.4.3 Dispute of Recalculation Settlement Statement T+76B.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit disputes regarding Incremental Changes in a Recalculation Settlement Statement T+76B, including the CAISO's implementation of a prior accepted dispute contained in a Recalculation Settlement Statement T+76B, no later than twelve (12) months from the relevant Trading Day (T+12M). A dispute shall only be based on Incremental Changes between Recalculation Settlement Statement T+38B and Recalculation Settlement Statement T+76B. Valid disputes regarding data appearing on a Recalculation Settlement Statement T+76B will be reflected on a later Recalculation Settlement Statement for that Trading Day. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+76B, it may initiate good faith negotiation of the dispute with the CAISO no later than thirty (30) days after the date of the CAISO's response to the dispute.

**11.29.8.4.4 Dispute of Recalculation Settlement Statement T+18M.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit disputes regarding Incremental Changes, including the CAISO's implementation of a prior accepted dispute contained in a Recalculation Settlement Statement T+18M no later than nineteen (19) months from the relevant Trading Day (T+19M). A dispute shall only be based on Incremental Changes between Recalculation Settlement Statement T+76B and Recalculation Settlement Statement T+18M. Valid Disputes regarding data appearing on a Recalculation Settlement Statement T+18M will be reflected on a later Recalculation Settlement Statement. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+18M, it may initiate a good faith negotiation with the CAISO no later than thirty (30) days after the date of the CAISO's response to the dispute.

**11.29.8.4.5 Dispute of Recalculation Settlement Statement T+35M.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit disputes regarding Incremental Changes in a Recalculation Settlement Statement T+35M, including the CAISO's implementation of a prior accepted dispute contained in a Recalculation Settlement Statement T+35M, no later than seven (7) calendar days from the publication date of a Recalculation Settlement Statement T+35M. A dispute shall only be based on (i) Incremental Changes between Recalculation Settlement Statement T+18M and Recalculation Settlement Statement T+35M, (ii) Meter Data issues identified through the audit process, or (iii) any good faith negotiation or dispute resolution settlement. Valid disputes regarding data appearing on a Recalculation Settlement Statement T+35M will be reflected on the Recalculation Settlement Statement T+36M. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+35M, it may pursue the dispute only through the dispute resolution process set forth in Section 13.

**11.29.8.4.6 Dispute of Recalculation Settlement Statement T+36M.**

Recalculation Settlement Statement T+36M shall not be subject to either a dispute by a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO, or adjustment by CAISO, except as directed by the CAISO Governing Board or by an order of FERC. Nothing herein shall be construed to restrict the right of the CAISO or any Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO's to seek redress from FERC in accordance with the Federal Power Act.

**11.29.8.4.7 Recurring Disputes or Exceptions.**

A Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may request the CAISO to treat as recurring a dispute or exception raised in accordance with Sections 11.29.8.1 and 11.29.8.2 above, if a dispute or exception would apply to subsequent Initial Settlement Statements T+7B and subsequent Recalculation Settlement Statements as permitted by Section 11.29.8.3. A request for recurring treatment may be made for any valid reason provided that subsequent Initial Settlement Statements T+7B and Recalculation Settlement Statements would be affected, including but not limited to, that the disputed calculation will recur, or that a disagreement as to policy will affect calculations in subsequent Initial Settlement Statement T+7B and Recalculation Settlement Statements. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO wishes to request that the CAISO treat a dispute as recurring, it shall, in the notice, clearly indicate that it requests such treatment and set forth in detail the reasons that support such treatment. To the extent possible, the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall state the types of charges and dates to which the dispute will apply, and provide estimates of the amounts that will likely be claimed on each date.

The CAISO shall make a determination on such a request within five (5) Business Days of receipt. To preserve its right to dispute an item, a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO must continue to raise a dispute or report an exception until it is notified by the CAISO that the CAISO agrees to treat the dispute or exception as recurring. If the CAISO grants a request to treat a dispute or exception as recurring, the dispute raised or exception reported by the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall be deemed to apply to every subsequent Initial Settlement Statement T+7B and Recalculation Settlement Statement provided to the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO from the date that the CAISO grants the request for recurrent treatment until: a) ninety (90) days have elapsed, unless the CAISO indicates a different expiration date on its response to the request, in which case the expiration date shall be as stated by the CAISO in its response or b) the dispute or exception is resolved, whichever is shorter. The CAISO may deny a request that the CAISO treat a dispute as recurring for any valid reason, including because the request is not adequately specific as to the basis for recurring treatment or the subsequent calculations that will be affected.

**11.29.8.5 [NOT USED]**

**11.29.8.6 CAISO Contact.**

If the CAISO does not agree with the amount claimed or if it requires additional information, it shall make reasonable efforts (taking into account the time it received the notice of dispute and the complexity of the issue involved) to contact the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to resolve the issue before issuing a Recalculation Settlement Statement. If it is not possible to contact the relevant party, the CAISO shall issue the Recalculation Settlement Statement without taking into account the dispute notice.

**11.29.8.7 Payment Pending Dispute.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO which receives an Invoice or Payment Advice shall pay any net debit and shall be entitled to receive any net credit shown in the Invoice or Payment Advice on the Payment Date, whether or not there is any dispute regarding the amount of the debit or credit. The provisions of Section 13 shall apply to the disputed amount.

**11.29.9 Payment Procedures.**

**11.29.9.1 All Payments to Be Made Through the CAISO.**

All Scheduling Coordinators, CRR Holders, Black Start Generators, and Participating TOs shall discharge their obligations to pay the amounts owed by them and shall receive payments of all amounts owed to them under this CAISO Tariff only through the CAISO.

**11.29.9.2 CAISO Accounts to be Established.**

The CAISO is authorized to establish and maintain bank accounts held in trust for Market Participants and obtain lines of credit and other banking facilities (not exceeding an aggregate amount set by the CAISO Governing Board) necessary for the operation of its Settlement and billing procedures. Unless

In the event that there are funds in the CAISO Surplus Account in excess of an amount to be determined by the CAISO Governing Board and identified in a Market Notice by the CAISO to Market Participants, the amount of such excess will be distributed to Scheduling Coordinators using the same method of apportioning the refund as the method employed in apportioning the liability for the Grid Management Charge.

**11.29.10 Billing and Payment.**

The CAISO shall prepare and send to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO two Invoices or Payment Advices for each billing period in each calendar month. There are two (2) billing periods in each calendar month. The first billing period is from the first to the fifteenth day of the month and second billing period is from the sixteenth to the last of day of the month. The CAISO will publish Invoices and Payment Advices for the first semi-monthly billing period in a month on the seventh Business Day after the Trading Day that is the fifteenth day of the month. The CAISO will publish Invoices and Payment Advices for the second semi-monthly billing period in a month on the seventh Business Day after the Trading Day that is the end of the month. Each Invoice or Payment Advice will show amounts which are to be paid by or to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO, the Payment Date, being the date on which such amounts are to be paid or received, and details of the CAISO Clearing Account to which any amounts owed by or to Scheduling Coordinators, CRR Holder, Black Start Generator or Participating TO are to be paid. Revenues owed from a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO are expressed as a positive amount on an Invoice. Revenues owed to a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO are expressed as a negative amount on a Payment Advice. Payments or charges for the items referred to in an Invoice or Payment Advice (except for the charges payable under long-term contracts) for each Trading Day in each calendar month shall be made five (5) Business Days after the date on which the semi-monthly Invoice or Payment Advice is issued.

**11.29.10.1 Billing Periods.**

Each Invoice or Payment Advice will include one (1) semi-monthly billing period and up to five (5) other billing periods. The other billing periods correspond to the dates on which the Recalculation Settlement Statements are published. Any Invoice or Payment Advice for a billing period corresponding to a Recalculation Settlement Statement will be reflected on the next scheduled semi-monthly Invoice or Payment Advice for the end of the month. Each billing period will be represented separately on the Invoice or Payment Advice but the net Invoice or Payment Advice for a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO will reflect the entity's net financial obligations in all billing periods.

**11.29.10.2 Interest.**

Interest will be applied to any deviations through the second Recalculation Settlement Statement - Recalculation Settlement Statement T+76B. Interest will be calculated separately for the billing period from the first to the fifteen day of the month and for the billing period from the sixteenth to the last of day of the month. The rate of interest will be the interest rate calculated in accordance with 18 C.F.R. 35.19a of FERC's regulations.

**11.29.10.3 Other Invoicing Provisions.**

The Invoices or Payment Advices will also include the total charges for each component of the Grid Management Charge, the total charges associated with any Interest for each relevant Trading Month, the FERC Annual Charges due monthly, as well as any disbursements associated with a shortfall receipt distribution.

A separate Invoice for the FERC Annual Charges due annually will be issued by the CAISO to the Scheduling Coordinator in accordance with Section 11.19.1.2. The CAISO will issue separate Invoices for NERC/WECC Charges as described in Section 11.20.

A separate Invoice for a shortfall allocation will be issued by the CAISO to Scheduling Coordinators in the event of a payment default in accordance with Section 11.29.17.1.

Recalculation Settlement Statements, post closing adjustments and the financial outcomes of CAISO ADR Procedures and any other dispute resolution may be invoiced separately from monthly market activities. The CAISO shall provide a Market Notice prior to such invoicing identifying the components of such Invoice or Payment Advice.

**11.29.10.4 Emergency Procedures.**

**11.29.10.5 Use of Estimated Data.**

In the event of an emergency or a failure of any of the CAISO software or business systems, the CAISO may use estimated Settlement Statements and Invoices and Payment Advices and may implement any temporary variation of the timing requirements relating to the Settlement and billing process contained in the CAISO Tariff. Details of the variation and the method chosen to produce estimated data, Settlement Statements and Invoices and Payment Advices will be published on the CAISO Website.

**11.29.10.6 Payment of Estimated Statements and Invoices.**

When estimated Settlement Statements and Invoices or Payment Advices are issued by the CAISO, payments between the CAISO and Market Participants shall be made on an estimated basis and the necessary corrections shall be made by the CAISO as soon as practicable. The corrections will be reflected as soon as practicable in later Settlement Statements and Invoices and Payment Advices issued by the CAISO. Failure to make such estimated payments shall result in the same consequences as a failure to make actual payments.

**11.29.10.7 Validation and Correction of Estimated Statements and Invoices.**

The CAISO shall use its best efforts to verify the estimated data and to make the necessary corrections as soon as practicable. The corrections will be reflected as soon as practicable in later Settlement Statements and Invoices and Payment Advices issued by the CAISO.

**11.29.10.8 Estimated Statements to be Final.**

In the event that the CAISO is of the opinion that, despite its best efforts, it is not possible for it to verify the estimated data because actual data is not reasonably expected to become available to the CAISO in the foreseeable future, the CAISO shall consult with the Market Participants in order to develop the most appropriate substitute data including using data provided by Market Participants. Following such determination of substitute data, the CAISO shall send to the relevant Market Participants revised Settlement Statements and Invoices and Payment Advices. The provisions of Section 11.29.8.6 shall apply to payment of revised Invoices issued in accordance with these emergency procedures. Failure to make payments of such revised Invoices shall result in the same consequences as a failure to make actual payments.

**11.29.11 Instructions for Payment.**

Each Scheduling Coordinator or CRR Holder shall remit to the CAISO Clearing Account the amount shown on the Invoice as payable by that Scheduling Coordinator or CRR Holder for value not later than 10:00 a.m. on the Payment Date.

**11.29.12 CAISO's Responsibilities.**

On the due date for payment of amounts shown in an Invoice, the CAISO shall ascertain whether all amounts required to be remitted to the CAISO Clearing Account have been credited to it. If any such amount has not been so credited, it shall ascertain which Scheduling Coordinators or CRR Holder have failed to pay the amount owed by them and it may take steps to recover any overdue amount.

**11.29.13 Non-payment by a Scheduling Coordinator or CRR Holder.**

**11.29.13.1 Notification and Interest.**

If a Scheduling Coordinator or CRR Holder becomes aware that a payment for which it is responsible will not be remitted to the CAISO Clearing Account on time, it shall immediately notify the CAISO of the fact

relevant Initial Settlement Statement T+7B and the Recalculation Settlement Statements, Invoices, Payment Advices, and other documentation on which the CAISO's certificate was based to the CAISO Debtor and the relevant CAISO Creditors. A CAISO certificate given under this Section 11.29.21.2 may be used as prima facie evidence of the amount due by a CAISO Debtor to CAISO Creditors in any legal proceedings.

**11.29.22 Data Gathering and Storage.**

**11.29.22.1 Required Capabilities.**

The CAISO shall ensure that the Settlement process shall contain, at a minimum, the following data gathering and storage capabilities:

- (a) the accurate, time-sequenced, end-to-end traceability of the Settlements process so that Scheduling Coordinators, CRR Holders and Participating TOs can fully verify their Settlement Statements;
- (b) the ability to specify and accept data that is specifically needed for audit trail requirements; and
- (c) the archiving of Meter Data, Settlement runs and other information used to prepare Settlement Statements to be consistent with the time frame required to re-run the Settlement process by state laws and the rules of the Local Regulatory Authority.

**11.29.22.2 Data Dissemination.**

Data shall not be disseminated by the CAISO except as permitted in this CAISO Tariff.

**11.29.23 Communications.**

The Initial Settlement Statement T+7B, any Recalculation Settlement Statement, and Invoices, and Payment Advices will be considered issued to CAISO Creditors or CAISO Debtors when released by the CAISO's secure communication system. Communications on a Payment Date relating to payment shall be made by the fastest practical means including by telephone. If there is a failure of a communication system and it is not possible to communicate by electronic means, then the CAISO or CAISO Creditor or CAISO Debtor, as the case may be, shall communicate by facsimile but only if the recipient is first advised by telephone to expect the facsimile. Methods of communication between the CAISO and Market Participants may be varied by the CAISO giving not less than ten (10) days notice to Market Participants on the CAISO's secure communication system.

**11.29.24 CAISO Payments Calendar.**

**11.29.24.1 Preparation.**

In September of each year, the CAISO will prepare a draft CAISO Payments Calendar for the following calendar year showing for each Trading Day:

- (a) The date by which Scheduling Coordinators are required to provide Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter Data for all their Scheduling Coordinator Metered Entities for each Settlement Period in the Trading Day;
- (b) The date on which the CAISO will issue Initial Settlement Statements T+7B and Invoices and Payment Advices to Scheduling Coordinators or CRR Holders, Black Start Generators and Participating TOs for that Trading Day;
- (c) The date by which Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs are required to notify the CAISO of any disputes in relation to their Initial Settlement Statements T+7B pursuant to Section 11.29.8.2;

- (d) The date on which the CAISO will issue the Recalculation Settlement Statements T+38B, T+76B, T+18M, T+35M, and T+36M, and Invoices and Payment Advices to Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs for that Trading Day;
- (e) The dates by which Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs are required to notify the CAISO of any disputes in relation to their Recalculation Settlement Statements T+38B, T+76B, T+18M and T+35M.
- (f) The date and time by which CAISO Debtors are required to have made payments into the CAISO Clearing Account in payment of Invoices for that Trading Day;
- (g) The dates and times on which CAISO Creditors will receive payments from the CAISO Clearing Account of amounts owing to them for that Trading Day; and
- (h) In relation to Reliability Must-Run Charges and RMR Payments, the details set out in paragraph 3 of Appendix N, Part J.

The CAISO will make a draft of the CAISO Payments Calendar available on the CAISO Website to Scheduling Coordinators, CRR Holders, Black Start Generators, Participating TOs and RMR Owners any of which may submit comments and objections to the CAISO within two weeks of the date of posting of the draft on the CAISO Website. No later than October 31<sup>st</sup> in each year, the CAISO will publish the final CAISO Payments Calendar for the following calendar year, after considering the comments and objections received from Scheduling Coordinators, CRR Holders, Black Start Generators, Participating TOs and RMR Owners. The final CAISO Payments Calendar will be posted on the CAISO Website, and will show for the period from 1 January to 31 December in the next succeeding year (both dates inclusive), the dates on which Settlement Statements shall be published by the CAISO and the Payment Dates on which the CAISO will pay the Participating TOs the Wheeling revenues allocated to them pursuant to Section 26.1.4.3.

**37.5.1.1 Expected Conduct.**

All applications, Bids, Submissions, reports, and other communications by a Market Participant or agent of a Market Participant to the CAISO, including maintenance and Outage data, Bid data, transaction information, and Load and resource information, must be submitted by a responsible company official who is knowledgeable of the facts submitted. The Market Participant shall provide accurate and factual information and not submit false or misleading information, or omit material information, in any communication with FERC, FERC-approved market monitors, FERC-approved regional transmission organizations, or FERC-approved independent system operators, or jurisdictional transmission providers, unless the Market Participant exercised due diligence to prevent such occurrences.

**37.5.1.2 Sanctions.**

The Sanctions for a violation of Section 37.5.1 shall be as follows: for the first violation within a rolling twelve (12) month period, \$2,500; for the second violation within a rolling twelve (12) month period, \$5,000; subsequent violations within a rolling twelve (12) month period, \$10,000.

**37.5.2 Inaccurate Meter Data.**

**37.5.2.1 Expected Conduct.**

Market Participants shall provide complete and accurate Settlement Quality Meter Data for each Trading Hour and shall correct any errors in such data prior to the issuance of Initial Settlement Statement T+7B or Recalculation Settlement Statement, as relevant. Failure to provide complete and accurate Settlement Quality Meter Data, as required by Section 10 and that results in an error that is discovered after issuance of an Initial Settlement Statement T+7B or Recalculation Settlement Statement, as relevant, shall be a violation of this rule. Scheduling Coordinators that fail to submit Scheduling Coordinator Estimated Settlement Quality Meter Data that is complete and based on a good faith estimate that reasonably represents Demand and/or Generation quantities for each Settlement Period as required by Section 10 and that results in an error that is discovered after issuance of an Initial Settlement Statement T+7B or Recalculation Settlement Statement, as relevant, shall be a violation of this rule.

**37.5.2.2 Sanctions.**

Violations under this Section 37.5.2 shall be subject to Sanction described in Section 37.11.

**37.9.3.2 Payment.**

Except as provided in Section 37.2.5, Section 37.4.4, Section 37.8.10 or Section 37.9.3.3 below, the Scheduling Coordinator shall be obligated to pay all penalty amounts reflected on Settlement Statements to the CAISO pursuant to the CAISO's Settlement process, as set forth in Section 11.

**37.9.3.3 Other Responsible Party.**

Where a party or parties other than the Scheduling Coordinator is responsible for the conduct giving rise to a penalty reflected on a Settlement Statement, and where the Scheduling Coordinator bears no responsibility for the conduct, such other party or parties ultimately shall be liable for the penalty. Under such circumstances, the Scheduling Coordinator shall use reasonable efforts to obtain payment of the penalty from the responsible party(ies) and to remit such payment to the CAISO in the ordinary course of the Settlement process. In the event that the responsible party(ies) wish to dispute the penalty, or the Scheduling Coordinator otherwise is unable to obtain payment from the responsible parties, the Scheduling Coordinator shall notify the CAISO and dispute the Settlement Statement. The CAISO promptly shall notify FERC. If the CAISO finds, and DMM concurs, that a Market Participant separate from the Scheduling Coordinator that is unable to obtain payment from the responsible party(ies) is solely responsible for a violation, the Scheduling Coordinator that is unable to obtain payment may net its payment of its Invoice amount by the amount of the penalty in question. The CAISO may refuse to offer further service to any responsible party that fails to pay a penalty, unless excused under the terms of the CAISO Tariff, by providing notice of such refusal to the Scheduling Coordinator. Following such notice, the Scheduling Coordinator shall be liable for any subsequent penalties assessed on account of such responsible party.

**37.9.3.4 Dispute of FERC Sanctions.**

The right that a Market Participant may otherwise have under the CAISO Tariff to dispute a penalty that has been determined by FERC shall be limited to a claim that the CAISO failed properly to implement the penalty or other Sanction ordered by FERC, except as provided by Section 37.2.5 and Section 37.4.4.

**37.10 Miscellaneous.**

**37.10.1 Time Limitation.**

An investigation of events potentially subject to Sanction under this Section 37 must be commenced within ninety (90) days of discovery of the events. Sanctions may be assessed under this Section 37 up to one year after discovery of the events constituting the violation, but no later than three years after the date of the violation. Nothing in this section shall limit the rights or liabilities of any party under any other provision of applicable laws, regulations or tariff provisions.

**37.10.2 No Limitation on Other Rights.**

Nothing contained in this Section 37 shall limit the ability of the CAISO to collect information from Market Participants or to establish new provisions pursuant to Section 15.

**37.11 Method for Calculating Penalties.**

**37.11.1 Method for Calculating Inaccurate Meter Data Penalty.**

There is no Sanction for the submission of inaccurate Meter Data used for an Initial Settlement Statement T+ 7B. However, an error in submitted Meter Data that is discovered after issuance of a Recalculation Settlement Statement constitutes a Rule of Conduct violation. The level of the Sanction depends on whether the Scheduling Coordinator or the CAISO discovered the error. An increased penalty will apply for errors that are discovered by the CAISO.

Table A1 below shows how the level of the Sanction depends on the following factors: whether or not the Scheduling Coordinator finds the error; whether or not the Scheduling Coordinator owes the market, and whether or not the CAISO performs a re-run of the market or produces a Recalculation Settlement Statement. If the CAISO issues a Recalculation Settlement Statement or performs a re-run, then Settlement to all Scheduling Coordinators is recalculated, and the impact of such re-runs on charges assessed will be considered. A penalty charge equal to thirty percent (30%) of the estimated value of the Energy error will apply if the Scheduling Coordinator discovers the

error or seventy-five percent (75%) of the estimated value of the Energy error if the CAISO discovers the error. Penalty assessment and disposition of penalty proceeds will be administered as described in Section 37.9.1 and Section 37.9.4 respectively. A Sanction will not be imposed unless such Sanction is more than \$1,000 for at least one Trading Day during the period for which there was incomplete or inaccurate Meter Data.

Table A1 – Calculation of Inaccurate Meter Data Penalty When There Is A Recalculation Settlement Statement or re-run

Case	Does SC Owe Market?	
Case 1: SC Identifies Inaccurate Meter Data	Yes	Penalty = (MWh x applicable price) x 0.30
Case 1: SC Identifies Inaccurate Meter Data	No	Penalty = (MWh x applicable price) x 0.30
Case 2: CAISO Identifies Inaccurate Meter Data	Yes	Penalty = (MWh x applicable price) x 0.75
Case 2: CAISO Identifies Inaccurate Meter Data	No	Penalty = (MWh x applicable price) x 0.75

Note to Table A1:

The applicable price will be the greater of the relevant hourly LMP or \$10/MWh. The LMP used will be the values posted on OASIS for each Trading Hour of the applicable Trading Day period.

2. Method for Calculating Inaccurate Meter Data Penalty When there is not a Recalculation

Settlement Statement or re-run.

If the CAISO does not perform a Recalculation Settlement Statement or re-run, for cases of inaccurate Meter Data, Table A2 will be used to determine and allocate penalty and any market adjustment amount. The market adjustment approximates the financial impact on the market; however, it does not completely reflect all the Settlement consequences of inaccurately submitted Meter Data. The approximated value of the inaccurate Meter Data in question will be calculated and returned to the market based on the average of the pro rata share of Unaccounted for Energy (UFE) charged in the utility Service Area during the period of the inaccurate Meter Data event. The thirty percent (30%) or seventy-five percent (75%) penalty will be distributed as discussed in Section 37.9.4. For cases where the CAISO does not perform a Recalculation Settlement Statement or re-run and the Scheduling Coordinator does not owe the market, then no market adjustment will be performed.

TABLE A2- Calculation Of Inaccurate Meter Data Penalty When There Is Not a Recalculation Settlement Statement or re-run

Case	Does SC Owe Market?	CAISO does not perform a Recalculation Settlement Statement or re-run
Case 1: SC Identifies Inaccurate Meter Data	Yes	Market Adjustment = (MWh x applicable price) Penalty = (MWh x applicable price)) x 0.30
Case 1: SC Identifies Inaccurate Meter Data	No	No market adjustment will be made Penalty = (MWh x Hourly LMP) x 0.30
Case 2: CAISO Identifies Inaccurate Meter Data	Yes	Market Adjustment = (MWh x applicable price) Penalty = (MWh x applicable price) x 0.75
Case 2: CAISO Identifies Inaccurate Meter Data	No	No market adjustment will be made Penalty = (MWh x Hourly LMP) x 0.75

Notes to Table A2:

The applicable price will be the greater of the relevant hourly LMP or \$10/MWh. The LMP used will be the value posted on OASIS for each Trading Hour of the applicable Trading Day.

A Sanction will be imposed only if the Sanction is more than \$1,000 for at least one Trading Day during the period for which there was incomplete or inaccurate Meter Data.

If the error is to the detriment of the responsible Scheduling Coordinator (e.g., under-reported Generation or over-reported Demand), and the CAISO does not produce a Recalculation Settlement Statement or perform a re-run, then no market adjustment will be made. If the CAISO produces a Recalculation Settlement Statement or performs a re-run after the error is corrected, then the Scheduling Coordinator will be given credit for the additional Energy through the normal Settlement process. If the Scheduling Coordinator is paid for an error due to a Recalculation Settlement Statement or re-run, then a Sanction will be assessed to assure that Recalculation Settlement Statements or re-runs do not diminish the incentive to correct such errors. This Sanction would be thirty percent (30%) of the Energy value of the error if the Scheduling Coordinator discovers the error or seventy-five percent (75%) estimated value of the error if the CAISO discovers the error.

If the error is to the detriment of the market, then a charge equal to thirty percent (30%) or seventy-five (75%) of the estimated value of the error, as appropriate, will be added to the charge for the Energy. If there is no Recalculation Settlement Statement or re-run, then the cost of Energy supplied by the CAISO (and inappropriately charged to the market as Unaccounted for Energy) must be recovered as well, and the charge will be equal to 130% or 175% of the estimated value of the error, as appropriate.

<b>Access Charge</b>	A charge paid by all Utility Distribution Companies, Small Utility Distribution Companies, and MSS Operators with Gross Load in a PTO Service Territory, as set forth in Article II. The Access Charge includes the High Voltage Access Charge, the Transition Charge and the Low Voltage Access Charge. The Access Charge will recover the Participating TO's Transmission Revenue Requirement in accordance with Appendix F, Schedule 3.
<b>ACE</b>	Area Control Error
<b>ACR</b>	All Constraints Run
<b>Actual Settlement Quality Meter Data</b>	Settlement Quality Meter Data gathered, edited, validated, and submitted by the Scheduling Coordinators on behalf of Scheduling Coordinator Metered Entities.
<b>Adjusted Load Metric</b>	A Load Serving Entity's Load Metric minus the megawatts of Load served using Existing Transmission Contracts, Converted Rights, and Transmission Ownership Rights.
<b>Adjusted RMR Invoice</b>	The monthly invoice issued by the RMR Owner to the CAISO for adjustments made to the Revised Estimated RMR Invoice pursuant to the RMR Contract reflecting actual data for the billing month.
<b>Adjusted Verified CRR Source Quantity</b>	The MW amount eligible for nomination by an LSE or Qualified OBAALSE in a verified tier of the CRR Allocation process, determined by reducing a Verified CRR Source Quantity to account for circumstances where the ownership or contract right to a generating resource is effective only for a portion of a particular season or month for which CRRs are being nominated.

<b>CAISO Authorized Inspector</b>	A person authorized by the CAISO to certify, test, inspect and audit meters and Metering Facilities in accordance with the procedures established by the CAISO pursuant to Section 10.
<b>CAISO Bank</b>	The bank appointed by the CAISO from time to time for the purposes of operating the Settlement process.
<b>CAISO CEO</b>	The Chief Executive Officer of the CAISO.
<b>CAISO Clearing Account</b>	The account in the name of the CAISO with the CAISO Bank to which payments are required to be transferred for allocation to CAISO Creditors in accordance with their respective entitlements.
<b>CAISO Code of Conduct</b>	For employees, the code of conduct for officers, employees and substantially full-time consultants and contractors of the CAISO as set out in exhibit A to the CAISO bylaws; for governors, the code of conduct for governors of the CAISO as set out in exhibit B to the CAISO bylaws.
<b>CAISO Commitment Period</b>	The portion of a Commitment Period that is not a Self-Commitment Period.
<b>CAISO Control Center</b>	The control center established by the CAISO pursuant to Section 7.1.
<b>CAISO Controlled Grid</b>	The system of transmission lines and associated facilities of the Participating TOs that have been placed under the CAISO's Operational Control.
<b>CAISO Creditor</b>	A Business Associate to which amounts are payable under the terms of the CAISO Tariff and agreements with the CAISO.
<b>CAISO Debtor</b>	A Business Associate that is required to make a payment to the CAISO under the CAISO Tariff and agreements with the CAISO.
<b>CAISO Demand</b>	Power delivered to Load internal to CAISO Balancing Authority Area.
<b>CAISO Documents</b>	The CAISO Tariff, CAISO bylaws, and any agreement entered into between the CAISO and a Scheduling Coordinator, a Participating TO or any other Market Participant pursuant to the CAISO Tariff.
<b>CAISO Emissions Cost Trust Account</b>	The CAISO Account established pursuant to Section 11.18.2.
<b>CAISO Estimated Settlement Quality Meter Data</b>	Settlement Quality Meter Data estimated by the CAISO in accordance with Sections 10.3.6.1 and 11.1.5.

<b>IIE</b>	Instructed Imbalance Energy
<b>IIE Settlement Amount</b>	The payment due a Scheduling Coordinator for positive Instructed Imbalance Energy or the charge assessed on a Scheduling Coordinator for negative Instructed Imbalance Energy, as calculated pursuant to Section 11.5.1.
<b>Imbalance Energy</b>	The deviation of Supply or Demand from Day-Ahead Schedule, positive or negative, as measured by metered Generation, metered Load, or Real-Time Interchange Schedules.
<b>Import Bid</b>	A Supply Bid submitted to a CAISO Market at a Scheduling Point.
<b>Import Capability Load Share</b>	A Load Serving Entity's proportionate share of the forecasted Resource Adequacy Compliance Year coincident peak Demand for the CAISO Balancing Authority Area relative to the total coincident peak Demand for the CAISO Balancing Authority Area as determined by the California Energy Commission.
<b>Import Capability Load Share Ratio</b>	A Load Serving Entity's Import Capability Load Share divided by the sum of the Import Capability Load Shares of all Load Serving Entities with unfulfilled requests for Available Import Capability on a particular Intertie.
<b>Import Capability Transfer Registration Process</b>	The electronic means by which Load Serving Entities and Market Participants must register with the CAISO any bilateral transfers of Existing Contract Import Capability, Pre-RA Import Commitment Capability, or Remaining Import Capability.
<b>Incremental Change</b>	The change in dollar value of a specific Charge Code from the Initial Settlement Statement T+7B to a subsequent Recalculation Settlement Statement including any new Charge Codes or Trading Day charges appearing for the first time on a Settlement Statement.

<b>Independent Entity</b>	The entity, not affiliated with the CAISO or any Market Participant, that assists the CAISO in the determination of reference prices.
<b>Independent System Operator (ISO)</b>	See California Independent System Operator Corporation.
<b>Ineffective Economic Bid</b>	An Economic Bid that is not accepted in a CAISO market because its impact on the value of the CAISO Markets objectives, as specified in Section 31.3 and 34.5, would exceed the impact of adjusting a Non-priced Quantity. The CAISO maintains in the Business Practice Manuals the current values of the scheduling parameters that specify the thresholds, including the provisions of Section 27.4.3.1, whereby the market software determines whether to adjust a Non-priced Quantity rather than accept Economic Bids.
<b>Initial Settlement Statement T+7B</b>	A Settlement Statement generated by the CAISO for the calculation of Settlements for a given Trading Day, which is published on the seventh Business Day from the relevant Trading Day (T+7B) and is prior to the Invoice or Payment Advice published for the relevant bill period.
<b>In-Service Date</b>	The date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Participating TO Interconnection Facilities to obtain back feed power.
<b>Instructed Imbalance Energy (IIE)</b>	The portion of Imbalance Energy resulting from Dispatch Instructions and HASP Intertie Schedules.

<b>Real-Time Self-Scheduled Energy</b>	The slice of Non-Overlapping Optimal Energy that corresponds to the Real-Time total Self-Schedule.
<b>Real-Time Settlement Interval MSS Price</b>	1) The Real-Time LAP price for the MSS when the MSS internal metered Demand exceeds the MSS internal measured Generation; or 2) the weighted average of the Real-Time LMPs for all applicable PNodes within the relevant MSS when MSS internal measured Generation exceeds MSS internal Measured Demand where weighting factors for computing the weighted average are based on the measured Energy of all Generation at the corresponding PNodes.
<b>Real-Time Unit Commitment (RTUC)</b>	An application of the RTM that runs every 15 minutes and commits Fast Start Units and Medium Start Units using the SCUC to adjust from Day-Ahead Schedules and HASP Intertie Schedules.
<b>Recalculation Settlement Statement</b>	The recalculation of a Settlement Statement in accordance with the provisions of the CAISO Tariff, which includes the Recalculation Settlement Statement T+38B, the Recalculation Settlement Statement T+76B, the Recalculation Settlement Statement T+18M, the Recalculation Settlement Statement T+35M, the Recalculation Settlement Statement T+36M or any other Recalculation Settlement Statement authorized by the CAISO Governing Board.
<b>Recalculation Settlement Statement T+38B</b>	The reissue of an Initial Settlement Statement T+7B by the CAISO on the thirty-eighth (38th) Business Day from the relevant Trading Day..
<b>Recalculation Settlement Statement T+76B</b>	The reissue of an Initial Settlement Statement T+7B or a Recalculation Settlement Statement T+38B by the CAISO on the seventy-sixth (76th) Business Day from the relevant Trading Day (T+76B).
<b>Recalculation Settlement Statement T+18M</b>	The reissue of an Initial Settlement Statement T+7B, a Recalculation Settlement Statement T+38B, or a Recalculation Settlement Statement T+76B on the Business Day eighteen (18) calendar months from the relevant Trading Day (T+18M).
<b>Recalculation Settlement Statement T+35M</b>	The reissue of an Initial Settlement Statement T+7B, a Recalculation Settlement Statement T+38B, a Recalculation Settlement Statement T+76B, or a Recalculation Settlement Statement T+18M, on the Business Day thirty-five (35) calendar months from the relevant Trading Day (T+35M).

<b>Recalculation Settlement Statement T+36M</b>	The reissue of an Initial Settlement Statement T+7B, a Recalculation Settlement Statement T+38B, a Recalculation Settlement Statement T+18M or a Recalculation Settlement Statement T+35M on the Business Day thirty-six (36) calendar months from the relevant Trading Day (T+36M).
<b>Redispatch</b>	The readjustment of scheduled Generation or Demand side management measures, to relieve Congestion or manage Energy imbalances.
<b>Reference Bus</b>	The Location(s) on the CAISO Controlled Grid relative to which mathematical quantities relating to powerflow solution will be calculated.
<b>Registered Cost</b>	The cost basis of a generating resource for which the operating cost is determined from registered values pursuant to Section 30.4(2).

<b>Schedule</b>	A Day-Ahead Schedule, a HASP Advisory Schedule, or a HASP Intertie Schedule.
<b>Scheduled Demand</b>	The MW of Energy of Demand cleared through the IFM and set in the Day-Ahead Schedule for the next Trading Day.
<b>Scheduled Generation</b>	The MW of Energy of Generation cleared through the IFM and set in the Day-Ahead Schedule for the next Trading Day.
<b>Scheduling and Logging system for the CAISO (SLIC)</b>	A logging application that allows Market Participants to notify the CAISO when a Generating Unit's properties change due to physical problems. Users can modify the maximum and minimum output of a unit, as well as the Ramping capability of the unit.
<b>Scheduling Coordinator (SC)</b>	An entity certified by the CAISO for the purposes of undertaking the functions specified in Section 4.5.3.
<b>Scheduling Coordinator Agreement (SCA)</b>	An agreement between a Scheduling Coordinator and the CAISO whereby the Scheduling Coordinator agrees to comply with all CAISO rules, protocols and instructions, as those rules, protocols and instructions may be amended from time to time, a pro forma version of which is set forth in Appendix B.1.
<b>Scheduling Coordinator Applicant</b>	An applicant for certification by the CAISO as a Scheduling Coordinator.
<b>Scheduling Coordinator Application Form</b>	The form specified by the CAISO from time to time in which a Scheduling Coordinator Applicant must apply to the CAISO for certification as a Scheduling Coordinator.
<b>Scheduling Coordinator Customer</b>	A customer of the Scheduling Coordinator Applicant or a Scheduling Coordinator for whom the Scheduling Coordinator provides services relevant to the CAISO Controlled Grid.
<b>Scheduling Coordinator Estimated Settlement Quality Meter Data</b>	Settlement Quality Meter Data estimated and submitted by the Scheduling Coordinators on behalf of Scheduling Coordinator Metered Entities.

**Settlements, Metering,  
and Client Relations  
Charge**

The component of the Grid Management Charge that provides for the recovery of the CAISO's costs, including, but not limited to the costs of maintaining customer account data, providing account information to customers, responding to customer inquiries, calculating market charges, resolving customer disputes, and the costs associated with the CAISO's Settlement, billing, and metering activities. Because this is a fixed charge per Scheduling Coordinator ID, costs associated with activities listed above also are allocated to other charges under the Grid Management Charge according to formula set forth in Appendix F, Schedule 1, Part A.

**Settlement Statement**

Any one of the following: Initial Settlement Statement T+7B, Recalculation Settlement Statement T+38B, Recalculation Settlement Statement T+76B, Recalculation Settlement Statement T+18M, Recalculation Settlement Statement T+35M, Recalculation Settlement Statement T+36M, or any other Recalculation Settlement Statement authorized by the CAISO Governing Board.

**SFT**

Simultaneous Feasibility Test

**Shadow Price**

The marginal value of relieving a particular Constraint.

**Short Start Unit**

A Generating Unit that has a cycle time less than five hours (Start-Up Time plus Minimum Run Time is less than five hours), has a Start-Up Time less than two hours, and can be fully optimized with respect to this cycle time.

**Short-Term Unit  
Commitment (STUC)**

The Unit Commitment procedure run at approximately T-52.5 minutes for a Time Horizon of approximately five (5) hours. The STUC determines whether some Medium Start Units need to be started early enough to meet the Demand within the STUC Time Horizon using the CAISO Forecast of CAISO Demand. The STUC produces a Unit Commitment solution for every 15-minute interval within the STUC Time Horizon and issues binding Start-Up Instructions only as necessary.

**CAISO TARIFF APPENDIX H**  
**GRANFATHERED METERING AND SETTLEMENT PROVISIONS FOR TRADING DAYS**

**CAISO TARIFF APPENDIX H**  
**GRANDFATHERED METERING AND SETTLEMENT PROVISIONS FOR TRADING DAYS**  
**PRIOR TO OCTOBER 1, 2009**

**1. Grandfathering of Metering and Settlement Provisions for Trading Days Prior to October 1, 2009.**

Notwithstanding any other provisions of the CAISO Tariff the following provisions shall apply to transactions conducted prior to October 1, 2009. In all other respects, the CAISO Tariff, including the provisions of Section 10 and Section 11 not covered by this Appendix O, will apply to transactions that occurred prior to October 1, 2009.

**10.3.6 Timing of Meter Data Submission.**

Scheduling Coordinators shall submit either hourly time-stamped Settlement Quality Meter Data for Scheduling Coordinator Metered Entities or profiled cumulative Settlement Quality Meter Data to the CAISO for each Settlement Period in an Operating Day according to the timelines established in the CAISO Payments Calendar and as provided in the applicable Business Practice Manual. Scheduling Coordinators must also submit Settlement Quality Meter Data on demand as provided in the applicable Business Practice Manual.

**11.1.4 Calculations of Settlements.**

The CAISO shall calculate, account for and settle, based on the Settlement Quality Meter Data it has received, or, if Settlement Quality Meter Data is not available, based on the best available information or estimate it has received, the following charges in accordance with this CAISO Tariff.

**11.29 Billing and Payment Process.**

The CAISO will calculate for each charge the amounts payable by the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each Settlement Period of the Trading Day, and the amounts payable to that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for each Settlement Period of that Trading Day and shall arrive at a net amount payable for each charge by or to that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for that Trading Day. Each of these amounts will appear in the Initial Settlement Statement T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and the Recalculation Settlement Statement T+76BD that the CAISO will provide to the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO. The components of the Grid Management Charge will be included in the Initial Settlement Statement T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and the Recalculation Settlement Statement T+76BD with the other types of charges referred to in Section 11, but a separate Invoice for the Grid Management Charge, stating the rate, billing determinant volume, and total charge for each of its components, will be issued by the CAISO to the Scheduling Coordinator.

**11.29.1** The billing and payment process shall be based on the issuance of Initial Settlement Statement T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and the Recalculation Settlement Statement T+76BD for each Settlement Period in each Trading Day.

**11.29.2** Payment for the charges referred to in Section 11.1.2 (except for the charges payable under long-term contracts) for each Trading Day in each calendar month shall be made five (5) Business Days after issuance of the Initial Settlement Statement T+38BD for the last day of the relevant calendar month. Payment for adjustments will be made five (5) Business Days after issuance of the Initial Settlement Statement Reissue or Recalculation Settlement Statement for the last day of the relevant month. Payments for FERC Annual Charges will be made in accordance with Section 11.19.

**11.29.5 General Principles for Production of Settlement Statements.**

**11.29.5.1 Basis of Settlement.**

The basis of each Settlement Statement shall be the debiting or crediting of an account in the name of the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO in the general ledger set up by the CAISO to reflect all transactions, charges or payments settled by the CAISO.

**11.29.5.2 Right to Dispute.**

All Scheduling Coordinators, CRR Holders, Black Start Generators or Participating TOs shall have the right to dispute any item or calculation set forth in any Initial Settlement Statement in accordance with this CAISO Tariff.

**11.29.7 Settlements Cycle.**

**11.29.7.1 Timing of the Settlements Process.**

**11.29.7.1.1 Initial Settlement Statement T+38BD.**

The CAISO shall provide to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for validation an Initial Settlement Statement for each Trading Day within thirty-eight (38) Business Days of the relevant Trading Day, covering all Settlement Periods in that Trading Day. Each Initial Settlement Statement will include a statement of:

(a) the amount payable or receivable by the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge referred to in Section 11 for each Settlement Period in the relevant Trading Day;

(b) the total amount payable or receivable by that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for all Settlement Periods in that Trading Day after the amounts payable and the amounts receivable under (a) have been netted off pursuant to Section 11.29; and

(c) the components of each charge in each Settlement Period except for information contained in the Imbalance Energy report referred to in this Section 11.29.7.1.1.

Each Initial Settlement Statement shall also be accompanied by a breakdown of the components of the Imbalance Energy Charge (the Imbalance Energy report).

**11.29.7.1.2** Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall have a period of eight (8) Business Days from the issuance of an Initial Settlement Statement during which it may review the Initial Settlement Statement T+38BD and notify the CAISO of any errors. No later than fifty-one (51) Business Days after the Trading Day to which it relates, the CAISO shall issue an Initial Settlement Statement Reissue or a Recalculation Settlement Statement to each Scheduling Coordinator or CRR Holder for that Trading Day.

**11.29.7.1.3 Initial Settlement Statement Reissues and Recalculation Settlement Statements.**

The CAISO shall provide to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO an Initial Settlement Statement Reissue or a Recalculation Settlement Statement in accordance with the CAISO Tariff and the CAISO Payments Calendar. The Initial Settlement Statement Reissue or Recalculation Settlement Statement shall be in a format similar to that of the Initial Settlement Statement and shall include the same granularity of information provided in the Initial Settlement Statement as amended following the validation procedure.

**11.29.7.1.4** Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall have a period of ten (10) Business Days from the issuance of the Initial Settlement Statement Reissue or Recalculation Settlement Statement during which it may review the Incremental Changes on the Initial Settlement Statement Reissue or Recalculation Settlement Statement and notify the CAISO of any errors. No later than twenty-five (25) Business Days from the date of issuance of the Initial Settlement Statement Reissue or Recalculation Settlement Statement, the CAISO shall issue the 76th Day Recalculation Settlement Statement and shall incorporate any required corrections in a subsequent Initial Settlement Statement.

**11.29.7.2 Basis for Billing and Payment.**

The Initial Settlement Statement T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and the Recalculation Settlement Statement T+76BD shall constitute the basis for billing and associated automatic funds transfers in accordance with this CAISO Tariff. The Initial Settlement Statement T+38BD shall constitute the basis for billing and associated automatic funds transfers for all charges in the first instance. The Initial Settlement Statement Reissue and Recalculation Settlement Statement shall constitute the basis for billing and associated automatic funds transfers for adjustments to charges set forth in the Initial Settlement Statement T+38BD. Each Scheduling Coordinator, CRR Holder, Black Start Generator, and Participating TO shall pay any net debit and shall be entitled to receive any net credit shown in an Invoice or Payment Advice on the Payment Date, whether or not there is any dispute regarding the amount of the debit or credit.

**11.29.7.2.1 Elimination of Invoices under \$10.00.**

Preliminary and final Invoices and Payment Advices due to or from any Market Participant for amounts less than \$10.00 will be adjusted to \$0.00 and no amount will be due to or from that Market Participant for that Invoice or Payment Advice.

**11.29.7.3 Settlement Statement Re-runs and Post Final Adjustments.**

The CAISO is authorized to perform Settlement Statement Re-runs following approval of the CAISO Governing Board. A request to perform a Settlement Statement Re-run may be made at any time by a Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO by notice in writing to the CAISO Governing Board. The CAISO Governing Board shall, in considering whether to approve a request for a Settlement Statement Re-run, determine in its reasonable discretion whether there is good cause to justify the performance of a Settlement Statement Re-run.

**11.29.7.3.1** If a Settlement Statement Re-run is ordered by the CAISO Governing Board, the CAISO shall arrange to have the Settlement Statement Re-run carried out as soon as is reasonably practicable following the CAISO Governing Board's order, subject to the availability of staff and computer time, compatible software, appropriate data and other resources.

**11.29.7.3.2** The cost of a Settlement Statement Re-run shall be borne by the Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO requesting it, unless the Settlement Statement Re-run was needed due to a clerical oversight or error on the part of the CAISO staff.

**11.29.7.3.3** Where a Settlement Statement Re-run 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 this CAISO Tariff, for those Scheduling Coordinators, CRR Holders, Black Start Generators, or Participating TOs affected by the statement rerun, the CAISO shall reflect the amounts to be debited or credited in the next subsequent Recalculation Settlement Statement that it issues following the Settlement Statement Re-run to which the provisions of this Section 11 apply.

**11.29.7.3.4** Reruns, post closing adjustments and the financial outcomes of CAISO ADR Procedures and any other dispute resolution may be invoiced separately from monthly market activities. The CAISO shall provide a Market Notice at least thirty (30) days prior to such invoicing identifying the components of such Invoice or Payment Advice.

**11.29.8 Confirmation and Validation.**

**11.29.8.1 Confirmation.**

It is the responsibility of each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO to notify the CAISO if it fails to receive a Settlement Statement on the date specified for the publication of such Settlement Statement in the CAISO Payments Calendar. Each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall be deemed to have received its Settlement Statement on the dates specified, unless it notifies the CAISO to the contrary.

**11.29.8.2 Validation.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall have the opportunity to review the terms of the Initial Settlement Statement T+38BD that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall be deemed to have validated each Initial Settlement Statement unless it has raised a dispute or reported an exception within eight (8) Business Days from the date of issuance. Once validated, an Initial Settlement Statement shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, unless the CAISO performs a Settlement Statement Re-run pursuant to Section 11.29.7.3.

The notice of dispute, if any, shall state clearly the Trading Day, the issue date of the Initial Settlement Statement, the item disputed, the reasons for the dispute, the amount claimed (if appropriate) and shall be accompanied with all available evidence reasonably required to support the claim.

**11.29.8.3 Validation of Initial Settlement Statement Reissue and Recalculation Settlement Statements.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall have the opportunity to review the Incremental Changes that appear on the Initial Settlement Statement Reissue and Recalculation Settlement Statement that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall be deemed to have validated the Incremental Changes on each Initial Settlement Statement Reissue and Recalculation Settlement Statement unless it has raised a dispute or reported an exception regarding those Incremental Changes within ten (10) Business Days from the date of issuance. Once validated, the Incremental Changes on the Initial Settlement Statement Reissue and Recalculation Settlement Statement shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, unless the CAISO performs a Settlement Statement Re-run pursuant to Section 11.29.7.3. The notice of dispute shall state clearly the Trading Day, the issue date of the Initial Settlement Statement Reissue and Recalculation Settlement Statement, the item disputed, the reasons for the dispute, the amount claimed (if appropriate) and shall be accompanied with all available evidence reasonably required to support the claim. The only Recalculation Settlement Statement that cannot be disputed is the one issued on T+59BD.

**11.29.8.4 Recurring Disputes or Exceptions.**

A Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may request the CAISO to treat as recurring a dispute or exception raised in accordance with Sections 11.29.8.1 and 11.29.8.2 above, if a dispute or exception would apply to subsequent Initial and the Initial Settlement Statement Reissue and Recalculation Settlement Statements. A request for recurring treatment may be made for any valid reason provided that subsequent Initial Settlement Statements T+38BD, Initial Settlement Statement Reissue and Recalculation Settlement Statements would be affected, including but not limited to, that the disputed calculation will recur, or that a disagreement as to policy will affect calculations in subsequent Initial Settlement Statement T+38BD, the Initial Settlement Statement Reissue and Recalculation Settlement Statements. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO wishes to request that the CAISO treat a dispute as recurring, it shall, in the notice, clearly indicate that it requests such treatment and set forth in detail the reasons that support such treatment. To the extent possible, the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall state the types of charges and dates to which the dispute will apply, and provide estimates of the amounts that will likely be claimed on each date. The CAISO shall make a determination on such a request within five (5) Business Days of receipt. To preserve its right to dispute an item, a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO must continue to raise a dispute or report an exception until it is notified by the CAISO that the CAISO agrees to treat the dispute or exception as recurring. If the CAISO grants a request to treat a dispute or exception as recurring, the dispute raised or exception reported by the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall be deemed to apply to every subsequent Initial Settlement Statement T+38BD, the Initial Settlement Statement Reissue and Recalculation Settlement Statement provided to the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO from the date that the CAISO grants the request for recurrent treatment until: a) ninety (90) days have elapsed, unless the CAISO indicates a different expiration date on its response to the request, in which case the expiration date shall be as stated by the CAISO in its response or b) the dispute or exception is resolved, whichever is shorter. The CAISO may deny a request that the CAISO treat a dispute as recurring for any valid reason, including because the request is not adequately specific as to the basis for recurring treatment or the subsequent calculations that will be affected.

**11.29.8.5 Amendment.**

Regarding a dispute related to an Initial Settlement Statement, if the CAISO agrees with the amount claimed, it shall incorporate the relevant data into the Initial Settlement Statement Reissue or Recalculation Settlement Statement. Regarding a dispute related to an Incremental Change in an Initial Settlement Statement Reissue or Recalculation Settlement Statement, the CAISO shall make a determination on the dispute no later than twenty-five (25) Business Days from the issuance of the Initial Settlement Statement Reissue or Recalculation Settlement Statement, and, if the CAISO agrees with the amount claimed, shall incorporate the relevant data into the next Recalculation Settlement Statement issued on T+76BD.

**11.29.8.6 CAISO Contact.**

If the CAISO does not agree with the amount claimed or if it requires additional information, it shall make reasonable efforts (taking into account the time it received the notice of dispute and the complexity of the issue involved) to contact the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to resolve the issue before issuing the Initial Settlement Statement Reissue or Recalculation Settlement Statement. If it is not possible to contact the relevant party, the CAISO shall issue the Initial Settlement Statement Reissue or Recalculation Settlement Statement without taking into account the dispute notice.

**11.29.10 Billing and Payment.**

The CAISO shall prepare and send to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO two Invoices or Payment Advices for each calendar month. The first Invoice or Payment Advice will be based on the Initial Settlement Statement T+38BD and the second Invoice or Payment Advice will be based on the Initial Settlement Statement Reissue or Recalculation Settlement Statement(s). Each Invoice or Payment Advice will show amounts which are to be paid by or to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO, the Payment Date, being the date on which such amounts are to be paid or received and details of the CAISO Clearing Account to which any amounts owed by Scheduling Coordinators, CRR Holder, Black Start Generator or Participating TO are to be paid.

The Invoices or Payment Advices will also include the total charges for each component of the Grid Management Charge, the total charges associated with any Interest for each relevant Trading Month, the FERC Annual Charges due monthly, as well as any disbursements associated with a shortfall receipt distribution.

A separate Invoice for the FERC Annual Charges due annually will be issued by the CAISO to the Scheduling Coordinator in accordance with Section 11.19.1.2. The CAISO will issue separate Invoices for NERC/WECC Charges as described in Section 11.20.

A separate Invoice for a shortfall allocation will be issued by the CAISO to Scheduling Coordinators in the event of a payment default in accordance with Section 11.29.17.1.

Settlement Statement Reruns, post closing adjustments and the financial outcomes of CAISO ADR Procedures and any other dispute resolution may be invoiced separately from monthly market activities. The CAISO shall provide a Market Notice at least thirty (30) days prior to such invoicing identifying the components of such Invoice or Payment Advice.

**11.29.10.1 Emergency Procedures.**

**11.29.10.2 Use of Estimated Data.**

In the event of an emergency or a failure of any of the CAISO software or business systems, the CAISO may use estimated Settlement Statements and Invoices and Payment Advices and may implement any temporary variation of the timing requirements relating to the Settlement and billing process contained in the CAISO Tariff. Details of the variation and the method chosen to produce estimated data, Settlement Statements and Invoices and Payment Advices will be published on the CAISO Website.

**11.29.10.3 Payment of Estimated Statements and Invoices.**

When estimated Settlement Statements and Invoices or Payment Advices are issued by the CAISO, payments between the CAISO and Market Participants shall be made on an estimated basis and the necessary corrections shall be made by the CAISO as soon as practicable. The corrections will be reflected as soon as practicable in later Settlement Statements and Invoices and Payment Advices issued by the CAISO. Failure to make such estimated payments shall result in the same consequences as a failure to make actual payments.

**11.29.10.4 Validation and Correction of Estimated Statements and Invoices.**

The CAISO shall use its best efforts to verify the estimated data and to make the necessary corrections as soon as practicable. The corrections will be reflected as soon as practicable in later Settlement Statements and Invoices and Payment Advices issued by the CAISO.

**11.29.10.5 Estimated Statements to be Final.**

In the event that the CAISO is of the opinion that, despite its best efforts, it is not possible for it to verify the estimated data because actual data is not reasonably expected to become available to the CAISO in the foreseeable future, the CAISO shall consult with the Market Participants in order to develop the most appropriate substitute data including using data provided by Market Participants. Following such determination of substitute data, the CAISO shall send to the relevant Market Participants revised Settlement Statements and Invoices and Payment Advices. The provisions of Section 11.29.8.6 shall apply to payment of revised Invoices issued in accordance with these emergency procedures. Failure to make payments of such revised Invoices shall result in the same consequences as a failure to make actual payments.

**11.29.21.2 Evidence of Unpaid Amount.**

The CAISO shall, on request, certify in writing the amounts owed by a CAISO Debtor that remain unpaid and the CAISO Creditors to whom such amounts are owed and shall provide certified copies of the relevant Initial Settlement Statement T+38BD and the Initial Settlement Statement Reissue and Recalculation Settlement Statements, Invoices, Payment Advices, and other documentation on which the CAISO's certificate was based to the CAISO Debtor and the relevant CAISO Creditors. A CAISO certificate given under this Section 11.29.21.2 may be used as prima facie evidence of the amount due by a CAISO Debtor to CAISO Creditors in any legal proceedings.

**11.29.23 Communications.**

The Initial Settlement Statement T+38BD, any Initial Settlement Statement Reissue, the Recalculation Settlement Statements and Invoices, and Payment Advices will be considered issued to CAISO Creditors or CAISO Debtors when released by the CAISO's secure communication system. Communications on a Payment Date relating to payment shall be made by the fastest practical means including by telephone. If there is a failure of a communication system and it is not possible to communicate by electronic means, then the CAISO or CAISO Creditor or CAISO Debtor, as the case may be, shall communicate by facsimile but only if the recipient is first advised by telephone to expect the facsimile. Methods of communication between the CAISO and Market Participants may be varied by the CAISO giving not less than ten (10) days notice to Market Participants on the CAISO's secure communication system.

**11.29.24 CAISO Payments Calendar.**

**11.29.24.1 Preparation.**

In September of each year, the CAISO will prepare a draft CAISO Payments Calendar for the following calendar year showing for each Trading Day:

(a) The date by which Scheduling Coordinators are required to provide Settlement Quality Meter Data for all their Scheduling Coordinator Metered Entities for each Settlement Period in the Trading Day;

(b) The date on which the CAISO will issue Initial Settlement Statements and Invoices and Payment Advices to Scheduling Coordinators or CRR Holders, Black Start Generators and Participating TOs for that Trading Day;

(c) The date by which Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs are required to notify the CAISO of any disputes in relation to their Initial Settlement Statements pursuant to Section 11.29.8.2;

(d) The date on which the CAISO will issue the Initial Settlement Statement Reissue and Recalculation Settlement Statements for T+51BD, T+59BD and T+76BD, and Invoices and Payment Advices to Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs for that Trading Day;

(e) The date and time by which CAISO Debtors are required to have made payments into the CAISO Clearing Account in payment of Invoices for that Trading Day;

(f) The dates and times on which CAISO Creditors will receive payments from the CAISO Clearing Account of amounts owing to them for that Trading Day; and

(g) In relation to Reliability Must-Run Charges and RMR Payments, the details set out in paragraph 3 of Appendix N, Part J.

The CAISO will make a draft of the CAISO Payments Calendar available on the CAISO Website to Scheduling Coordinators, CRR Holders, Black Start Generators, Participating TOs and RMR Owners any of which may submit comments and objections to the CAISO within two weeks of the date of posting of the draft on the CAISO Website. No later than October 31st in each year, the CAISO will publish the final CAISO Payments Calendar for the following calendar year, after considering the comments and objections received from Scheduling Coordinators, CRR Holders, Black Start Generators, Participating TOs and RMR Owners. The final CAISO Payments Calendar will be posted on the CAISO Website, and will show for the period from 1 January to 31 December in the next succeeding year (both dates inclusive), the dates on which Settlement Statements shall be published by the CAISO and the Payment Dates on which the CAISO will pay the Participating TOs the Wheeling revenues allocated to them pursuant to Section 26.1.4.3.

## 2. Definitions

As used in this Appendix O, the capitalized terms defined below shall have the definitions specified in this Section 2. All other capitalized terms shall have the meaning specified in the Master Definition Supplement in Attachment A.

**Incremental Change:** The change in dollar value of a specific Charge Code from the Initial Settlement Statement T+33BD to the Initial Settlement Statement Reissue or Recalculation Settlement Statement including any new Charge Codes or Trading Day charges appearing for the first time on the Initial Settlement Statement, Reissue or Recalculation Settlement Statement.

**Initial Settlement Statement T+38BD:** A Settlement Statement generated by the CAISO for the calculation of Settlements for a given Trading Day, which is published on the thirty eight Business Day from the relevant Trading Day (T+38BD) and is prior to the Invoice or Payment Advice published for the relevant bill period.

**Settlement Statement Re-run:** The recalculation of a Settlement Statement in accordance with the provisions of the CAISO Tariff.

**Recalculation Settlement Statement:** The reissue of an Initial Settlement Statement T+38BD by the CAISO on the fifty-first (51st) Business Day from the relevant Trading Day (T+51BD) if T+51BD falls on a calendar day that is after the day the invoice or Payment Advice for the bill period containing the relevant Trading Day is scheduled to publish.

**Recalculation Settlement Statement T+76BD:** The reissue of an Initial Settlement Statement Reissue or the Recalculation Settlement Statement by the CAISO on the seventy-sixth (76th) Business Day from the relevant Trading Day (T+76BD).

**Settlement Statement:** Any one of the following: Initial Settlement Statement T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and Recalculation Settlement Statement T+76BD.

**Attachment B - Blacklines**  
**Payment Acceleration Amendment**  
**Fourth Replacement CAISO Tariff**  
**ER09-\_\_\_-000**  
**June 1, 2009**

\* \* \*

### 10.1.2 Meter Data Retention by the CAISO.

The CAISO will maintain a record of all Revenue Quality Meter Data and Settlement Quality Meter Data provided to it, as well as the Settlement Quality Meter Data it produces, for a period of 18 months on site at the CAISO's facilities and for a period ~~of 10 years in the CAISO's archive storage facilities~~ which, at least, allows for the re-run of data as required by this CAISO Tariff and any adjustment rules of the Local Regulatory Authority governing the Scheduling Coordinators and their End-Use Customers and FERC. The CAISO will, on reasonable notice, provide a Scheduling Coordinator with access to ~~Meter Data or~~ Settlement Quality Meter Data (actual or Scheduling Coordinator estimated) provided that the Scheduling Coordinator requesting access represented the entity for which that data was provided at the time the data was provided to the CAISO.

\* \* \*

### 10.2.1.3 Provision of and Access to Settlement Quality Meter Data.

Scheduling Coordinators may obtain Settlement Quality Meter Data relating to the CAISO Metered Entities they represent by directly accessing the Settlement Quality Meter Data Systems as specified in the applicable Business Practice Manual. ~~The CAISO will use its best efforts to ensure that such data is made available to Scheduling Coordinators within five (5) Business Days of the relevant Operating Day.~~

- (a) For CAISO Metered Entities, Revenue Quality Meter Data obtained by successfully polled meters will be validated, estimated and edited by the CAISO to produce Settlement Quality Meter Data (actual), which will be made available to Scheduling Coordinators within five (5) Business Days from the Trading Day (T+5B) and will be used in the Initial Settlement Statement T+7B calculation.
- (b) In the event that Revenue Quality Meter Data remains unavailable at noon on the fifth Business Day after the Trading Day (T+5B) due to unsuccessfully polled meters or facility and/or systems failures, the CAISO will estimate Settlement

Quality Meter Data for CAISO Metered Entities for any outstanding metered Demand and/or Generation for the Initial Settlement Statement T+7B calculation as provided in Section 11.1.5.

(c) If the CAISO is notified in accordance with Section 10.2.13.2 that the revenue quality meter for a CAISO Metered Entity requires repair, the CAISO will produce Settlement Quality Meter Data (actual) for that entity using the estimation procedures referred to in Section 10.2.9, which will be made available to the Scheduling Coordinator for the CAISO Metered Entity within forty-three (43) calendar days from the Trading Day (T+43C) and will be used in the Recalculation Settlement Statement T+38B calculation.

\* \* \*

#### **10.2.13.2 Repairs.**

If a revenue quality meter of a CAISO Metered Entity requires repairs to ensure that it operates in accordance with the requirements of the CAISO Tariff and the applicable Business Practice Manuals, the CAISO Metered Entity must immediately notify the CAISO of the need for repairing that meter and must ensure that those repairs are completed in accordance with the applicable Business Practice Manual. During periods for which no Revenue Quality Meter Data is available from a meter which has a current Certificate of Compliance, the CAISO will ~~substitute estimated Meter Data for that CAISO Metered Entity using the estimation procedures referred to in Section 10.2.9~~ create and provide access to Settlement Quality Meter Data for use in the Settlement Statement calculations, as provided in Section 10.2.1.3.- That estimated Meter Data will be used by the CAISO in its Settlement and billing process.

\* \* \*

#### **10.3.6 ~~Timing of~~ Settlement Quality Meter Data Submission.**

Scheduling Coordinators shall submit to the CAISO ~~either hourly time-stamped Actual~~ Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter Data, as provided in Section 10.3.6.1(a), for Scheduling Coordinator Metered Entities they represent ~~or~~

~~profiled cumulative Settlement Quality Meter Data to the CAISO~~ for each Settlement Period in an Operating Day according to the timelines established in [Section 10.3.6.1](#) and the CAISO Payments Calendar and as provided in the applicable Business Practice Manual. Scheduling Coordinators must also submit Settlement Quality Meter Data ([actual and Scheduling Coordinator estimated](#)) on demand as provided in the applicable Business Practice Manual.

#### **10.3.6.1 Timing of Settlement Quality Meter Data Submission for Calculation of Initial Settlement Statement T+7B.**

[Scheduling Coordinators must submit Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO no later than noon on the fifth Business Day after the Trading Day \(T+5B\) for the Initial Settlement Statement T+7B calculation.](#)

[\(a\) In the absence of Actual Settlement Quality Meter Data, Scheduling Coordinators may submit Scheduling Coordinator Estimated Settlement Quality Meter Data using interval metering when available, sound estimation practices, and other available information including, but not limited to, bids, schedules, forecasts, temperature data, operating logs, recorders, and historical data. Scheduling Coordinator Estimated Settlement Quality Meter Data must be a good faith estimate that reasonably represents Demand and/or Generation quantities for each Settlement Period.](#)

[\(b\) When Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter Data is not received by the CAISO for a Scheduling Coordinator Metered Entity within five \(5\) Business Days from the Trading Day \(T+5B\), the CAISO will estimate the entity's Settlement Quality Meter Data for any outstanding metered Demand and/or Generation for use in the Initial Settlement Statement T+7B calculation, as provided in Section 11.1.5.](#)

#### **10.3.6.2 Timing of Settlement Quality Meter Data Submission for Recalculation Settlement Statement T+38B.**

Scheduling Coordinators must submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO no later than midnight on the forty-third calendar day after the Trading Day (T+43C) for the Recalculation Settlement Statement T+38B.

(a) When Actual Settlement Quality Meter Data is not received by the CAISO for a Scheduling Coordinator Metered Entity by forty-three calendar days after the Trading Day (T+43C), the Settlement Quality Meter Data will be considered late and subject to sanctions pursuant to Section 37.5.

(b) Any Scheduling Coordinator Estimated Settlement Quality Meter Data submitted by a Scheduling Coordinator on behalf of the Scheduling Coordinator Metered Entities it represents that is not replaced with Actual Settlement Quality Meter Data by forty-three calendar days after the Trading Day (T+43C) will be considered late and subject to sanctions pursuant to Section 37.5. In the absence of Actual Settlement Quality Meter Data, Scheduling Coordinator Estimated Settlement Quality Meter Data will be used in the Recalculation Settlement Statements.

(c) The CAISO will not estimate a Scheduling Coordinator Metered Entity's Settlement Quality Meter Data for any outstanding metered Demand and/or Generation for use in a Recalculation Settlement Statement calculation. Any previous CAISO Estimated Settlement Quality Meter Data that the Scheduling Coordinator does not replace with Actual Settlement Quality Meter Data by forty-three (43) calendar days after the Trading Day (T+43C) will be set to zero.

**10.3.6.3 Timing of Settlement Quality Meter Data Submission for Recalculation Settlement Statements after the Recalculation Settlement Statement T+38B.**

Scheduling Coordinators may continue to submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO for use in Recalculation Settlement Statements subsequent to the Recalculation Settlement Statement T+38B according to timelines established in the CAISO Payment Calendar.

#### **10.3.10.1 Audit and Testing by Scheduling Coordinator.**

Each Scheduling Coordinator shall at least annually conduct (or engage an independent, qualified entity to conduct) audits and tests of the Metering Facilities of the Scheduling Coordinator Metered Entities that it represents and the Meter Data provided to the Scheduling Coordinator in order to ensure compliance with all applicable requirements of any relevant Local Regulatory Authority. Scheduling Coordinators shall undertake any other actions that are reasonable necessary to ensure the accuracy and integrity of the Settlement Quality Meter Data ([actual or Scheduling Coordinator estimated](#)) provided by them to the CAISO.

\* \* \*

#### **11.1.4 ~~Calculations of Settlements.~~[\[NOT USED\]](#)**

~~The CAISO shall calculate, account for and settle, based on the Settlement Quality Meter Data it has received, or, if Settlement Quality Meter Data is not available, based on the best available information or estimate it has received, the following charges in accordance with this CAISO Tariff.~~

#### **11.1.5 Settlement Quality Meter Data for Initial Settlement Statement T+7B Calculation.**

The CAISO's Initial Settlement Statement T+7B shall be based on the Settlement Quality Meter Data (actual or Scheduling Coordinator estimated) received in SQMDS. In the event Actual Settlement Quality Meter Data or Scheduling Coordinator Estimated Settlement Quality Meter Data is not received from a Scheduling Coordinator or CAISO Metered Entity, the CAISO will estimate Settlement Quality Meter Data for that outstanding metered Demand or Generation for the Initial Settlement Statement T+7B calculation.

- (a) CAISO Estimated Settlement Quality Meter Data for metered Generation will be based on total Expected Energy and dispatch of that resource as calculated in the Real-Time Market and as modified by any applicable corrections to the Dispatch Operating Point for the resource.

(b) CAISO Estimated Settlement Quality Meter Data for metered Demand will be based on Scheduled Demand by the appropriate LAP. This value will be increased by fifteen percent (15%) if the total actual system Demand in Real Time, as determined by the CAISO each hour, is greater than fifteen percent (15%) of the sum of the value of Scheduling Coordinator submitted metered Demand, CAISO polled estimated Settlement quality metered Demand, and Scheduled Demand for unsubmitted metered Demand at the fifth Business Day after the Trading Day (T+5B). CAISO Estimated Settlement Quantity Meter Demand for Participating Load will not be increased by fifteen percent (15%).

\* \* \*

### **11.23 Penalties for Uninstructed Imbalance Energy.**

Effective December 1, 2004, the CAISO shall not charge any Uninstructed Deviation Penalties pursuant to this Section 11.23 until FERC issues an order authorizing the CAISO to charge Uninstructed Deviation Penalties pursuant to this section. Beginning with Settlement Statements for the first Trading Day for which FERC authorizes the CAISO to charge Uninstructed Deviation Penalties pursuant to this section, the CAISO shall charge Scheduling Coordinators Uninstructed Deviation Penalties for Uninstructed Imbalance Energy resulting from resource deviations outside a Tolerance Band from their Dispatch Operating Point, for dispatched resources, or their Day-Ahead Schedule otherwise. Publishing of Uninstructed Deviation Penalty results will not occur on the Initial Settlement Statement T+7B but rather will occur on the Recalculation Settlement Statement T+38B. The Uninstructed Deviation Penalty will be applied as follows:

- (a) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval. The Uninstructed Deviation Penalty for positive Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval in which the CAISO has not declared a staged System Emergency;

- (b) The Uninstructed Deviation Penalty will apply to pre-Dispatched Bids from Non-Dynamic System Resources identified, when such a pre-Dispatch Instruction is issued more than forty (40) minutes prior to the relevant Operating Hour, subject to the following conditions: i) the Uninstructed Deviation Penalty will only apply to the pre-Dispatched amount of the Bid that is declined or not delivered, ii) the Uninstructed Deviation Penalty will not apply to a portion of a pre-Dispatched Bid that is subsequently not delivered at the direction of a Balancing Authority, including the CAISO, due to a curtailment of transmission capability or to prevent curtailment of native firm load occurring subsequent to issuing the pre-Dispatch Instruction, iii) the Uninstructed Deviation Penalty will not apply to Uninstructed Imbalance Energy resulting from declining subsequent intra-hour Dispatch Instructions. Dynamically scheduled Dynamic System Resources, to the extent they deviate from their Day-Ahead Schedule plus any Dispatch Instructions, will be subject to the Uninstructed Deviation Penalty.
- (c) The Uninstructed Deviation Penalty will not apply to Load or Curtailable Demand.
- (d) **[NOT USED]**
- (e) The Uninstructed Deviation Penalty will not apply to Regulatory Must-Run Generation or Participating Intermittent Resources that meet the scheduling obligations established in the Eligible Intermittent Resources Protocol in Appendix Q. No other applicable charges will be affected by this exemption. The Uninstructed Deviation Penalty also will not apply to Qualifying Facilities (QFs), including those that are dynamically scheduled, that have not executed and are not required pursuant to this CAISO Tariff to execute a Participating Generator Agreement (PGA) or Qualifying Facility Participating Generator Agreement.

- (f) All MSS resources designated as Load-following resources pursuant to Section 4.9.13.2 (regardless of gross or net settlement election) are exempt from Uninstructed Deviation Penalties in this Section 11.23. All MSS resources not designated as Load-following resources pursuant to Section 4.9.13.2 (regardless of gross or net Settlement election) are subject to Uninstructed Deviation Penalties in this Section 11.23.
- (g) The Uninstructed Deviation Penalty will apply to Generating Units providing Regulation and dynamically scheduled Dynamic System Resources providing Regulation to the extent that Uninstructed Deviations from such resources exceed each resource's actual Regulation range plus the applicable Tolerance Band. Resources providing Regulation and generating within their relevant Regulating range (or outside their relevant Regulating range as a direct result of CAISO control or instruction) will be deemed to have zero (0) deviations for purposes of the Uninstructed Deviation Penalty.
- (h) The Uninstructed Deviation Penalty will be calculated and assessed for each resource individually, except as specified in Appendix R, which specifies when Uninstructed Deviations from individual resources may be aggregated.
- (i) The Uninstructed Deviation Penalty shall not apply to any Uninstructed Imbalance Energy resulting from compliance with a directive by the CAISO or the Reliability Coordinator.
- (j) **[NOT USED]**
- (k) The Uninstructed Deviation Penalty will not apply when the applicable LMP is negative or zero.
- (l) The Uninstructed Deviation Penalty for positive Uninstructed Imbalance Energy will be the amount of the Uninstructed Imbalance Energy in

excess of the Tolerance Band multiplied by a price equal to one hundred percent (100%) of the corresponding LMP. The relevant LMP will be calculated for each UDP Location as the ten-minute weighted average price of two five-minute Dispatch Interval LMPs and the two five-minute optimal Instructed Imbalance Energy quantities. The net effect of the Uninstructed Deviation Penalty and the Settlement for positive Uninstructed Imbalance Energy beyond the Tolerance Band will be that the CAISO will not pay for such Energy.

- (m) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be the amount of the Uninstructed Imbalance Energy in excess of the Tolerance Band multiplied by a price equal to fifty percent (50%) of the corresponding Resource-Specific Settlement Interval LMP or, in the case of aggregated resources, the Settlement Interval Penalty Location Real-Time LMP.
- (n) The Uninstructed Deviation Penalty will not apply to deviations from Energy delivered as part of a scheduled test so long as the test has been scheduled by the Scheduling Coordinator with the CAISO or the CAISO has initiated the test for the purposes of validating unit performance.
- (o) The Uninstructed Deviation Penalty shall not apply to any excess Energy delivered from or any shortfall of Energy not delivered from an Exceptional Dispatch, involving a Generating Unit or a System Unit unless the CAISO and the supplier have agreed upon the time of, duration of, and amount of Energy to be delivered in the out-of-market transaction and the CAISO reflects the out-of-market transaction in its Real-Time Expected Energy calculations. The Uninstructed Deviation Penalty shall apply to Energy outside the Tolerance Band from out-of-market transactions with dynamically scheduled Dynamic System Resources to the extent the agreed-to Energy is not delivered or over-

delivered, and to any Energy from Non-Dynamic System Resources to the extent the agreed-to Energy is not delivered if that over- or under-delivery was due to action taken by or not taken by the System Resource and not the result of action taken by a Balancing Authority due to a curtailment of firm transmission capability or to prevent curtailment of native firm load occurring subsequent to the out-of-market transaction.

- (p) The Uninstructed Deviation Penalty shall not apply to Generating Units and dynamically scheduled Dynamic System Resources with Uninstructed Imbalance Energy if the Generating Unit or dynamically scheduled Dynamic System Resource was physically incapable of delivering the expected Energy or if systems malfunctions prevent receipt of Dispatch Instructions, provided that the Generating Unit or dynamically scheduled Dynamic System Resource had notified the CAISO within thirty (30) minutes of the onset of an event that prevents the resource from performing its obligations. A Generating Unit or dynamically scheduled Dynamic System Resource must notify CAISO operations staff of its reasons for failing to deliver the Expected Energy in accordance with Section 9.3.10.6 and must provide information to the CAISO that verifies the reason the resource failed to comply with the Dispatch Instruction within forty-eight (48) hours of the Operating Hour in which the instruction is issued.
- (q) Adjustments to any Generating Unit, Curtailable Demand and System Resource Day-Ahead Schedules or HASP Intertie Schedules made in accordance with the terms of TRTC Instructions for Existing Contracts or TORs shall not be subject to Uninstructed Deviation Penalties. Valid changes to ETC Self-Schedules or TOR Self-Schedules submitted after the close of the HASP or the RTM shall not be subject to Uninstructed Deviation Penalties.

- (r) Any changes made to Schedules prior to the CAISO issuing HASP Intertie Schedules shall not be subject to Uninstructed Deviation Penalties.
- (s) Uninstructed Deviation Penalties shall not be charged to any deviation from a Dispatch Instruction that does not comply with the requirements set forth in this CAISO Tariff.
- (t) Amounts collected as Uninstructed Deviation Penalties shall first be assigned to reduce the portion of above-LMP costs that would otherwise be assigned pro rata to all Scheduling Coordinators in that Settlement Interval. Any remaining portion of amounts collected as Uninstructed Deviation Penalties after satisfying these sequential commitments shall be treated in accordance with Section 11.29.9.6.3.
- (u) Condition 2 RMR Units shall be exempt from Uninstructed Deviation Penalties.
- (v) The Uninstructed Deviation Penalty shall not apply to positive Uninstructed Imbalance Energy attributable to operation below the Generating Unit's Minimum Operating Limit from the time the Generating Unit synchronizes to the grid to the earlier of (1) the Settlement Interval in which the Generating Unit produces a quantity of Energy that represents an average rate of delivery over such Settlement Interval in excess of the Generating Unit's Minimum Operating Limit plus the applicable Tolerance Band, or (2) the first Settlement Interval after the expiration of a period of time that begins at the end of the Settlement Interval in which the Generating Unit synchronizes to the grid and ends after the Generating Unit's maximum Start-Up Time as specified in the Master File. The Uninstructed Deviation Penalty shall not apply to any positive Uninstructed Imbalance Energy attributable to operation below the Generating Unit's Minimum Operating Limit for a duration equal to

the minimum of two Settlement Intervals or the time specified in the Master File for the Generating Unit to disconnect from the grid after reaching its Minimum Operating Limit following either (1) the last Settlement Interval of an hour in which the Generating Unit had a non-zero Day-Ahead Schedule or (2) the Settlement Interval in which the Generating Unit is expected to reach its Minimum Operating Limit based on the applicable Ramp Rate when the CAISO instructed the Generating Unit to Shut-Down. The amount of Uninstructed Imbalance Energy exempted from the Uninstructed Deviation Penalty shall not exceed the amount of the Generating Unit's Minimum Operating Limit plus the applicable Tolerance Band. This exception from the application of the Uninstructed Deviation Penalty does not apply to Dynamic System Resources.

- (w) UDP shall not apply to deviations by a Generating Unit that are attributable to any automatic response to a system disturbance, including a response to correct frequency decay, in accordance with Applicable Reliability Criteria for the duration of the system disturbance, and for an additional five (5) minutes when a Generating Unit's deviation is in the same direction as the mitigating frequency response.
- (x) The Uninstructed Deviation Penalty shall not apply in the event that a malfunction in a CAISO system application causes an infeasible Dispatch Instruction to be communicated or prevents timely communication of a Dispatch Instruction or a SLIC malfunction prevents a resource from reporting an event that affects the resource's ability to deliver Energy.
- (y) The Uninstructed Deviation Penalty shall not apply to a failure to comply with a manual Dispatch Instruction that is not confirmed by a Dispatch

Instruction transmitted through the CAISO's Automated Dispatch System.

- (z) The Uninstructed Deviation Penalty shall not apply if a Dispatch Instruction is validated after the start time of the instruction from the Settlement Interval in which the Dispatch Instruction was first effective to the earliest Settlement Interval, inclusive, in which the resource is able to respond to the Dispatch Instruction.

\* \* \*

### **11.29 Billing and Payment Process.**

The CAISO will calculate for each charge the amounts payable by the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each Settlement Period of the Trading Day, and the amounts payable to that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for each Settlement Period of that Trading Day and shall arrive at a net amount payable for each charge by or to that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for that Trading Day. Each of these amounts will appear in the ~~Initial Settlement Statements T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and the Recalculation Settlement Statement T+76BD~~ that the CAISO will provide to the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO. The components of the Grid Management Charge will be included in ~~an the~~ Initial Settlement Statement T+~~7B38BD~~, ~~Initial Settlement Statement Reissue, and any~~ Recalculation Settlement Statement ~~and the Recalculation Settlement Statement T+76BD~~ with the other types of charges referred to in Section 11, ~~but a separate invoice for the Grid Management Charge, stating the rate, billing determinant volume, and total charge for each of its components, will be issued by the CAISO to the Scheduling Coordinator.~~

**11.29.1** The billing and payment process shall be based on the issuance of Initial Settlement Statement T+~~7B38BD, Initial Settlement Statement Reissue, Recalculation Settlement~~

~~Statement and the Recalculation Settlement Statements T+76BD for each Settlement Period in each Trading Day.~~

**11.29.2** Payments ~~for the charges~~ for the items referred to in Section 11.1.2 (except for the charges payable under long-term contracts) for each Trading Day in each calendar month shall be made five (5) Business Days after issuance of the Invoices and Payment Advices issued in accordance with Section 11.29.10~~Initial Settlement Statement T+38BD for the last day of the relevant calendar month. Payment for adjustments will be made five (5) Business Days after issuance of the Initial Settlement Statement Reissue or Recalculation Settlement Statement for the last day of the relevant month.~~ Payments for FERC Annual Charges will be made in accordance with Section 11.19.

\* \* \*

**11.29.5.2 Right to Dispute.**

All Scheduling Coordinators, CRR Holders, Black Start Generators or Participating TOs shall have the right to dispute any item or calculation set forth in any Initial Settlement Statement T+7B Recalculation Settlement Statement T+38B, or Incremental Changes in Recalculation Settlement Statements T+76B, T+18M, and T+35M in accordance with this CAISO Tariff, but not those set forth in Recalculation Settlement Statement T+36M.

\* \* \*

**11.29.7.1 Timing of the Settlements Process.**

The CAISO will publish: (i) Initial Settlement Statements T+7B on the seventh Business Day from the relevant Trading Day (T+7B), (ii) Recalculation Settlement Statements on the thirty-eighth Business Day from the relevant Trading Day (T+38B), (iii) Recalculation Settlement Statements on the seventy-sixth Business Day after the Trading Day (T+76B), (iv) Recalculation Settlement Statements on the Business Day eighteen (18) calendar months from the relevant Trading Day (T+18M) if necessary, (v) Recalculation Settlement Statements on the Business Day thirty-five (35) calendar months from the relevant Trading Day (T+35M) if necessary, (vi) Recalculation Settlement Statements on the Business Day thirty-six (36) calendar months from the relevant

[Trading Day \(T+36M\) if necessary, and \(v\) any other Recalculation Settlement Statement authorized under Section 11.29.7.3. The CAISO will issue a notice to the market if a Recalculation Settlement Statement T+18M, Recalculation Settlement Statement T+35M, Recalculation Settlement Statement T+36M, or any additional Recalculation Settlement Statement is required for a Trading Day.](#)

**11.29.7.1.1 Initial Settlement Statement T+~~38~~7B.**

The CAISO shall provide to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for validation an Initial Settlement Statement [T+7B](#) for each Trading Day within ~~seven thirty-eight (387)~~ Business Days of the relevant Trading Day, covering all Settlement Periods in that Trading Day. Each Initial Settlement Statement [T+7B will be produced using available Settlement Quality Meter Data \(either actual or estimated\) and CAISO Estimated Settlement Quality Meter Data.](#) The Initial Settlement Statement [T+7B](#) will include ~~a statement of:~~ the following:

- (a) the amount payable or receivable by the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge referred to in Section 11 for each Settlement Period in the relevant Trading Day;
- (b) the total amount payable or receivable by that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for all Settlement Periods in that Trading Day after the amounts payable and the amounts receivable under (a) have been netted off pursuant to Section 11.29; and
- (c) the components of each charge in each Settlement Period except for information contained in the Imbalance Energy report referred to in this Section 11.29.7.1.1; ~~and-~~

(d) ~~Each Initial Settlement Statement shall also be accompanied by a~~  
breakdown of the components of the Imbalance Energy Charge (the  
Imbalance Energy report).

~~11.29.7.1.2 — Each Scheduling Coordinator, CRR Holder, Black Start Generator or  
Participating TO shall have a period of eight (8) Business Days from the issuance of an Initial  
Settlement Statement during which it may review the Initial Settlement Statement T+38BD and  
notify the CAISO of any errors. No later than fifty one (51) Business Days after the Trading Day  
to which it relates, the CAISO shall issue an Initial Settlement Statement Reissue or a  
Recalculation Settlement Statement to each Scheduling Coordinator or CRR Holder for that  
Trading Day.~~

**11.29.7.1.32 Initial Settlement Statement Reissues and Recalculation Settlement  
Statements.**

The CAISO shall provide to each Scheduling Coordinator, CRR Holder, Black Start Generator or  
Participating TO ~~an Initial Settlement Statement Reissue or a~~ Recalculation Settlement  
Statements in accordance with the CAISO Tariff and the CAISO Payments Calendar. ~~The Initial  
Settlement Statement Reissue or~~ Recalculation Settlement Statements shall be in a format  
similar to that of the Initial Settlement Statement T+7B and shall include the same granularity of  
information provided in the Initial Settlement Statement T+TB as amended following the validation  
procedure.

~~11.29.7.1.4 — Each Scheduling Coordinator, CRR Holder, Black Start Generator or  
Participating TO shall have a period of ten (10) Business Days from the issuance of the Initial  
Settlement Statement Reissue or Recalculation Settlement Statement during which it may review  
the Incremental Changes on the Initial Settlement Statement Reissue or Recalculation Settlement  
Statement and notify the CAISO of any errors. No later than twenty five (25) Business Days from  
the date of issuance of the Initial Settlement Statement Reissue or Recalculation Settlement  
Statement, the CAISO shall issue the 76<sup>th</sup> Day Recalculation Settlement Statement and shall  
incorporate any required corrections in a subsequent Initial Settlement Statement.~~

\* \* \*

#### **11.29.7.2 Basis for Billing and Payment.**

The Initial Settlement Statement T+~~7B38BD~~, and any Recalculation Settlement Statement ~~Initial Settlement Statement Reissue, Recalculation Settlement Statement and the Recalculation Settlement Statement T+76BD~~ shall constitute the basis for billing ~~and associated automatic funds transfers~~ in accordance with this CAISO Tariff. The Initial Settlement Statement T+~~7B8BD~~ shall constitute the basis for billing ~~and associated automatic funds transfers~~ for all charges in the first instance. The ~~Initial Settlement Statement Reissue and~~ Recalculation Settlement Statement T+~~38B~~ shall constitute the basis for billing ~~and associated automatic funds transfers~~ for adjustments to charges set forth in the Initial Settlement Statement T+~~7B38BD~~. Each Scheduling Coordinator, CRR Holder, Black Start Generator, and Participating TO shall pay any net debit and shall be entitled to receive any net credit shown in an Invoice or Payment Advice on the Payment Date, whether or not there is any dispute regarding the amount of the debit or credit.

#### **11.29.7.2.1 Elimination of Invoices under \$10.00.**

~~Preliminary and final~~ Invoices and Payment Advices due to or from any ~~Market Participant Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO~~ for amounts less than \$10.00 will be adjusted to \$0.00 and no amount will be due to or from that ~~Market Participant Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO~~ for that Invoice or Payment Advice.

#### **11.29.7.3 Additional Recalculation Settlement Statements ~~Re-runs and Post Final Adjustments.~~**

The CAISO shall issue no Recalculation Settlement Statements other than to Recalculation Settlement Statements T+38B, Recalculation Settlement Statements T+76B, Recalculation Settlement Statements T+18M, Recalculation Settlement Statements T+35M, and Recalculation Settlement Statements T+36M, unless directed by ~~The CAISO is authorized to perform Settlement Statement Re-runs following approval of the CAISO Governing Board or pursuant to a FERC order.~~ A request to perform a Settlement Statement Re-run may be made at any time by a

~~Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO by notice in writing to the CAISO Governing Board. The CAISO Governing Board shall, in considering whether to approve a request for a Settlement Statement Re-run, determine in its reasonable discretion whether there is good cause to justify the performance of a Settlement Statement Re-run.~~

**11.29.7.3.1** If an additional Recalculation Settlement Statement ~~Re-run~~ is ordered by the CAISO Governing Board, the CAISO shall arrange to have the Recalculation Settlement Statement ~~Re-run~~ carried out as soon as is reasonably practicable following the CAISO Governing Board's order, subject to the availability of staff and computer time, compatible software, appropriate data and other resources.

**11.29.7.3.2** The cost of an additional Recalculation Settlement Statement ~~Re-run~~ shall be borne by the Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO requesting it, unless ~~the an additional Recalculation~~ Settlement Statement ~~Re-run~~ was needed due to a clerical oversight or error on the part of the CAISO staff.

**11.29.7.3.3** Where an additional Recalculation Settlement Statement ~~Re-run~~ 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 this CAISO Tariff, for those Scheduling Coordinators, CRR Holders, Black Start Generators, or Participating TOs affected by the additional Recalculation Settlement sStatement-re-run, the CAISO shall reflect the amounts to be debited or credited in the next subsequent scheduled semi-monthly Invoice or Payment Advice for the end of the month~~Recalculation Settlement Statement that it issues following the Settlement Statement Re-run to which the provisions of this Section 11 apply.~~

**11.29.7.3.4** Re-runs, post closing adjustments and the financial outcomes of CAISO ADR Procedures and any other dispute resolution may be invoiced separately from monthly market activities. The CAISO shall provide a Market Notice at least thirty (30) days prior to such invoicing identifying the components of such Invoice or Payment Advice.

\* \* \*

**11.29.8.2 Validation of Initial Settlement Statement T+7B and Recalculation Settlement Statement T+38B.**

**11.29.8.2.1 Validation of Initial Settlement Statement T+7B.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall have the opportunity to review the terms of the Initial Settlement Statement T+~~7B~~<sup>38B</sup> that it receives.

The Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall be deemed to have validated each Initial Settlement Statement T+7B unless it has raised a dispute or reported an exception within ~~fourteen~~ <sup>eight</sup> (14~~8~~) Business Days from the date of issuance.

Once validated, an Initial Settlement Statement T+7B shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, ~~unless~~ except to the extent that the CAISO performs a Recalculation Settlement Statement ~~Re-run pursuant to Section 11.29.7.3.~~

The notice of dispute, if any, shall state clearly the Trading Day, the issue date of the Initial Settlement Statement T+7B, the item disputed, the reasons for the dispute, and the amount claimed (if appropriate) and shall be accompanied with all available evidence reasonably required to support the claim.

**11.29.8.2.2 Validation of Recalculation Settlement Statement T+38B.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall have the opportunity to review the terms of the Recalculation Settlement Statement T+38B that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall be deemed to have validated each Recalculation Settlement Statement T+38B unless it has raised a dispute or reported an exception within eighteen (18) Business Days from the date of issuance. Once validated, a Recalculation Settlement Statement T+38B shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, except to the extent that the CAISO performs a subsequent Recalculation Settlement Statement.

The notice of dispute, if any, shall state clearly the Trading Day, the issue date of the Recalculation Settlement Statement T+38B, the item disputed, the reasons for the dispute, and

the amount claimed (if appropriate) and shall be accompanied with all available evidence reasonably required to support the claim.

**11.29.8.3 Validation of ~~Additional Initial Settlement Statement Reissue and Recalculation Settlement Statements.~~**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall have the opportunity to review the Incremental Changes, including the CAISO's implementation of a prior accepted dispute, that appear on or are omitted from any the Initial Settlement Statement ~~Reissue and~~ Recalculation Settlement Statement T+76B, Recalculation Settlement Statement T+18M or Recalculation Settlement Statement T+35M that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall be deemed to have validated the Incremental Changes on each Initial Settlement Statement ~~Reissue and~~ Recalculation Settlement Statement unless it has raised a dispute or reported an exception regarding those Incremental Changes within time periods set forth in Sections 11.29.8.4.1 through 11.29.8.4.6 ~~ten (10) Business Days~~ from the date of issuance. Once validated, the Incremental Changes on a the Initial Settlement Statement ~~Reissue and~~ Recalculation Settlement Statement T+76B, Recalculation Settlement Statement T+18M, or Recalculation Settlement Statement T+35M shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, unless ~~except to the extent that~~ the CAISO performs an additional Recalculation Settlement Statement ~~Re-run~~ pursuant to Section 11.29.7.3. The notice of dispute shall state clearly the Trading Day, the issue date of the Initial Settlement Statement ~~Reissue and~~ Recalculation Settlement Statement, the item disputed, the reasons for the dispute, and the amount claimed (if appropriate) and shall be accompanied with all available evidence reasonably required to support the claim. The only Recalculation Settlement Statement that cannot be disputed is Recalculation Settlement Statement ~~the one issued on~~ T+36M59BD.

**11.29.8.4 Disputes or Exceptions.**

**11.29.8.4.1 Dispute of Initial Settlement Statement T+7B.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit a dispute that identifies discrepancies or errors for any item in an Initial Settlement Statement

T+7B, except for CAISO or Scheduling Coordinator Estimated Settlement Quality Meter Data, no later than fourteen (14) Business Days from the publication date of an Initial Settlement Statement T+7B. Valid disputes regarding data appearing on an Initial Settlement Statement T+7B will be reflected in a later Recalculation Settlement Statement for that Trading Day. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on an Initial Settlement Statement T+7B, it may initiate a good faith negotiation of the dispute with the CAISO no later than thirty (30) days after the date of the CAISO's response to the dispute.

#### **11.29.8.4.2 Dispute of Recalculation Settlement Statement T+38B.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit a dispute that identifies discrepancies or errors for any item in a Recalculation Settlement Statement T+38B no later than eighteen (18) Business Days from the publication date of the Recalculation Settlement Statement T+38B. Valid disputes regarding data appearing on a Recalculation Settlement Statement T+38B will be reflected in a later Recalculation Settlement Statement for that Trading Day. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+38B, it may initiate a good faith negotiation of the dispute with the CAISO no later than thirty (30) days after the date of the CAISO's response to the dispute.

#### **11.29.8.4.3 Dispute of Recalculation Settlement Statement T+76B.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit disputes regarding Incremental Changes in a Recalculation Settlement Statement T+76B, including the CAISO's implementation of a prior accepted dispute contained in a Recalculation Settlement Statement T+76B, no later than twelve (12) months from the relevant Trading Day (T+12M). A dispute shall only be based on Incremental Changes between Recalculation Settlement Statement T+38B and Recalculation Settlement Statement T+76B. Valid disputes regarding data appearing on a Recalculation Settlement Statement T+76B will be reflected on a later Recalculation Settlement Statement for that Trading Day. If a Scheduling Coordinator, CRR

Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+76B, it may initiate good faith negotiation of the dispute with the CAISO no later than thirty (30) days after the date of the CAISO's response to the dispute.

**11.29.8.4.4 Dispute of Recalculation Settlement Statement T+18M.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit disputes regarding Incremental Changes, including the CAISO's implementation of a prior accepted dispute contained in a Recalculation Settlement Statement T+18M no later than nineteen (19) months from the relevant Trading Day (T+19M). A dispute shall only be based on Incremental Changes between Recalculation Settlement Statement T+76B and Recalculation Settlement Statement T+18M. Valid Disputes regarding data appearing on a Recalculation Settlement Statement T+18M will be reflected on a later Recalculation Settlement Statement. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on a Recalculation Settlement Statement T+18M, it may initiate a good faith negotiation with the CAISO no later than thirty (30) days after the date of the CAISO's response to the dispute.

**11.29.8.4.5 Dispute of Recalculation Settlement Statement T+35M.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may submit disputes regarding Incremental Changes in a Recalculation Settlement Statement T+35M, including the CAISO's implementation of a prior accepted dispute contained in a Recalculation Settlement Statement T+35M, no later than seven (7) calendar days from the publication date of a Recalculation Settlement Statement T+35M. A dispute shall only be based on (i) Incremental Changes between Recalculation Settlement Statement T+18M and Recalculation Settlement Statement T+35M, (ii) Meter Data issues identified through the audit process, or (iii) any good faith negotiation or dispute resolution settlement. Valid disputes regarding data appearing on a Recalculation Settlement Statement T+35M will be reflected on the Recalculation Settlement Statement T+36M. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO disagrees with the CAISO's resolution of a dispute regarding data appearing on

[a Recalculation Settlement Statement T+35M, it may pursue the dispute only through the dispute resolution process set forth in Section 13.](#)

**11.29.8.4.6 Dispute of Recalculation Settlement Statement T+36M.**

[Recalculation Settlement Statement T+36M shall not be subject to either a dispute by a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO, or adjustment by CAISO, except as directed by the CAISO Governing Board or by an order of FERC. Nothing herein shall be construed to restrict the right of the CAISO or any Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO's to seek redress from FERC in accordance with the Federal Power Act.](#)

**11.29.8.4.7 Recurring Disputes or Exceptions.**

A Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may request the CAISO to treat as recurring a dispute or exception raised in accordance with Sections 11.29.8.1 and 11.29.8.2 above, if a dispute or exception would apply to subsequent Initial ~~and the Initial~~ Settlement Statements ~~T+7B and subsequent Reissue and~~ Recalculation Settlement Statements [as permitted by Section 11.29.8.3](#). A request for recurring treatment may be made for any valid reason provided that subsequent Initial Settlement Statements T+~~7B38BD, Initial Settlement Statement Reissue~~ and Recalculation Settlement Statements would be affected, including but not limited to, that the disputed calculation will recur, or that a disagreement as to policy will affect calculations in subsequent Initial Settlement Statement T+~~7B38BD and, the Initial Settlement Statement Reissue and~~ Recalculation Settlement Statements. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO wishes to request that the CAISO treat a dispute as recurring, it shall, in the notice, clearly indicate that it requests such treatment and set forth in detail the reasons that support such treatment. To the extent possible, the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall state the types of charges and dates to which the dispute will apply, and provide estimates of the amounts that will likely be claimed on each date.

The CAISO shall make a determination on such a request within five (5) Business Days of receipt. To preserve its right to dispute an item, a Scheduling Coordinator, CRR Holder, Black

Start Generator or Participating TO must continue to raise a dispute or report an exception until it is notified by the CAISO that the CAISO agrees to treat the dispute or exception as recurring. If the CAISO grants a request to treat a dispute or exception as recurring, the dispute raised or exception reported by the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall be deemed to apply to every subsequent Initial Settlement Statement T+38BD7B, ~~the Initial Settlement Statement Reissue~~ and Recalculation Settlement Statement provided to the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO from the date that the CAISO grants the request for recurrent treatment until: a) ninety (90) days have elapsed, unless the CAISO indicates a different expiration date on its response to the request, in which case the expiration date shall be as stated by the CAISO in its response or b) the dispute or exception is resolved, whichever is shorter. The CAISO may deny a request that the CAISO treat a dispute as recurring for any valid reason, including because the request is not adequately specific as to the basis for recurring treatment or the subsequent calculations that will be affected.

**11.29.8.5**      ~~**[NOT USED]Amendment.**~~

~~Regarding a dispute related to an Initial Settlement Statement, if the CAISO agrees with the amount claimed, it shall incorporate the relevant data into the Initial Settlement Statement Reissue or Recalculation Settlement Statement. Regarding a dispute related to an Incremental Change in an Initial Settlement Statement Reissue or Recalculation Settlement Statement, the CAISO shall make a determination on the dispute no later than twenty-five (25) Business Days from the issuance of the Initial Settlement Statement Reissue or Recalculation Settlement Statement, and, if the CAISO agrees with the amount claimed, shall incorporate the relevant data into the next Recalculation Settlement Statement issued on T+76BD.~~

**11.29.8.6**      **CAISO Contact.**

If the CAISO does not agree with the amount claimed or if it requires additional information, it shall make reasonable efforts (taking into account the time it received the notice of dispute and the complexity of the issue involved) to contact the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to resolve the issue before issuing ~~the Initial Settlement~~

~~Statement Reissue or~~ Recalculation Settlement Statement. If it is not possible to contact the relevant party, the CAISO shall issue the ~~Initial Settlement Statement Reissue or~~ Recalculation Settlement Statement without taking into account the dispute notice.

\* \* \*

#### **11.29.10 Billing and Payment.**

The CAISO shall prepare and send to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO two Invoices or Payment Advices for each billing period in each calendar month. There are two (2) billing periods in each calendar month. The first billing period is from the first to the fifteenth day of the month and second billing period is from the sixteenth to the last of day of the month. The CAISO will publish Invoices and Payment Advices for the first semi-monthly billing period in a month on the seventh Business Day after the Trading Day that is the fifteenth day of the month. The CAISO will publish Invoices and Payment Advices for the second semi-monthly billing period in a month on the seventh Business Day after the Trading Day that is the end of the month.~~The first Invoice or Payment Advice will be based on the Initial Settlement Statement T+38BD and the second Invoice or Payment Advice will be based on the Initial Settlement Statement Reissue or Recalculation Settlement Statement(s).~~ Each Invoice or Payment Advice will show amounts which are to be paid by or to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO, the Payment Date, being the date on which such amounts are to be paid or received, and details of the CAISO Clearing Account to which any amounts owed by or to Scheduling Coordinators, CRR Holder, Black Start Generator or Participating TO are to be paid. Revenues owed from a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO are expressed as a positive amount on an Invoice. Revenues owed to a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO are expressed as a negative amount on a Payment Advice. Payments or charges for the items referred to in an Invoice or Payment Advice (except for the charges payable under long-term contracts) for each Trading Day in each calendar month shall be made five (5) Business Days after the date on which the semi-monthly Invoice or Payment Advice is issued.

#### **11.29.10.1 Billing Periods.**

Each Invoice or Payment Advice will include one (1) semi-monthly billing period and up to five (5) other billing periods. The other billing periods correspond to the dates on which the Recalculation Settlement Statements are published. Any Invoice or Payment Advice for a billing period corresponding to a Recalculation Settlement Statement will be reflected on the next scheduled semi-monthly Invoice or Payment Advice for the end of the month. Each billing period will be represented separately on the Invoice or Payment Advice but the net Invoice or Payment Advice for a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO will reflect the entity's net financial obligations in all billing periods.

**11.29.10.2 Interest.**

Interest will be applied to any deviations through the second Recalculation Settlement Statement - Recalculation Settlement Statement T+76B. Interest will be calculated separately for the billing period from the first to the fifteen day of the month and for the billing period from the sixteenth to the last of day of the month. The rate of interest will be the interest rate calculated in accordance with 18 C.F.R. 35.19a of FERC's regulations.

**11.29.10.3 Other Invoicing Provisions.**

The Invoices or Payment Advices will also include the total charges for each component of the Grid Management Charge, the total charges associated with any Interest for each relevant Trading Month, the FERC Annual Charges due monthly, as well as any disbursements associated with a shortfall receipt distribution.

A separate Invoice for the FERC Annual Charges due annually will be issued by the CAISO to the Scheduling Coordinator in accordance with Section 11.19.1.2. The CAISO will issue separate Invoices for NERC/WECC Charges as described in Section 11.20.

A separate Invoice for a shortfall allocation will be issued by the CAISO to Scheduling Coordinators in the event of a payment default in accordance with Section 11.29.17.1.

Recalculation Settlement Statements~~Reruns~~, post closing adjustments and the financial outcomes of CAISO ADR Procedures and any other dispute resolution may be invoiced

separately from monthly market activities. The CAISO shall provide a Market Notice ~~at least thirty (30) days~~ prior to such invoicing identifying the components of such Invoice or Payment Advice.

**11.29.10.14 Emergency Procedures.**

**11.29.10.25 Use of Estimated Data.**

In the event of an emergency or a failure of any of the CAISO software or business systems, the CAISO may use estimated Settlement Statements and Invoices and Payment Advices and may implement any temporary variation of the timing requirements relating to the Settlement and billing process contained in the CAISO Tariff. Details of the variation and the method chosen to produce estimated data, Settlement Statements and Invoices and Payment Advices will be published on the CAISO Website.

**11.29.10.36 Payment of Estimated Statements and Invoices.**

When estimated Settlement Statements and Invoices or Payment Advices are issued by the CAISO, payments between the CAISO and Market Participants shall be made on an estimated basis and the necessary corrections shall be made by the CAISO as soon as practicable. The corrections will be reflected as soon as practicable in later Settlement Statements and Invoices and Payment Advices issued by the CAISO. Failure to make such estimated payments shall result in the same consequences as a failure to make actual payments.

**11.29.10.47 Validation and Correction of Estimated Statements and Invoices.**

The CAISO shall use its best efforts to verify the estimated data and to make the necessary corrections as soon as practicable. The corrections will be reflected as soon as practicable in later Settlement Statements and Invoices and Payment Advices issued by the CAISO.

**11.29.10.58 Estimated Statements to be Final.**

In the event that the CAISO is of the opinion that, despite its best efforts, it is not possible for it to verify the estimated data because actual data is not reasonably expected to become available to the CAISO in the foreseeable future, the CAISO shall consult with the Market Participants in order to develop the most appropriate substitute data including using data provided by Market Participants. Following such determination of substitute data, the CAISO shall send to the

relevant Market Participants revised Settlement Statements and Invoices and Payment Advices. The provisions of Section 11.29.8.6 shall apply to payment of revised Invoices issued in accordance with these emergency procedures. Failure to make payments of such revised Invoices shall result in the same consequences as a failure to make actual payments.

\* \* \*

#### **11.29.21.2 Evidence of Unpaid Amount.**

The CAISO shall, on request, certify in writing the amounts owed by a CAISO Debtor that remain unpaid and the CAISO Creditors to whom such amounts are owed and shall provide certified copies of the relevant Initial Settlement Statement T+[7B38BD](#) and the [Initial Settlement Statement Reissue and Recalculation Settlement Statements, Invoices, Payment Advices, and other documentation on which the CAISO's certificate was based to the CAISO Debtor and the relevant CAISO Creditors. A CAISO certificate given under this Section 11.29.21.2 may be used as prima facie evidence of the amount due by a CAISO Debtor to CAISO Creditors in any legal proceedings.](#)

\* \* \*

#### **11.29.23 Communications.**

The Initial Settlement Statement T+[7B38BD](#), any [Initial Settlement Statement Reissue, the Recalculation Settlement Statements,](#) and Invoices, and Payment Advices will be considered issued to CAISO Creditors or CAISO Debtors when released by the CAISO's secure communication system. Communications on a Payment Date relating to payment shall be made by the fastest practical means including by telephone. If there is a failure of a communication system and it is not possible to communicate by electronic means, then the CAISO or CAISO Creditor or CAISO Debtor, as the case may be, shall communicate by facsimile but only if the recipient is first advised by telephone to expect the facsimile. Methods of communication between the CAISO and Market Participants may be varied by the CAISO giving not less than ten (10) days notice to Market Participants on the CAISO's secure communication system.

#### **11.29.24 CAISO Payments Calendar.**

#### 11.29.24.1 Preparation.

In September of each year, the CAISO will prepare a draft CAISO Payments Calendar for the following calendar year showing for each Trading Day:

- (a) The date by which Scheduling Coordinators are required to provide [Actual Settlement Quality Meter Data](#) or [Scheduling Coordinator Estimated Settlement Quality Meter Data](#) for all their Scheduling Coordinator Metered Entities for each Settlement Period in the Trading Day;
- (b) The date on which the CAISO will issue Initial Settlement Statements [T+7B](#) and Invoices and Payment Advices to Scheduling Coordinators or CRR Holders, Black Start Generators and Participating TOs for that Trading Day;
- (c) The date by which Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs are required to notify the CAISO of any disputes in relation to their Initial Settlement Statements [T+7B](#) pursuant to Section 11.29.8.2;
- (d) The date on which the CAISO will issue the ~~Initial Settlement Statement Reissue and~~ Recalculation Settlement Statements ~~for~~ [T+51BD38B](#), [T+59BD76B](#), [T+18M](#), [T+35M](#), and [T+76BD36M](#), and Invoices and Payment Advices to Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs for that Trading Day;
- (e) [The dates by which Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs are required to notify the CAISO of any disputes in relation to their Recalculation Settlement Statements T+38B, T+76B, T+18M and T+35M.](#)

- (ef) The date and time by which CAISO Debtors are required to have made payments into the CAISO Clearing Account in payment of Invoices for that Trading Day;
- (fg) The dates and times on which CAISO Creditors will receive payments from the CAISO Clearing Account of amounts owing to them for that Trading Day; and
- (gh) In relation to Reliability Must-Run Charges and RMR Payments, the details set out in paragraph 3 of Appendix N, Part J.

The CAISO will make a draft of the CAISO Payments Calendar available on the CAISO Website to Scheduling Coordinators, CRR Holders, Black Start Generators, Participating TOs and RMR Owners any of which may submit comments and objections to the CAISO within two weeks of the date of posting of the draft on the CAISO Website. No later than October 31<sup>st</sup> in each year, the CAISO will publish the final CAISO Payments Calendar for the following calendar year, after considering the comments and objections received from Scheduling Coordinators, CRR Holders, Black Start Generators, Participating TOs and RMR Owners. The final CAISO Payments Calendar will be posted on the CAISO Website, and will show for the period from 1 January to 31 December in the next succeeding year (both dates inclusive), the dates on which Settlement Statements shall be published by the CAISO and the Payment Dates on which the CAISO will pay the Participating TOs the Wheeling revenues allocated to them pursuant to Section 26.1.4.3.

\* \* \*

#### **37.5.2.1 Expected Conduct.**

Market Participants shall provide complete and accurate Settlement Quality Meter Data for each Trading Hour and shall correct any errors in such data prior to the issuance of Initial Settlement Statement [T+7B Reissue](#) or Recalculation Settlement Statements, as relevant. Failure to provide complete and accurate Settlement Quality Meter Data, as required by Section 10 and that results in an error that is discovered after issuance of [an](#) Initial Settlement Statement [T+7B Reissue](#) or Recalculation Settlement Statements, as relevant, shall be a violation of this rule. [Scheduling](#)

Coordinators that fail to submit Scheduling Coordinator Estimated Settlement Quality Meter Data that is complete and based on a good faith estimate that reasonably represents Demand and/or Generation quantities for each Settlement Period as required by Section 10 and that results in an error that is discovered after issuance of an Initial Settlement Statement T+7B or Recalculation Settlement Statement, as relevant, shall be a violation of this rule.

\* \* \*

### **37.9.3.3 Other Responsible Party.**

Where a party or parties other than the Scheduling Coordinator is responsible for the conduct giving rise to a penalty reflected on a Settlement Statement, and where the Scheduling Coordinator bears no responsibility for the conduct, such other party or parties ultimately shall be liable for the penalty. Under such circumstances, the Scheduling Coordinator shall use reasonable efforts to obtain payment of the penalty from the responsible party(ies) and to remit such payment to the CAISO in the ordinary course of the Settlement process. In the event that the responsible party(ies) wish to dispute the penalty, or the Scheduling Coordinator otherwise is unable to obtain payment from the responsible parties, the Scheduling Coordinator shall notify the CAISO and dispute the ~~Initial~~ Settlement Statement ~~T+38-BD~~. The CAISO promptly shall notify FERC. If the CAISO finds, and DMM concurs, that a Market Participant separate from the Scheduling Coordinator that is unable to obtain payment from the responsible party(ies) is solely responsible for a violation, the Scheduling Coordinator that is unable to obtain payment may net its payment of its Invoice amount by the amount of the penalty in question. The CAISO may refuse to offer further service to any responsible party that fails to pay a penalty, unless excused under the terms of the CAISO Tariff, by providing notice of such refusal to the Scheduling Coordinator. Following such notice, the Scheduling Coordinator shall be liable for any subsequent penalties assessed on account of such responsible party.

\* \* \*

### **37.11.1 Method for Calculating Inaccurate Meter Data Penalty.**

There is no Sanction for the submission of inaccurate Meter Data used for an Initial Settlement Statement T+ ~~7B38-BD~~. However, an error in submitted Meter Data that is discovered after issuance of an ~~Initial Settlement Statement Reissue or~~ Recalculation Settlement Statement, ~~as applicable~~, constitutes a Rule of Conduct violation. The level of the Sanction depends on whether the Scheduling Coordinator or the CAISO discovered the error. An increased penalty will apply for errors that are discovered by the CAISO.

Table A1 below shows how the level of the Sanction depends on the following factors: whether or not the Scheduling Coordinator finds the error; whether or not the Scheduling Coordinator owes the market, and whether or not the CAISO performs a ~~Settlement Statement R~~re-run of the market ~~or produces a Recalculation Settlement Statement~~. If the CAISO ~~issues a Recalculation Settlement Statement or~~ performs a ~~Settlement Statement R~~re-run, then Settlement to all Scheduling Coordinators is recalculated, and the impact of such re-runs on charges assessed will be considered. A penalty charge equal to thirty percent (30%) of the estimated value of the Energy error will apply if the Scheduling Coordinator discovers the error or seventy-five percent (75%) of the estimated value of the Energy error if the CAISO discovers the error. Penalty assessment and disposition of penalty proceeds will be administered as described in Section 37.9.1 and Section 37.9.4 respectively. A Sanction will not be imposed unless such Sanction is more than \$1,000 for at least one Trading Day during the period for which there was incomplete or inaccurate Meter Data.

Table A1 – Calculation of Inaccurate Meter Data Penalty When There Is A ~~Recalculation Settlement Statement or R~~re-run

Case	Does SC Owe Market?	
Case 1: SC Identifies Inaccurate Meter Data	Yes	Penalty = (MWh x applicable price) x 0.30
Case 1: SC Identifies Inaccurate Meter Data	No	Penalty = (MWh x applicable price) x 0.30

Case 2: CAISO Identifies Inaccurate Meter Data	Yes	Penalty = (MWh x applicable price) x 0.75
Case 2: CAISO Identifies Inaccurate Meter Data	No	Penalty = (MWh x applicable price) x 0.75

Note to Table A1:

The applicable price will be the greater of the relevant hourly LMP or \$10/MWh. The LMP used will be the values posted on OASIS for each Trading Hour of the applicable Trading Day period.

2. Method for Calculating Inaccurate Meter Data Penalty When there is not a [Recalculation Settlement Statement](#) [or Rre-run](#).

If the CAISO does not perform a [Recalculation Settlement Statement](#) [or Rre-run](#), for cases of inaccurate Meter Data, Table A2 will be used to determine and allocate penalty and any market adjustment amount. The market adjustment approximates the financial impact on the market; however, it does not completely reflect all the Settlement consequences of inaccurately submitted Meter Data. The approximated value of the inaccurate Meter Data in question will be calculated and returned to the market based on the average of the pro rata share of Unaccounted for Energy (UFE) charged in the utility Service Area during the period of the inaccurate Meter Data event.

The thirty percent (30%) or seventy-five percent (75%) penalty will be distributed as discussed in Section 37.9.4. For cases where the CAISO does not perform a [Recalculation Settlement Statement](#) [or Rre-run](#) and the Scheduling Coordinator does not owe the market, then no market adjustment will be performed.

TABLE A2- Calculation Of Inaccurate Meter Data Penalty When There Is [Not](#) a [Recalculation Settlement Statement](#) [or Rre-run](#)

Case	Does SC Owe Market?	
Case 1: SC Identifies Inaccurate Meter Data	Yes	Market Adjustment = (MWh x applicable price) Penalty = (MWh x applicable price) x 0.30
Case 1: SC Identifies Inaccurate Meter Data	No	No market adjustment will be made Penalty = (MWh x Hourly LMP) x 0.30
Case 2: CAISO Identifies Inaccurate Meter Data	Yes	Market Adjustment = (MWh x applicable price) Penalty = (MWh x applicable price) x 0.75
Case 2: CAISO Identifies Inaccurate Meter Data	No	No market adjustment will be made Penalty = (MWh x Hourly LMP) x 0.75

Notes to Table A2:

The applicable price will be the greater of the relevant hourly LMP or \$10/MWh. The LMP used will be the value posted on OASIS for each Trading Hour of the applicable Trading Day.

A Sanction will be imposed only if the Sanction is more than \$1,000 for at least one Trading Day during the period for which there was incomplete or inaccurate Meter Data.

If the error is to the detriment of the responsible Scheduling Coordinator (e.g., under-reported Generation or over-reported Demand), and the CAISO does not ~~perform~~ produce a [Recalculation Settlement Statement](#) ~~or perform a R~~re-run, then no market adjustment will be made. If the CAISO ~~performs~~ produces a [Recalculation Settlement Statement](#) ~~or performs a R~~re-run after the error is corrected, then the Scheduling Coordinator will be given credit for the additional Energy through the normal Settlement process. If the Scheduling Coordinator is paid for an error due to a [Recalculation Settlement Statement](#) ~~or R~~re-run, then a Sanction will be assessed to assure that [Recalculation Settlement Statements](#) ~~or R~~re-runs do not diminish the incentive to correct such

errors. This Sanction would be thirty percent (30%) of the Energy value of the error if the Scheduling Coordinator discovers the error or seventy-five percent (75%) estimated value of the error if the CAISO discovers the error.

If the error is to the detriment of the market, then a charge equal to thirty percent (30%) or seventy-five (75%) of the estimated value of the error, as appropriate, will be added to the charge for the Energy. If there is no [Recalculation Settlement Statement](#) or [Re-run](#), then the cost of Energy supplied by the CAISO (and inappropriately charged to the market as Unaccounted for Energy) must be recovered as well, and the charge will be equal to 130% or 175% of the estimated value of the error, as appropriate.

\* \* \*

## CAISO Tariff Appendix A

### Master Definitions Supplement

\* \* \*

#### Actual Settlement Quality Meter Data

Settlement Quality Meter Data gathered, edited, validated, and submitted by the Scheduling Coordinators on behalf of Scheduling Coordinator Metered Entities.

\* \* \*

#### CAISO Estimated Settlement Quality Meter Data

Settlement Quality Meter Data estimated by the CAISO in accordance with Sections 10.3.6.1 and 11.1.5.

\* \* \*

#### **Incremental Change**

The change in dollar value of a specific Charge Code from the Initial Settlement Statement T+~~7B33BD~~ to a subsequent Recalculation Settlement Statement ~~the Initial Settlement Statement Reissue or Recalculation Settlement Statement~~ including any new Charge Codes or Trading Day charges appearing for the first time on a the Initial Settlement Statement, Reissue or Recalculation Settlement Statement.

\* \* \*

**Initial Settlement  
Statement Reissue**

~~The reissue of an Initial Settlement Statement T+38BD by the CAISO on the fifty first (51st) Business Day from the relevant Trading Day (T+51BD) if T+51BD falls on a calendar day that is on or before the day the Invoice or Payment Advice for the bill period containing the relevant Trading Day is scheduled to publish.~~

**Initial Settlement  
Statement T+~~738~~BD**

A Settlement Statement generated by the CAISO for the calculation of Settlements for a given Trading Day, which is published on the ~~thirty-eight-seventh~~ Business Day from the relevant Trading Day (T+~~7B38~~BD) and is prior to the Invoice or Payment Advice published for the relevant bill period.

\* \* \*

**Recalculation Settlement  
Statement  
Re-run**

The re-calculation of a Settlement Statement in accordance with the provisions of the CAISO Tariff, which includes the Recalculation Settlement Statement T+38B, the Recalculation Settlement Statement T+76B, the Recalculation Settlement Statement T+18M, the Recalculation Settlement Statement T+35M, the Recalculation Settlement Statement T+36M or any other Recalculation Settlement Statement authorized by the CAISO Governing Board.

**Recalculation Settlement  
Statement T+38B**

The reissue of an Initial Settlement Statement T+~~38BD~~7B by the CAISO on the ~~fifty-first~~thirty-eighth (~~51st~~38th) Business Day from the relevant Trading Day, ~~(T+51BD) if T+51BD falls on a calendar day that is after the day the Invoice or Payment Advice for the bill period containing the relevant Trading Day is scheduled to publish.~~

**Recalculation Settlement  
Statement T+76~~BD~~**

The reissue of an Initial Settlement Statement T+7B~~Reissue~~ or atthe Recalculation Settlement Statement T+38B by the CAISO on the seventy-sixth (76th) Business Day from the relevant Trading Day (T+76~~BD~~).

**Recalculation Settlement  
Statement T+18M**

The reissue of an Initial Settlement Statement T+7B, a Recalculation Settlement Statement T+38B, or a Recalculation Settlement Statement T+76B on the Business Day eighteen (18) calendar months from the relevant Trading Day (T+18M).

**Recalculation Settlement  
Statement T+35M**

The reissue of an Initial Settlement Statement T+7B, a Recalculation Settlement Statement T+38B, a Recalculation Settlement Statement T+76B, or a Recalculation Settlement Statement T+18M, on the Business Day thirty-five (35) calendar months from the relevant Trading Day (T+35M).

**Recalculation Settlement**

The reissue of an Initial Settlement Statement T+7B, a Recalculation

**Statement T+36M**

Settlement Statement T+38B, a Recalculation Settlement Statement T+18M or a Recalculation Settlement Statement T+35M on the Business Day thirty-six (36) calendar months from the relevant Trading Day (T+36M).

\* \* \*

**Scheduling Coordinator  
Estimated Settlement  
Quality Meter Data**

Settlement Quality Meter Data estimated and submitted by the Scheduling Coordinators on behalf of Scheduling Coordinator Metered Entities.

\* \* \*

**Settlement Statement**

Any one of the following: Initial Settlement Statement T+7B, Recalculation Settlement Statement T+38BD, ~~Initial Settlement Statement Reissue~~, Recalculation Settlement Statement T+76B, and Recalculation Settlement Statement T+18M, Recalculation Settlement Statement T+35M, Recalculation Settlement Statement T+36M, or any other Recalculation Settlement Statement authorized by the CAISO Governing Board.~~T+76BD~~.

\* \* \*

**CAISO TARIFF APPENDIX H**

**[NOT USED]**

**~~[Ten Sheet Numbers Reserved for Future Filings.]~~**

**GRANDFATHERED METERING AND SETTLEMENT PROVISIONS FOR TRADING DAYS**

**PRIOR TO OCTOBER 1, 2009**

**1. Grandfathering of Metering and Settlement Provisions for Trading Days Prior to October 1, 2009.**

Notwithstanding any other provisions of the CAISO Tariff the following provisions shall apply to transactions conducted prior to October 1, 2009. In all other respects, the CAISO Tariff, including the provisions of Section 10 and Section 11 not covered by this Appendix O, will apply to transactions that occurred prior to October 1, 2009.

**10.3.6 Timing of Meter Data Submission.**

Scheduling Coordinators shall submit either hourly time-stamped Settlement Quality Meter Data for Scheduling Coordinator Metered Entities or profiled cumulative Settlement Quality Meter Data to the CAISO for each Settlement Period in an Operating Day according to the timelines established in the CAISO Payments Calendar and as provided in the applicable Business

Practice Manual. Scheduling Coordinators must also submit Settlement Quality Meter Data on demand as provided in the applicable Business Practice Manual.

#### **11.1.4 Calculations of Settlements.**

The CAISO shall calculate, account for and settle, based on the Settlement Quality Meter Data it has received, or, if Settlement Quality Meter Data is not available, based on the best available information or estimate it has received, the following charges in accordance with this CAISO Tariff.

#### **11.29 Billing and Payment Process.**

The CAISO will calculate for each charge the amounts payable by the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each Settlement Period of the Trading Day, and the amounts payable to that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for each Settlement Period of that Trading Day and shall arrive at a net amount payable for each charge by or to that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for that Trading Day. Each of these amounts will appear in the Initial Settlement Statement T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and the Recalculation Settlement Statement T+76BD that the CAISO will provide to the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO. The components of the Grid Management Charge will be included in the Initial Settlement Statement T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and the Recalculation Settlement Statement T+76BD with the other types of charges referred to in Section 11, but a separate Invoice for the Grid Management Charge, stating the rate, billing determinant volume, and total charge for each of its components, will be issued by the CAISO to the Scheduling Coordinator.

**11.29.1** The billing and payment process shall be based on the issuance of Initial Settlement Statement T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and the Recalculation Settlement Statement T+76BD for each Settlement Period in each Trading Day.

**11.29.2** Payment for the charges referred to in Section 11.1.2 (except for the charges payable under long-term contracts) for each Trading Day in each calendar month shall be made five (5) Business Days after issuance of the Initial Settlement Statement T+38BD for the last day of the relevant calendar month. Payment for adjustments will be made five (5) Business Days after issuance of the Initial Settlement Statement Reissue or Recalculation Settlement Statement for the last day of the relevant month. Payments for FERC Annual Charges will be made in accordance with Section 11.19.

#### **11.29.5 General Principles for Production of Settlement Statements.**

##### **11.29.5.1 Basis of Settlement.**

The basis of each Settlement Statement shall be the debiting or crediting of an account in the name of the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO in the general ledger set up by the CAISO to reflect all transactions, charges or payments settled by the CAISO.

##### **11.29.5.2 Right to Dispute.**

All Scheduling Coordinators, CRR Holders, Black Start Generators or Participating TOs shall have the right to dispute any item or calculation set forth in any Initial Settlement Statement in accordance with this CAISO Tariff.

## **11.29.7 Settlements Cycle.**

### **11.29.7.1 Timing of the Settlements Process.**

#### **11.29.7.1.1 Initial Settlement Statement T+38BD.**

The CAISO shall provide to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for validation an Initial Settlement Statement for each Trading Day within thirty-eight (38) Business Days of the relevant Trading Day, covering all Settlement Periods in that Trading Day. Each Initial Settlement Statement will include a statement of:

(a) the amount payable or receivable by the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge referred to in Section 11 for each Settlement Period in the relevant Trading Day;

(b) the total amount payable or receivable by that Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO for each charge for all Settlement Periods in that Trading Day after the amounts payable and the amounts receivable under (a) have been netted off pursuant to Section 11.29; and

(c) the components of each charge in each Settlement Period except for information contained in the Imbalance Energy report referred to in this Section 11.29.7.1.1.

Each Initial Settlement Statement shall also be accompanied by a breakdown of the components of the Imbalance Energy Charge (the Imbalance Energy report).

11.29.7.1.2 Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall have a period of eight (8) Business Days from the issuance of an Initial Settlement Statement during which it may review the Initial Settlement Statement T+38BD and notify the CAISO of any errors. No later than fifty-one (51) Business Days after the Trading Day to which it relates, the CAISO shall issue an Initial Settlement Statement Reissue or a Recalculation Settlement Statement to each Scheduling Coordinator or CRR Holder for that Trading Day.

#### **11.29.7.1.3 Initial Settlement Statement Reissues and Recalculation Settlement Statements.**

The CAISO shall provide to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO an Initial Settlement Statement Reissue or a Recalculation Settlement Statement in accordance with the CAISO Tariff and the CAISO Payments Calendar. The Initial Settlement Statement Reissue or Recalculation Settlement Statement shall be in a format similar to that of the Initial Settlement Statement and shall include the same granularity of information provided in the Initial Settlement Statement as amended following the validation procedure.

11.29.7.1.4 Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall have a period of ten (10) Business Days from the issuance of the Initial Settlement Statement Reissue or Recalculation Settlement Statement during which it may review the Incremental Changes on the Initial Settlement Statement Reissue or Recalculation Settlement Statement and notify the CAISO of any errors. No later than twenty-five (25) Business Days from the date of issuance of the Initial Settlement Statement Reissue or Recalculation Settlement Statement, the CAISO shall issue the 76th Day Recalculation Settlement Statement and shall incorporate any required corrections in a subsequent Initial Settlement Statement.

### **11.29.7.2 Basis for Billing and Payment.**

The Initial Settlement Statement T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and the Recalculation Settlement Statement T+76BD shall constitute the basis for billing and associated automatic funds transfers in accordance with this CAISO Tariff. The Initial Settlement Statement T+38BD shall constitute the basis for billing and associated automatic funds transfers for all charges in the first instance. The Initial Settlement Statement Reissue and Recalculation Settlement Statement shall constitute the basis for billing and associated automatic funds transfers for adjustments to charges set forth in the Initial Settlement Statement T+38BD. Each Scheduling Coordinator, CRR Holder, Black Start Generator, and Participating TO shall pay any net debit and shall be entitled to receive any net credit shown in an Invoice or Payment Advice on the Payment Date, whether or not there is any dispute regarding the amount of the debit or credit.

#### **11.29.7.2.1 Elimination of Invoices under \$10.00.**

Preliminary and final Invoices and Payment Advices due to or from any Market Participant for amounts less than \$10.00 will be adjusted to \$0.00 and no amount will be due to or from that Market Participant for that Invoice or Payment Advice.

#### **11.29.7.3 Settlement Statement Re-runs and Post Final Adjustments.**

The CAISO is authorized to perform Settlement Statement Re-runs following approval of the CAISO Governing Board. A request to perform a Settlement Statement Re-run may be made at any time by a Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO by notice in writing to the CAISO Governing Board. The CAISO Governing Board shall, in considering whether to approve a request for a Settlement Statement Re-run, determine in its reasonable discretion whether there is good cause to justify the performance of a Settlement Statement Re-run.

11.29.7.3.1 If a Settlement Statement Re-run is ordered by the CAISO Governing Board, the CAISO shall arrange to have the Settlement Statement Re-run carried out as soon as is reasonably practicable following the CAISO Governing Board's order, subject to the availability of staff and computer time, compatible software, appropriate data and other resources.

11.29.7.3.2 The cost of a Settlement Statement Re-run shall be borne by the Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO requesting it, unless the Settlement Statement Re-run was needed due to a clerical oversight or error on the part of the CAISO staff.

11.29.7.3.3 Where a Settlement Statement Re-run 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 this CAISO Tariff, for those Scheduling Coordinators, CRR Holders, Black Start Generators, or Participating TOs affected by the statement rerun, the CAISO shall reflect the amounts to be debited or credited in the next subsequent Recalculation Settlement Statement that it issues following the Settlement Statement Re-run to which the provisions of this Section 11 apply.

11.29.7.3.4 Reruns, post closing adjustments and the financial outcomes of CAISO ADR Procedures and any other dispute resolution may be invoiced separately from monthly market activities. The CAISO shall provide a Market Notice at least thirty (30) days prior to such invoicing identifying the components of such Invoice or Payment Advice.

#### **11.29.8 Confirmation and Validation.**

##### **11.29.8.1 Confirmation.**

It is the responsibility of each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO to notify the CAISO if it fails to receive a Settlement Statement on the date specified for the publication of such Settlement Statement in the CAISO Payments Calendar. Each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall be deemed to have received its Settlement Statement on the dates specified, unless it notifies the CAISO to the contrary.

#### **11.29.8.2 Validation.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall have the opportunity to review the terms of the Initial Settlement Statement T+38BD that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator, or Participating TO shall be deemed to have validated each Initial Settlement Statement unless it has raised a dispute or reported an exception within eight (8) Business Days from the date of issuance. Once validated, an Initial Settlement Statement shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, unless the CAISO performs a Settlement Statement Re-run pursuant to Section 11.29.7.3.

The notice of dispute, if any, shall state clearly the Trading Day, the issue date of the Initial Settlement Statement, the item disputed, the reasons for the dispute, the amount claimed (if appropriate) and shall be accompanied with all available evidence reasonably required to support the claim.

#### **11.29.8.3 Validation of Initial Settlement Statement Reissue and Recalculation Settlement Statements.**

Each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall have the opportunity to review the Incremental Changes that appear on the Initial Settlement Statement Reissue and Recalculation Settlement Statement that it receives. The Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall be deemed to have validated the Incremental Changes on each Initial Settlement Statement Reissue and Recalculation Settlement Statement unless it has raised a dispute or reported an exception regarding those Incremental Changes within ten (10) Business Days from the date of issuance. Once validated, the Incremental Changes on the Initial Settlement Statement Reissue and Recalculation Settlement Statement shall be binding on the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to which it relates, unless the CAISO performs a Settlement Statement Re-run pursuant to Section 11.29.7.3. The notice of dispute shall state clearly the Trading Day, the issue date of the Initial Settlement Statement Reissue and Recalculation Settlement Statement, the item disputed, the reasons for the dispute, the amount claimed (if appropriate) and shall be accompanied with all available evidence reasonably required to support the claim. The only Recalculation Settlement Statement that cannot be disputed is the one issued on T+59BD.

#### **11.29.8.4 Recurring Disputes or Exceptions.**

A Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO may request the CAISO to treat as recurring a dispute or exception raised in accordance with Sections 11.29.8.1 and 11.29.8.2 above, if a dispute or exception would apply to subsequent Initial and the Initial Settlement Statement Reissue and Recalculation Settlement Statements. A request for recurring treatment may be made for any valid reason provided that subsequent Initial Settlement Statements T+38BD, Initial Settlement Statement Reissue and Recalculation Settlement Statements would be affected, including but not limited to, that the disputed calculation will recur, or that a disagreement as to policy will affect calculations in subsequent Initial Settlement Statement T+38BD, the Initial Settlement Statement Reissue and Recalculation Settlement Statements. If a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO wishes to request that the CAISO treat a dispute as recurring, it shall, in the notice, clearly

indicate that it requests such treatment and set forth in detail the reasons that support such treatment. To the extent possible, the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall state the types of charges and dates to which the dispute will apply, and provide estimates of the amounts that will likely be claimed on each date. The CAISO shall make a determination on such a request within five (5) Business Days of receipt. To preserve its right to dispute an item, a Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO must continue to raise a dispute or report an exception until it is notified by the CAISO that the CAISO agrees to treat the dispute or exception as recurring. If the CAISO grants a request to treat a dispute or exception as recurring, the dispute raised or exception reported by the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO shall be deemed to apply to every subsequent Initial Settlement Statement T+38BD, the Initial Settlement Statement Reissue and Recalculation Settlement Statement provided to the Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO from the date that the CAISO grants the request for recurrent treatment until: a) ninety (90) days have elapsed, unless the CAISO indicates a different expiration date on its response to the request, in which case the expiration date shall be as stated by the CAISO in its response or b) the dispute or exception is resolved, whichever is shorter. The CAISO may deny a request that the CAISO treat a dispute as recurring for any valid reason, including because the request is not adequately specific as to the basis for recurring treatment or the subsequent calculations that will be affected.

#### **11.29.8.5 Amendment.**

Regarding a dispute related to an Initial Settlement Statement, if the CAISO agrees with the amount claimed, it shall incorporate the relevant data into the Initial Settlement Statement Reissue or Recalculation Settlement Statement. Regarding a dispute related to an Incremental Change in an Initial Settlement Statement Reissue or Recalculation Settlement Statement, the CAISO shall make a determination on the dispute no later than twenty-five (25) Business Days from the issuance of the Initial Settlement Statement Reissue or Recalculation Settlement Statement, and, if the CAISO agrees with the amount claimed, shall incorporate the relevant data into the next Recalculation Settlement Statement issued on T+76BD.

#### **11.29.8.6 CAISO Contact.**

If the CAISO does not agree with the amount claimed or if it requires additional information, it shall make reasonable efforts (taking into account the time it received the notice of dispute and the complexity of the issue involved) to contact the relevant Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO to resolve the issue before issuing the Initial Settlement Statement Reissue or Recalculation Settlement Statement. If it is not possible to contact the relevant party, the CAISO shall issue the Initial Settlement Statement Reissue or Recalculation Settlement Statement without taking into account the dispute notice.

#### **11.29.10 Billing and Payment.**

The CAISO shall prepare and send to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO two Invoices or Payment Advices for each calendar month. The first Invoice or Payment Advice will be based on the Initial Settlement Statement T+38BD and the second Invoice or Payment Advice will be based on the Initial Settlement Statement Reissue or Recalculation Settlement Statement(s). Each Invoice or Payment Advice will show amounts which are to be paid by or to each Scheduling Coordinator, CRR Holder, Black Start Generator or Participating TO, the Payment Date, being the date on which such amounts are to be paid or received and details of the CAISO Clearing Account to which any amounts owed by Scheduling Coordinators, CRR Holder, Black Start Generator or Participating TO are to be paid.

The Invoices or Payment Advices will also include the total charges for each component of the Grid Management Charge, the total charges associated with any Interest for each relevant

Trading Month, the FERC Annual Charges due monthly, as well as any disbursements associated with a shortfall receipt distribution.

A separate Invoice for the FERC Annual Charges due annually will be issued by the CAISO to the Scheduling Coordinator in accordance with Section 11.19.1.2. The CAISO will issue separate Invoices for NERC/WECC Charges as described in Section 11.20.

A separate Invoice for a shortfall allocation will be issued by the CAISO to Scheduling Coordinators in the event of a payment default in accordance with Section 11.29.17.1.

Settlement Statement Reruns, post closing adjustments and the financial outcomes of CAISO ADR Procedures and any other dispute resolution may be invoiced separately from monthly market activities. The CAISO shall provide a Market Notice at least thirty (30) days prior to such invoicing identifying the components of such Invoice or Payment Advice.

#### **11.29.10.1 Emergency Procedures.**

#### **11.29.10.2 Use of Estimated Data.**

In the event of an emergency or a failure of any of the CAISO software or business systems, the CAISO may use estimated Settlement Statements and Invoices and Payment Advices and may implement any temporary variation of the timing requirements relating to the Settlement and billing process contained in the CAISO Tariff. Details of the variation and the method chosen to produce estimated data, Settlement Statements and Invoices and Payment Advices will be published on the CAISO Website.

#### **11.29.10.3 Payment of Estimated Statements and Invoices.**

When estimated Settlement Statements and Invoices or Payment Advices are issued by the CAISO, payments between the CAISO and Market Participants shall be made on an estimated basis and the necessary corrections shall be made by the CAISO as soon as practicable. The corrections will be reflected as soon as practicable in later Settlement Statements and Invoices and Payment Advices issued by the CAISO. Failure to make such estimated payments shall result in the same consequences as a failure to make actual payments.

#### **11.29.10.4 Validation and Correction of Estimated Statements and Invoices.**

The CAISO shall use its best efforts to verify the estimated data and to make the necessary corrections as soon as practicable. The corrections will be reflected as soon as practicable in later Settlement Statements and Invoices and Payment Advices issued by the CAISO.

#### **11.29.10.5 Estimated Statements to be Final.**

In the event that the CAISO is of the opinion that, despite its best efforts, it is not possible for it to verify the estimated data because actual data is not reasonably expected to become available to the CAISO in the foreseeable future, the CAISO shall consult with the Market Participants in order to develop the most appropriate substitute data including using data provided by Market Participants. Following such determination of substitute data, the CAISO shall send to the relevant Market Participants revised Settlement Statements and Invoices and Payment Advices. The provisions of Section 11.29.8.6 shall apply to payment of revised Invoices issued in accordance with these emergency procedures. Failure to make payments of such revised Invoices shall result in the same consequences as a failure to make actual payments.

#### **11.29.21.2 Evidence of Unpaid Amount.**

The CAISO shall, on request, certify in writing the amounts owed by a CAISO Debtor that remain unpaid and the CAISO Creditors to whom such amounts are owed and shall provide certified copies of the relevant Initial Settlement Statement T+38BD and the Initial Settlement Statement Reissue and Recalculation Settlement Statements, Invoices, Payment Advices, and other documentation on which the CAISO's certificate was based to the CAISO Debtor and the relevant CAISO Creditors. A CAISO certificate given under this Section 11.29.21.2 may be used as prima facie evidence of the amount due by a CAISO Debtor to CAISO Creditors in any legal proceedings.

### **11.29.23 Communications.**

The Initial Settlement Statement T+38BD, any Initial Settlement Statement Reissue, the Recalculation Settlement Statements and Invoices, and Payment Advices will be considered issued to CAISO Creditors or CAISO Debtors when released by the CAISO's secure communication system. Communications on a Payment Date relating to payment shall be made by the fastest practical means including by telephone. If there is a failure of a communication system and it is not possible to communicate by electronic means, then the CAISO or CAISO Creditor or CAISO Debtor, as the case may be, shall communicate by facsimile but only if the recipient is first advised by telephone to expect the facsimile. Methods of communication between the CAISO and Market Participants may be varied by the CAISO giving not less than ten (10) days notice to Market Participants on the CAISO's secure communication system.

### **11.29.24 CAISO Payments Calendar.**

#### **11.29.24.1 Preparation.**

In September of each year, the CAISO will prepare a draft CAISO Payments Calendar for the following calendar year showing for each Trading Day:

(a) The date by which Scheduling Coordinators are required to provide Settlement Quality Meter Data for all their Scheduling Coordinator Metered Entities for each Settlement Period in the Trading Day;

(b) The date on which the CAISO will issue Initial Settlement Statements and Invoices and Payment Advices to Scheduling Coordinators or CRR Holders, Black Start Generators and Participating TOs for that Trading Day;

(c) The date by which Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs are required to notify the CAISO of any disputes in relation to their Initial Settlement Statements pursuant to Section 11.29.8.2;

(d) The date on which the CAISO will issue the Initial Settlement Statement Reissue and Recalculation Settlement Statements for T+51BD, T+59BD and T+76BD, and Invoices and Payment Advices to Scheduling Coordinators, CRR Holders, Black Start Generators and Participating TOs for that Trading Day;

(e) The date and time by which CAISO Debtors are required to have made payments into the CAISO Clearing Account in payment of Invoices for that Trading Day;

(f) The dates and times on which CAISO Creditors will receive payments from the CAISO Clearing Account of amounts owing to them for that Trading Day; and

(g) In relation to Reliability Must-Run Charges and RMR Payments, the details set out in paragraph 3 of Appendix N, Part J.

The CAISO will make a draft of the CAISO Payments Calendar available on the CAISO Website to Scheduling Coordinators, CRR Holders, Black Start Generators, Participating TOs and RMR Owners any of which may submit comments and objections to the CAISO within two weeks of the date of posting of the draft on the CAISO Website. No later than October 31st in each year, the CAISO will publish the final CAISO Payments Calendar for the following calendar year, after considering the comments and objections received from Scheduling Coordinators, CRR Holders, Black Start Generators, Participating TOs and RMR Owners. The final CAISO Payments Calendar will be posted on the CAISO Website, and will show for the period from 1 January to 31 December in the next succeeding year (both dates inclusive), the dates on which Settlement Statements shall be published by the CAISO and the Payment Dates on which the CAISO will pay the Participating TOs the Wheeling revenues allocated to them pursuant to Section 26.1.4.3.

## **2. Definitions**

As used in this Appendix O, the capitalized terms defined below shall have the definitions specified in this Section 2. All other capitalized terms shall have the meaning specified in the Master Definition Supplement in Attachment A.

### **Incremental Change:**

The change in dollar value of a specific Charge Code from the Initial Settlement Statement T+33BD to the Initial Settlement Statement Reissue or Recalculation Settlement Statement including any new Charge Codes or Trading Day charges appearing for the first time on the Initial Settlement Statement, Reissue or Recalculation Settlement Statement.

**Initial Settlement Statement T+38BD:** A Settlement Statement generated by the CAISO for the calculation of Settlements for a given Trading Day, which is published on the thirty eighth Business Day from the relevant Trading Day (T+38BD) and is prior to the Invoice or Payment Advice published for the relevant bill period.

**Settlement Statement Re-run:** The recalculation of a Settlement Statement in accordance with the provisions of the CAISO Tariff.

**Recalculation Settlement Statement:** The reissue of an Initial Settlement Statement T+38BD by the CAISO on the fifty-first (51st) Business Day from the relevant Trading Day (T+51BD) if T+51BD falls on a calendar day that is after the day the invoice or Payment Advice for the bill period containing the relevant Trading Day is scheduled to publish.

**Recalculation Settlement Statement T+76BD:** The reissue of an Initial Settlement Statement Reissue or the Recalculation Settlement Statement by the CAISO on the seventy-sixth (76th) Business Day from the relevant Trading Day (T+76BD).

**Settlement Statement:** Any one of the following: Initial Settlement Statement T+38BD, Initial Settlement Statement Reissue, Recalculation Settlement Statement and Recalculation Settlement Statement T+76BD.

\* \* \*

**Attachment C – CAISO Payment Acceleration Project Implementation Plan, May 29, 2009**  
**Payment Acceleration Amendment**  
**ER09-\_\_\_\_-000**  
**Fourth Replacement CAISO Tariff**  
**June 1, 2009**



**California ISO Payment Acceleration Project  
Implementation Plan V1.3  
May 29, 2009**

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## 1.0 - Introduction

The California ISO (CAISO) completed a comprehensive Payment Acceleration stakeholder process to address the need for an efficient cash clearing timeframe and to reduce the Settlement Statement timeframe as part of Strategic Objective 1.0, Excellence in Grid & Market Operations in *CAISO's Five-Year Strategic Plan 2008-2012*<sup>1</sup>.

A final proposal was published on December 5<sup>th</sup>, 2008 which is comprised of a decreased Settlement calculation and Invoice timeline that reduces the current average cash clearing time from 56 to 17 business days. In addition, the initial Settlement Statement publication timeline decreases to 7 business days (from the current 38). The final proposal is located on the CAISO website at <http://www.caiso.com/2094/2094d6796f840.pdf>.

Following completion of the final proposal, the CAISO conducted Implementation Workshops that included detailed business scenario walkthroughs and finalized the following:

- Business Requirements – validated with the use of business use cases - a collaborative, scenario-driven process involving both internal & external entities and stakeholders.
- Design Impacts – identified impacted areas and resolved design issues.
- Deployment Timeline – finalized timeline of the following major project milestones:
  - Development Phase (both internal & external)
  - Dry Run Period
  - Go-Live Date
- Deployment Criteria

The objective of this Implementation Plan is to document the workshop results and provide Market Participant's the information they need to begin their Payment Acceleration implementation tasks. CAISO plans to continue conducting Implementation Workshops throughout the project, accepting and incorporating stakeholder feedback into the plan appropriately.

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<sup>1</sup> The CAISO's Five Year Strategic Plan 2008-2012 can be located at <http://www.caiso.com/1fa4/1fa4c0d125c80.pdf>

## 2.0 - Payment Acceleration Implementation Summary

Table below outlines the Payment Acceleration Final Proposal recommendations. In addition, the application, system, and documentation impacts identified in the Implementation Workshops are listed.

Subject	Final Proposal	Impacts
Settlement Statements	<p>T+7B (initial) – also acts as Credit run</p> <p>T+38B (Recalculation)</p> <p>T+76B (Recalculation)</p> <p>T+18M (Recalculation)</p> <p>T+35M (optional &amp; sunset)</p>	<p>Business Practice Manuals (BPM)</p> <p>Bill Determinant Files – include flag to identify source of estimation.</p> <p>Settlement Statements - Elimination of Re-Issue statement</p> <p>Addition of two new charge codes</p> <p>Documentation – Configuration Guides, Payment Calendar, BD Matrix, SaMC Interface Spec's</p>
Meter Data Submission & Estimation	<p>Substitution for meter data not available at T+5B, reflected on T+7B statement.</p> <p>CAISO requires a successful submission of meter data within the OMAR application at T+5B (Noon).</p> <p>When meter data is not available within this timeframe, the CAISO will estimate outstanding metered demand and generation.</p>	<p>Business Practice Manuals (BPM)</p> <p>Meter Data Submission Process</p> <p>OMAR On-line Application</p> <p>OMAR-Online Automation Specifications</p>
Billing & Invoicing	<p>Semi-Monthly (twice per month)</p> <p>Floating date based on Settlement calendar date of TD+7B after 15th and EOM.</p> <p>Initial Statements invoiced semi-monthly – includes 1-15th and 16th – EOM.</p> <p>Recalculation Statements invoiced monthly and included on one of the two semi-monthly invoices along with initial billing period.</p> <p>Interest will be assessed on any deviations through the second recalculation invoice (T+76B).</p>	<p><u>Invoice</u></p> <ul style="list-style-type: none"> <li>• Will now include multiple (up to 5) billing periods</li> <li>• Invoice frequency changes to semi-monthly</li> <li>• Updated Payment Calendar</li> <li>• Addition of two new charge codes on output files (statements, bill determinant, invoice)</li> </ul> <p><u>Dispute timeline</u></p> <ul style="list-style-type: none"> <li>• Changes due to new statement timeline</li> <li>• Interest is disputable – will follow current dispute process</li> </ul>

## **3.0 – Business Process Impacts**

The following Business Practice Manual sections have been tentatively identified as requiring modification due to Payment Acceleration.

### **Billing & Settlements**

- Section 2.3.2 – Schedule for Settlement Statement Publication
- Section 2.3.4 – Disputes, Settlement Adjustments, & Settlement Re-run Adjustments
- Section 2.3.5 – Billing & Payment
- Section 2.4 – Payment Calendar
- Section 3.1 – Settlement Runs & Types
- Section 3.2 – Charge Code Groupings for Settlements (to include Interest charge codes)
- Section 3.5 – Estimated Settlement
- Section 4.1 – Billing
- Section 5.0 – Dispute Process
- Section 6.3 – Financial Calculations (to include interest charges)

### **Credit Management**

- Section 4.1 – Purpose of Unsecured Credit Limit
- Section 4.2 – Classes of Entities That May Be Eligible for Unsecured Credit
- Section 4.3.3.1 – Rated Public/Private Corporations
- Section 4.3.3.2 – Unrated Public/Private Corporations
- Section 4.3.3.3 – Rated Governmental Entities
- Section 4.4.2 – Unsecured Credit Limit for an Unrated Governmental Entity That Receives Appropriations from the Federal Government or a State Government
- Section 6.1 – Estimated Aggregate Liability Overview
- Section 6.3 – Calculation of the Estimated Aggregate Liability for New Market Participants
- Section 6.4 – Transition to the Estimated Aggregate Liability Calculation Shown in Section 6.2

### **Rules of Conduct Administration**

- Section 3.4 – Sanction Administration
- Section 3.4.4 – Settlement

### **Market Operations Appendices**

- Attachment C (Expected Energy Calculation)

### **CAISO Metered Entity Responsibilities**

- Section 5.1.3 Maintenance & Repairs – a CAISO Metered Entity requirements for repair of certified meters to ensure availability of revenue quality meter data.

### **SC Metered Entity Responsibilities**

- Section 6.1.3 - Process for submittal & re-submittal of SQMD
- Section 6.1.4 – Failure to submit Accurate Settlement Quality Meter Data
- Section 6.3.1 - Scheduling Coordinator Self-Audit Report

These changes will follow CAISO's BPM change management process. Changes to the tariff will follow CAISO's standard process for posting the proposed changes and obtaining stakeholder input through written comments and a meeting or conference call.

The objective of the following sections is to describe business process impacts due to Payment Acceleration. This will provide external stakeholders the required information to begin their preparation for the Payment Acceleration Dry Run period.

### **3.1 - Settlement Statements**

#### **Types of Settlement Statements**

There are two types of Settlement Statements, an Initial Settlement Statement and a Recalculation Settlement Statement. The first issuance of the Initial Settlement Statement is the first statement published by CAISO of the calculation of the Settlements and allocation of the charges for a given Trading Day. A Recalculation Settlement Statement is a true-up against an invoiced version of a previous Initial or Recalculation Settlement Statement. A Recalculation Settlement Statement is published after the Initial Invoice/Payment Advice for the relevant Bill Period. There are only three factors that distinguish these two types:

- The names of the statements, including version reference
- The timing of publication in relation to the Invoicing process, meaning the calendar day on which it publishes
- The inclusion of Previous and Net Billable Quantities, Billable Prices, and Settlement Amounts

The re-issue statement and Credit Run are no longer applicable under Payment Acceleration.

#### **Schedule for Settlement Statement Publication**

CAISO publishes the Initial Settlement Statement to each Business Associate for each Trading Day (T) on T+7B for the relevant Trading Day covering all Settlement Periods in that Trading Day or Bill Period.

On T + 38B from the relevant Trading Day, CAISO publishes a first version Recalculation Settlement Statement (called a Recalculation Settlement Statement). From both a technical and business process perspective, a Recalculation Settlement Statement can only be generated and published once a version of an Initial Settlement Statement for the associated Trading Day has been published and included on an Invoice or Payment Advice. The Recalculation Statement generated and published on T + 38B is issued to each Business Associate for the Trading Day covering all Settlement Periods in that Trading Day or Bill Period. Business Associates can dispute the Incremental Changes on these statements as the Settlement Amounts presented on these Statements represent the financial obligations owing to or from a Business Associate.

Since the contents of each Settlement Statement contains transactional data for one Trading Day (or Bill Period), Settlement Adjustments needed after the T+38B Recalculation Settlement is published on a subsequent version of the Recalculation Settlement Statement. The subsequent Recalculation Settlement Statement is generated and published thirty-eight (38) Business Days from the day on which the Recalculation Settlement Statement for T + 38B for the relevant Trading Day is published. This timing equates to a publication date of T +76 Business Days.

In the event additional Settlement Statement Recalculation runs for a given Trading Day (or set of Trading Days) are needed after the Recalculation Settlement Statement is published on T + 76B, CAISO will schedule them at T+18M and T+35M and communicate via a Market Notice. The table below provides a summary of the publication dates for the various Settlement Statement types:

<b>Settlement Statement Types</b>	<b>Publication Date</b>
Initial Settlement Statement T + 7B	T + 7B
Recalculation Settlement Statement	T + 38B, post-Initial Invoicing
Recalculation Settlement Statement	T + 76B
Subsequent Recalculation Settlement Statements T > 76B	T+18M – 18 Calendar months after Trade Date T+35M – 35 Calendar months after Trade Date

### **Content of Settlement Statements**

Three XML files make up the content of any version of a published Credit, Initial or Recalculation Settlement Statement. These files are:

1. A Settlement Amount File
2. A Business Associate (BA) Bill Determinant File
3. A common CAISO Bill Determinant File

The content of these files reflects transactional data for only one Trading Day or Bill Period unless otherwise specified by calculation rules for a given Charge Code and are detailed in the SaMC Interface Specification for Business Associates.

Under Payment Acceleration, a new Bill Determinant will be published for each 10 min interval that identifies the source of the meter data. The value is as follows:

- 1 - Actual (A) SQMD
- 2 - SC estimated (E) SQMD
- 3 – CAISO estimated meter data
- 4 – CAISO estimated meter data override

In addition, two additional charge codes will be configured and included on the output files; one for Interest Allocation and the other for Interest Distribution.

### **Dispute Timeline**

Business Associates have fourteen (14) Business Days (B) from the publication date of the Initial Settlement Statement generated on T+7B to review the contents. By the fourteenth (14<sup>th</sup>) Business Day (T+21B), the Business Associate is to notify CAISO of any errors found that are not related to estimated meter data by providing the specifics detailed in Section 5 – Dispute Processes of the Billing & Settlements BPM. Valid Disputes result in a Settlement Adjustment(s) to the impacted transaction(s), which appears on the Recalculation Settlement Statement issued on T+38B for the relevant Trading Day.

Business Associates have eighteen (18) Business Days from the publication date of the Recalculation Settlement Statement at T+38B to review the contents and notify CAISO of any errors.

Valid Disputes regarding data appearing on the Recalculation Settlement Statement issued on T + 38B result in a Settlement Adjustment to the impacted transactions, and appear on the next scheduled Recalculation Settlement Statement for the relevant Trading Day (that is, the T+76B Recalculation Settlement Statement).

Valid Disputes against the Incremental Changes appearing on a Recalculation Settlement Statement issued on T+76B, or any subsequent version of a Recalculation Settlement Statement, result in a Settlement Recalculation Adjustment to the impacted transaction(s) and appear on a subsequent issuance of a Recalculation Settlement Statement generated at T+18M and/or T+35M for the relevant Trading Day.

### **Settlement Adjustments & Settlement Statement Reruns**

The Settlement Statement Rerun is no longer a valid run type under Payment Acceleration. Any Settlement Adjustment to a Trading Day will be processed and reflected on the subsequent Recalculation Settlement Statement and is included on the invoice as part of the appropriate billing period.

## Sunset Provision

CAISO will implement a sunset provision effective at T+36M. The final true-up Settlements Statement will publish at T+35M to allow time for settlement disputes, and adjustments if necessary, prior to the sunset. In the case where an adjustment is required, another Settlements Statement will publish and the adjustment will be reflected on a subsequent semi-monthly Invoice. This adjustment will be final and not subject to dispute. The only exception to the sunset timeline will be in accordance with FERC orders/rulings.

## Settlement Runs & Types

A Settlement Run is the daily execution of specified Settlement calculations in order to generate either current or revised Settlement results for output. During the execution of a Settlement Run, both charges and matching revenue distributions are calculated as balanced transactions in accordance with the equations specified for each Charge Code and Pre-calculation. For all calculations included in a Settlement Run, revenue distributions are payments to a Business Associated expressed as a negative value and charges are monies owned from a Business Associated expressed as a positive value. There are two categories of Settlement Runs: Initial and Recalculation.

A unique Settlement Run is defined for each Settlement calculation result set that contains a specific set of Charge Codes and Pre-calculations. Each of these defined Settlement Runs is a unique Settlement Run Type. Under Payment Acceleration, the following Settlement Run Types exist in support of each for the following result sets:

Settlement Run Type	Description of Output
TAC Rate Run	Run including all pre-calculations needed to calculate and provide current TAC and Wheeling rates for posting.
Daily Initial Market Run	Initial run for each Charge Code set with the same Payment Date that is executed for all Trading Days in a Bill Period. These result sets are used to facilitate the generation and publication of all versions of the Daily Initial Settlement Statement, which in turn support the generation and publication of all versions of the Initial Invoice or Payment Advice.
Monthly Initial Market Run	Same as the Daily Initial Market Run, however this run includes all Trading Days in a Bill Period. These result sets are used to facilitate the generation and publication of all versions of the Monthly Initial Settlement Statement.
Daily Recalculation Market Run	Recalculation run for each Charge Code set with the same Payment Date that is executed for all Trading Days in a Bill Period. These result sets are used to facilitate the generation and publication of all versions of the Daily Recalculation Settlement Statement, which in turn support the generation and publication of all versions of the Recalculation Invoice or Payment Advice.

Settlement Run Type	Description of Output
Monthly Recalculation Market Run	Same as the Daily Recalculation Market Run, however this run includes all Trading Days in a Bill Period. These result sets are used to facilitate the generation and publication of all versions of the Monthly Recalculation Settlement Statement.
Initial RMR Run	Initial run for each RMR Contract Invoice amount with the same Payment Date in accordance with the CAISO RMR Payment Calendar.

### **PTB Direct Charges (Interest)**

PTB Direct Charges are Current Settlement Amount entries associated with specific Charge Codes that are not calculated by the Settlements system and are directly assigned to a Settlement Statement and Invoice or Payment Advice. There are two subcategories of PTB Direct Charges; one of which is PTB Financial Adjustments. A PTB Financial Adjustment is a method for entering Current Settlement Amounts provided by the market clearing system that adjusts for specific financial scenarios outside of CAISO Market transactions. In contrast to a PTB Charge Code Adjustment, where a dollar amount is entered to change or modify a Settlement Amount associated with a system generated Charge Code, PTB Financial Adjustments are dollar amount credit or debit adjustments related to the collection and distribution of interest (such as in CC 2999 or 3999), as well as the re-allocation or re-distribution of dollars in the event of a Shortfall (in CC 5910 and 5900) during the cash clearing process.

Under Payment Acceleration, the two new charge codes for interest allocation and distribution will be configured as a PTB Financial Adjustment.

## **3.2 - Billing & Invoicing**

### **Schedule for Invoice/Payment Advice Publication**

The schedule for generating and issuing Invoices and Payment advices against Settlement Statements amounts for a Bill Period is called the Invoicing Cycle. During the course of a Business Day, CAISO generates and publishes Settlement Statements prior to generating and publishing any Invoices/Payment Advices scheduled for the calendar day. Under Payment Acceleration, CAISO prepares and publishes to each Business Associate two Invoices/Payment Advices in each calendar month. Each constitutes the basis for billing and associated automatic funds transfer in accordance with CAISO Tariff Section 11.29.7.2. Each Payment Advice that is published has a unique Invoice number and is issued on the calendar day on which the Initial Settlement Statement for the last Trading Day of a Bill Period has been calculated and published (that is, T+7B). Billing periods are defined as follows:

## **Billing Periods**

Initial Statements (T+7B) from Trade Dates 1st-15<sup>th</sup>

Initial Statements (T+7B) from Trade Dates 16<sup>th</sup> – end of month (eom)

Recalculation (T+38B)

Recalculation (T+76B)

Recalculation (T+18M)

Recalculation (T+35M)

The Invoice or Payment Advices will include up to five billing periods. For example, an invoice may include one of the Initial Statement (T+7B) billing periods as well as up to four Recalculation Statement billing periods. The recalculation billing periods will be included on the next scheduled invoice once an entire month has been calculated and published. Each Bill Period is presented separately on the Invoice or Payment Advice; however the net Invoice or Payment Advice total representing the Business Associate's financial obligation reflects all Bill Periods.

## **Content of Invoices/Payment Advices**

One XML file makes up the content of any published version of an Invoice or Payment Advice. The content of this file includes Previous, Current, and Net Settlement Amounts for multiple Bill Periods in addition to the specifics detailed in the SaMC Interface Specification for Business Associates found on the CAISO website. There is no difference between the structures of the two monthly Invoice/Payment Advices. As a given Invoice/Payment Advice contains multiple Bill Periods, one Bill Period included may represent a set of Initial Settlement Statements, and another Bill Period included may represent a set of Recalculation Settlement Statements. Both the Settlement and Invoicing Cycles drive which Bill Periods are included on a particular Invoice/Payment Advice.

Invoices/Payment Advices contain only those Settlement Amounts that are included on a published version of a Settlement Statement. Furthermore, Settlement Statements for all Trading Days within a Bill Period must be published before an Invoice/Payment Advice is generated and published for the Bill Period containing those Trading Days.

The Settlement Statements included in the Invoice/Payment Advice are:

- Published versions of the Initial Settlement Statements issued on T+7B for all Trading Days within a Bill Period that is scheduled for Invoicing based on the Payment Calendar
- Published versions of the Recalculation Settlement Statements issued on T+38B and T+76B for all Trading Days within a Bill Period that is scheduled for Recalculation Invoicing based on the Payment Calendar
- Published versions of the any subsequent Recalculation Settlement Statement issued on or after T+76B for all Trading Days within a Bill Period available on the calendar date that a Invoice/Payment Advice is scheduled for publication

### **Financial Calculations – Interest**

Interest will be applied to any deviations through the second Recalculation Invoice (statements through T+76B). Interest will stop after the second Recalculation Invoice and not carry on into subsequent Invoices that could occur for the T+18 month and T+35 month statements. Interest will be charged or paid through separate Charge Codes in the CAISO Settlements system based on FERC's quarterly rate. The first recalculation Invoice will contain interest charges on deviations between the initial (T+7B) and first recalculation with SQMD (T+38B). This first recalculation Invoice will charge interest separately for the time period of the 1st through the 15th and the 16th through the end of the month since the initial Invoice for the first half of the month versus the second half of the month is issued on different dates. The second Recalculation Invoice (T+76B) will include interest charges reflecting variations between the 1st and 2nd recalculation Invoices. Again, on the 2nd true-up Invoice, interest will be charged separately for each half of the month. Interest charged or paid will be calculated back to the first due date of the initial Invoice. An example is provided on the CAISO website at <http://www.aiso.com/2366/2366aefb477b0.pdf>. Interest amounts to be charged or allocated to Business Associates are processed through PTB Financial Adjustments in new CC6999 and CC7999. Descriptions for each of these two new Charge Codes will be included in the BPM Configuration Guides. Sample Billing Determinants are included in section 4.0 below.

### **3.3 - Meter Data Submission & Estimation**

#### **Process for Submittal of Settlement Quality Meter Data**

Under Payment Acceleration, CAISO will require that estimated or actual settlement quality meter data (SQMD) be submitted by the Schedule Coordinator (SC) and available within the OMAR application by 12pm (noon) on T+5B. All SCs for Scheduling Coordinator Metered Entities are responsible for submitting SQMD in Standard Time for each Settlement Period.

Estimated SQMD data submittal can be accomplished in this time frame using interval metering when available and sound estimation practices that blend a variety of available information (schedules, forecasts, temperature data, operating logs, recorders and historic data) to make a reasonable representation of the Load used and Generation delivered.

Scheduling Coordinators may submit both actual and estimated SQMD for the SC metered entities they represent using one of the CAISO's approved Meter Data Exchange Formats (MDEF): MDEF or CSV formats. Estimated SQMD submitted using the MDEF format will be identified by using an ".est" or ".EST" file extension. Upon successful submission of the file, the special extension will trigger OMAR to FLAG all the files' contents to an 'E' status signifying submittal of estimated SQMD. Actual SQMD submitted using MDEF files will be identified by using the ".dat" or ".DAT" file extension which will trigger OMAR to flag all file contents with a status of 'A' signifying submittal of actual SQMD. Estimated SQMD submitted using a CSV file will be identified by using the existing Status value of 'E' for estimated or 'A' for actual, both of which will be required in the file contents of a CSV file submitted. An example is provided in section 4.0 below.

Due to the requirement that actual SQMD is due by T+43C, CAISO estimated meter data will not be used in any recalculation statements. After T+43C, CAISO meter data estimates are overridden with zeros if the SC still has not submitted actual SQMD by the time required for recalculation. Subsequent submission of actual SQMD will be used in other recalculation statements based on the timing of submission, but will be considered 'late' and non compliant with the requirement to submit SQMD by t+43C.

Additionally, SC submitted estimated SQMD not replaced by actual SQMD will be used in recalculation statements, however, it will be considered as 'late' and non-compliant with the requirement to submit SQMD by T+43C. Subsequent submission of actual SQMD will be used in recalculation statement based on the timing of the submission.

Tariff changes will be made to support the requirement and responsibility of the SC to ensure that submitted estimated meter data for payment acceleration by T+5B reasonably represents the load or generation they serve.

Monitoring measures currently in place for under scheduled load penalty will be leveraged at T+38B to determine the impact of unscheduled demand in the Day-Ahead market.

## Meter Data Estimation

CAISO will estimate outstanding generation and load meter data only when meter data is not available within the required timeframe. Estimated Metered Generation will be based on Expected Energy and Estimated Metered Demand will be based on the following methodology:

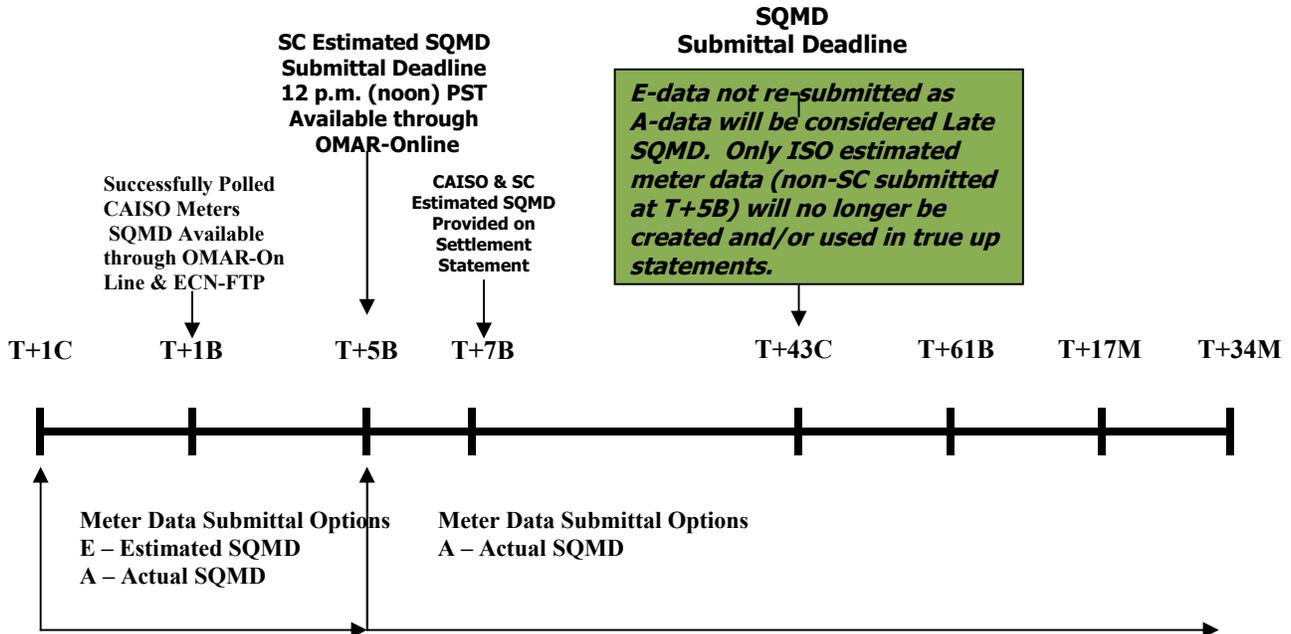
IF,	THEN,
ASD < TEMD	Estimated Metered Demand = SC Scheduled Demand
ASD > TEMD, by less than 15%	Estimated Metered Demand = SC Scheduled Demand
ASD > TEMD, by more than 15%	Estimated Metered Demand = SC Scheduled Demand plus 15%

Where,

ASD = Total Actual System Demand = the total actual load determined by the CAISO in real time

TEMD = Total Estimated Metered Demand = SC submitted metered demand + CA ISO polled estimated settlement quality metered demand + Scheduled Demand for un-submitted metered demand

## Meter Data Submittal Timeline



## **3.4 - Credit Management**

### **Maximum Amount of Unsecured Credit**

With the reduction in the cash clearing cycle from a maximum of 95 trading days to 34 trading days, there will be a corresponding decrease in the maximum amount of unsecured credit from \$150 million to \$50 million. Changes will be necessitated in the following sections of the BPM for Credit Management:

- Section 4.1 – reduce maximum trading day from 95 to 34 and remove footnote 2
- Section 4.2 – change \$150 million to \$50 million in Unsecured Credit Limit calculations
- Section 4.3.3.1 – 4.3.3.3 – modify examples to show impact of \$50 million maximum unsecured credit limit
- Section 4.4.2 – change the cap of \$150 million to \$50 million

### **Estimated Aggregate Liability Calculation**

Under Payment Acceleration, the GMC/Monthly Charge Codes and the Daily Charge Codes will effectively be invoiced using different frequencies. The first 15 days of the month will be invoiced first, upon publishing of the daily statement for the 15<sup>th</sup> of the month. The second half of the month including GMC and Month-end Charge Codes will be invoiced upon the publishing of the last day of the month. This effectively splits the invoice periods of the different Charge Code types. Daily Charge Codes get invoiced twice per month and GMC/Monthly Charge Codes get invoiced once per month. Therefore, outstanding Daily Charge Code liability varies from approximately 15 – 34 days while outstanding GMC/Monthly Charge Code liability varies from approximately 15 – 48 days. Changes will be necessitated in the following sections of the BPM for Credit Management:

- Section 6.1 – change 65-95 trade days of unpaid obligations to 15-48 trade days, delete the footnote and change the illustration
- Section 6.3 – change references to 95 trade days to 34 trade days
- Section 6.4 – eliminate sentence referring to 102-day level posting period and associated footnote

## 4.0 - Technical Specifications – External Interfaces

This section identifies Payment Acceleration impacts related to external user interfaces, external systems, and software applications that require communications or data exchanges between CAISO and Market Participants.

### User Interfaces

OMAR-Online GUI will be modified to (1) display a reading flag of “Actual” or “Estimated” for each interval and (2) display an overall flag of “Actual” or “Estimated” for each SC submitted meter data file. OMAR-Online will also display a similar status flag at the file level.

OMAR-Online meter data version viewing functionality will be expanded to allow Market Participant ability to see ALL versions submitted and accepted by the CAISO.

Bill Determinant file will include a new Billing Determinant identifying whether the meter data utilized was “Actual” or “Estimated” and if estimated, the source of the estimates “ISO” or “SC”. Values are as follows:

- 1 - Actual (A) SQMD
- 2 - SC estimated (E) SQMD
- 3 – CAISO estimated meter data
- 4 – CAISO estimated meter data override

### Hardware Interfaces

There are no new hardware interfaces as a result of PA

### Software Interfaces

#### Settlements

The XML payload for the Billing Determinants (BD) will include information on the following:

- Meter Data States - whether the meter data utilized was “Actual” or “Estimated” and if estimated, the source of the estimates “ISO” or “SC”.
- Interest Calculation Information
- Specific scenarios are posted at <http://www.caiso.com/23a5/23a5901d707f0.pdf>

**No changes to the XML Schema Definition (XSD) are required.**

Below are examples of each of the additional BDs included as part of Payment Acceleration:

**Interest Charges – X indicates required field**

<b>Billing Determinant Name</b>	<b>Charge Code</b>	<b>Attribute1 (BA-ID)</b>	<b>Attribute16 (Invoice-Ref)</b>	<b>Attribute17 (Bill-Period-Start)</b>	<b>Attribute18 (Bill-Period-End)</b>
BA_DAY_INV_DEV_INT_DIST_AMT	6999	X		X	X
BA_DAY_INV_DEV_INT_ALLOC_AMT	7999	X		X	X
BA_DAY_INITIAL_INV_1ST_TO_MID_MTH_AMT		X	X	X	X
BA_DAY_INITIAL_INV_MID_MTH_TO_EOM_AMT		X	X	X	X
BA_DAY_1ST_TRUE_UP_INV_AMT		X	X	X	X
BA_DAY_2ND_TRUE_UP_INV_AMT		X	X	X	X
NUM_OF_INTEREST_DAYS_BTWN_1ST_INIT_AND_TRUEUP					
NUM_OF_INTEREST_DAYS_BTWN_2ND_INIT_AND_TRUEUP					
NUM_OF_INTEREST_DAYS_BTWN_1ST_INIT_AND_EOQ					
NUM_OF_INTEREST_DAYS_BTWN_2ND_INIT_AND_EOQ					
NUM_OF_INTEREST_DAYS_BTWN_BOQ_AND_EOQ					
NUM_OF_INTEREST_DAYS_BTWN_BOQ_AND_TRUEUP					
FERC_QTR_DAILY_INTEREST_RATE					
SECOND_REQD_FERC_INTEREST_RATE					
THIRD_REQD_FERC_INTEREST_RATE					

Billing Determinant Name	Charge Code	Attribute2 (From-Date)	Attribute21 (From-Date-Type)	Attribute22 (To-Date)	Attribute23 (To-Date-Type)	INT001 (Amount)
BA_DAY_INV_DEV_INT_DIST_AMT	6999					X
BA_DAY_INV_DEV_INT_ALLOC_AMT	7999					X
BA_DAY_INITIAL_INV_1ST_TO_MID_MTH_AMT		X	X			X
BA_DAY_INITIAL_INV_MID_MTH_TO_EOM_AMT		X	X			X
BA_DAY_1ST_TRUE_UP_INV_AMT				X	X	X
BA_DAY_2ND_TRUE_UP_INV_AMT				X	X	X
NUM_OF_INTEREST_DAYS_BTWN_1ST_I NIT_AND_TRUEUP		X	X	X	X	X
NUM_OF_INTEREST_DAYS_BTWN_2ND_I NIT_AND_TRUEUP		X	X	X	X	X
NUM_OF_INTEREST_DAYS_BTWN_1ST_I NIT_AND_EOQ		X	X	X	X	X
NUM_OF_INTEREST_DAYS_BTWN_2ND_I NIT_AND_EOQ		X	X	X	X	X
NUM_OF_INTEREST_DAYS_BTWN_BOQ_ AND_EOQ		X	X	X	X	X
NUM_OF_INTEREST_DAYS_BTWN_BOQ_ AND_TRUEUP		X	X	X	X	X
FERC_QTR_DAILY_INTEREST_RATE		X	X	X	X	X
SECOND_REQD_FERC_INTEREST_RATE		X	X	X	X	X
THIRD_REQD_FERC_INTEREST_RATE		X	X	X	X	X

**Meter Data States – X indicates required field**

Billing Determinant Name	Trade-Date	Attribute1 (BA-ID)	Attribute2 (RES-NAME)	Attribute3 (RES-TYPE)	INT001	INT002	INT003	INT004	INT005	INT006
BA_10M_RSRC_Meter_Source_Flag	X	X	X	X	X (1-4)	X (1-4)	X (1-4)	X (1-4)	X (1-4)	X (1-4)
BA_10M_RSRC_METER_QTY	X	X	X	X	X	X	X	X	X	X

## **Naming Conventions – Statements & Invoices**

### **Initial Statement – T+7B**

BD File:

*ba\_id-DETERMINANTS-runid-DAILY\_INITIAL\_MARKET-Version-APPROVED-periodstart(yyyymmdd)-postdate.xml*  
E.g.: 1006- DETERMINANTS-2009041011- DAILY\_INITIAL\_MARKET-1-APPROVED-20090401-20090515.xml

Statement File:

*ba\_id-SETTLEMENT-runid-DAILY\_INITIAL\_MARKET-Version-APPROVED-periodstart (yyyymmdd)-postdate.xml*  
E.g.: 1006- SETTLEMENT-2009041011- DAILY\_INITIAL\_MARKET-1-APPROVED-20090401-20090515.xml

### **Monthly Initial**

BD File:

*ba\_id-DETERMINANTS-runid-MONHLY\_INITIAL\_MARKET-Version-APPROVED-periodstart (yyyymmdd)-postdate.xml.*  
E.g.: 1006- DETERMINANTS-2009041011- MONTHLY\_INITIAL\_MARKET-1-APPROVED-20090401-20090515.xml

Statement File:

*ba\_id-SETTLEMENT-runid-MONTHLY\_INITIAL\_MARKET-Version-APPROVED-periodstart (yyyymmdd)-postdate.xml*  
E.g.: 1006- SETTLEMENT-2009041011- MONTHLY\_INITIAL\_MARKET-1-APPROVED-20090401-20090515.xml

### **Recalculation Statements**

BD File:

*ba\_id-DETERMINANTS-runid-DAILY\_RECASC\_MARKET-Version-APPROVED-periodstart (yyyymmdd)-postdate.xml*  
E.g.: 1006- DETERMINANTS-2009041011- DAILY\_RECASC\_MARKET-1-APPROVED-20090401-20090515.xml

Statement File:

*ba\_id-SETTLEMENT-runid-DAILY\_RECASC\_MARKET-Version-APPROVED-periodstart (yyyymmdd)-postdate.xml*  
E.g.: 1006- SETTLEMENT-2009041011- DAILY\_RECASC\_MARKET-1-APPROVED-20090401-20090515.xml

### **Invoice**

*Ba\_id-INVOICE-runid-MARKET-Version-APPROVED-periodstart(yyyymmdd)-postdate.xml*  
E.g. : 1006-INVOICE-2009042331-MARKET-1-APPROVED-20090401.20090515.xml

## **Metering**

Files, in the CSV format only, submitted with Settlement Quality Meter Data will contain a Status value of 'E' for SC estimated and 'A' for actual SQMD. Below are sample files:

Example of CSV File Submittal for Estimated Settlement Quality Meter Data using E (Estimated) Status:

<b>MSID</b>	<b>Channel</b>	<b>Date</b>	<b>Time</b>	<b>Value</b>	<b>UOM</b>	<b>Interval</b>	<b>Status</b>	<b>DSTFLAG</b>
TESTS7UNIT1	1	12/15/2008	0:10	123.37	1	10	E	N
TESTS7UNIT1	1	12/15/2008	0:20	124.10	1	10	E	N
TESTS7UNIT1	1	12/15/2008	0:30	122.64	1	10	E	N
TESTS7UNIT1	1	12/15/2008	0:40	122.64	1	10	E	N
TESTS7UNIT1	1	12/15/2008	0:50	121.91	1	10	E	N
TESTS7UNIT1	1	12/15/2008	1:00	123.37	1	10	E	N

Example of File Submittal for Settlement Quality Meter Data using A (Actual) Status:

<b>MSID</b>	<b>Channel</b>	<b>Date</b>	<b>Time</b>	<b>Value</b>	<b>UOM</b>	<b>Interval</b>	<b>Status</b>	<b>DSTFLAG</b>
TESTS7UNIT1	1	12/15/2008	0:10	123.37	1	10	A	N
TESTS7UNIT1	1	12/15/2008	0:20	124.10	1	10	A	N
TESTS7UNIT1	1	12/15/2008	0:30	122.64	1	10	A	N
TESTS7UNIT1	1	12/15/2008	0:40	122.64	1	10	A	N
TESTS7UNIT1	1	12/15/2008	0:50	121.91	1	10	A	N
TESTS7UNIT1	1	12/15/2008	1:00	123.37	1	10	A	N

## **Communications Interfaces**

There are no new communication interfaces as a result of PA

## **Business Use Cases**

A use case is a description of a system's behavior as it responds to requests. In other words, a use case describes "who" can do "what" with the system in question. The use case technique is used to capture a system's behavioral requirements by detailing scenario-driven threads through the functional requirements.

During the Implementation Workshops for Payment Acceleration, business use cases were presented and discussed with stakeholders to validate the business requirements. Appendix A contains the final set of business use cases from the workshop.

## 5.0 - Testing Approach (Dry Run Period)

The three month Dry Run Period is scheduled for July 1st – October 5<sup>th</sup>, 2009 and will consist of the following:

- Full Integration Testing with PA functionality
- Simulate PA timeline for data availability from ‘upstream’ systems
- Simulate Meter Data submission process with collaboration from Market Participants
- Accelerated & consolidated timeline of statements and invoices for testing purposes. Similar to how MRTU Market Simulation works.
- Produce outputs for Market Participant review
  - Initial Statement
  - True-up Statements
  - Invoices – at least two, with one showing all billing periods
- Database will be ‘seeded’ with Production Market and Meter Data as follows:
  - Structured Testing - July 1-31 → April Production Data
  - Unstructured Testing – Aug 1-31 → May Production Data
  - Unstructured Testing – September 1-30 → June Production Data
- Schedule begins on 7/1/09 and concludes on 10/5/2009.
- CAISO will submit Meter Data for April (July calendar) trade dates throughout all three submission (recalc) timelines. Objective is to test all scenarios – all four meter data statuses and interest charges. SC’s will begin submitting data for August and September trade dates.
- Interest Scenarios – Market Participants will be able to see interest charges based on the difference between estimation and actual.
- Mercury Quality Center will be used for defect tracking and IMS for issue resolution.

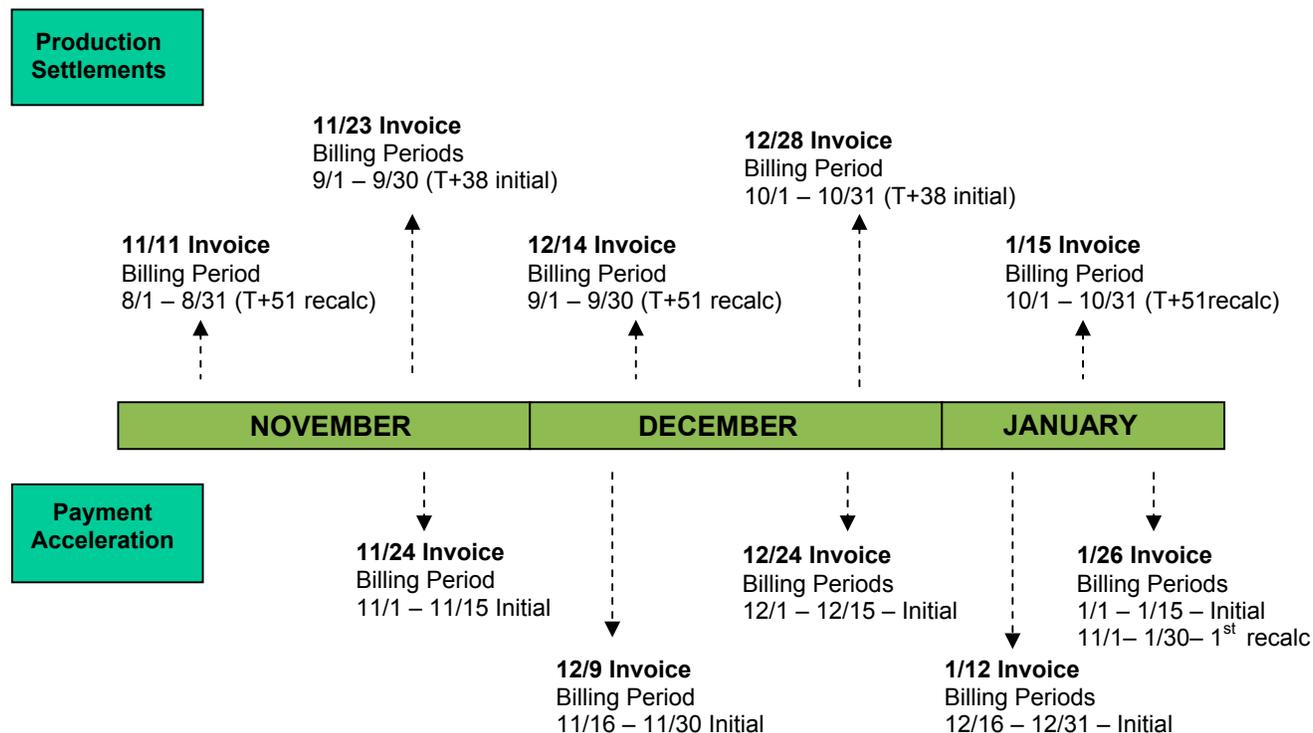
The Dry Run Payment Calendar can be located at <http://www.caiso.com/23a5/23a590783000.pdf>

## 6.0 – Training

Meter Data Submission training material currently posted on the website will be updated. In addition, comprehensive training sessions will be provided in 2009 that would include changes for Payment Acceleration.

## 7.0 - Transition Period

The Transition period will run from November 2009 through January 2010. During this time, invoices will be published per both the existing production Payment Calendar as well as the new Payment Acceleration Payment Calendar. Publication of the October invoice, on 1/15/2010, for the T+51 recalculation statements completes the transition period. Complete schedule is shown below:



In addition, a Payment Calendar showing October – December 2009 was posted on the CAISO Payment Acceleration Website along with this document.

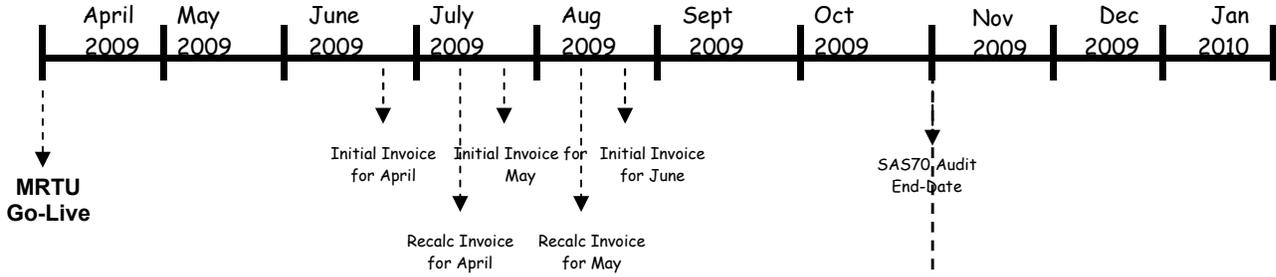
## 8.0 - Deployment Criteria & Timeline

Payment Acceleration is scheduled for implementation on November 1<sup>st</sup>, 2009, pending the successful completion of the following deployment criteria:

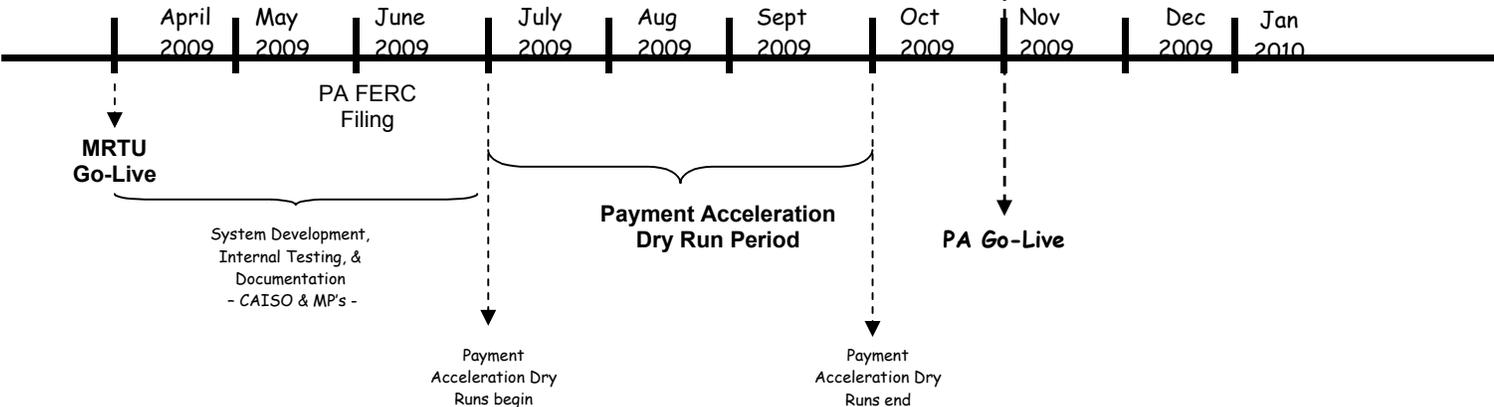
- CAISO Readiness
  - BOG Approval – completed on 12/17/08
  - FERC Filing & Approval – 6/1/2009
  - System Testing Complete
  - Process / Documentation changes completed and published to Market Participants
  - Transition Plan documented and approved by Market Participants
  
- Entrance Criteria
  - Completion of a three month Dry Run period
  - External Interfaces frozen for 4 weeks prior to implementation
  
- Production
  - Stability – publish three initial invoices and two Recalc invoices in accordance with Production Payment calendar, post MRTU go-live.
  - Past MRTU reversion period
  
- Market Participant Readiness
  - System Changes Completed

Diagram below depicts the Production and Payment Acceleration Implementation timeline:

**Production Timeline Strategy**

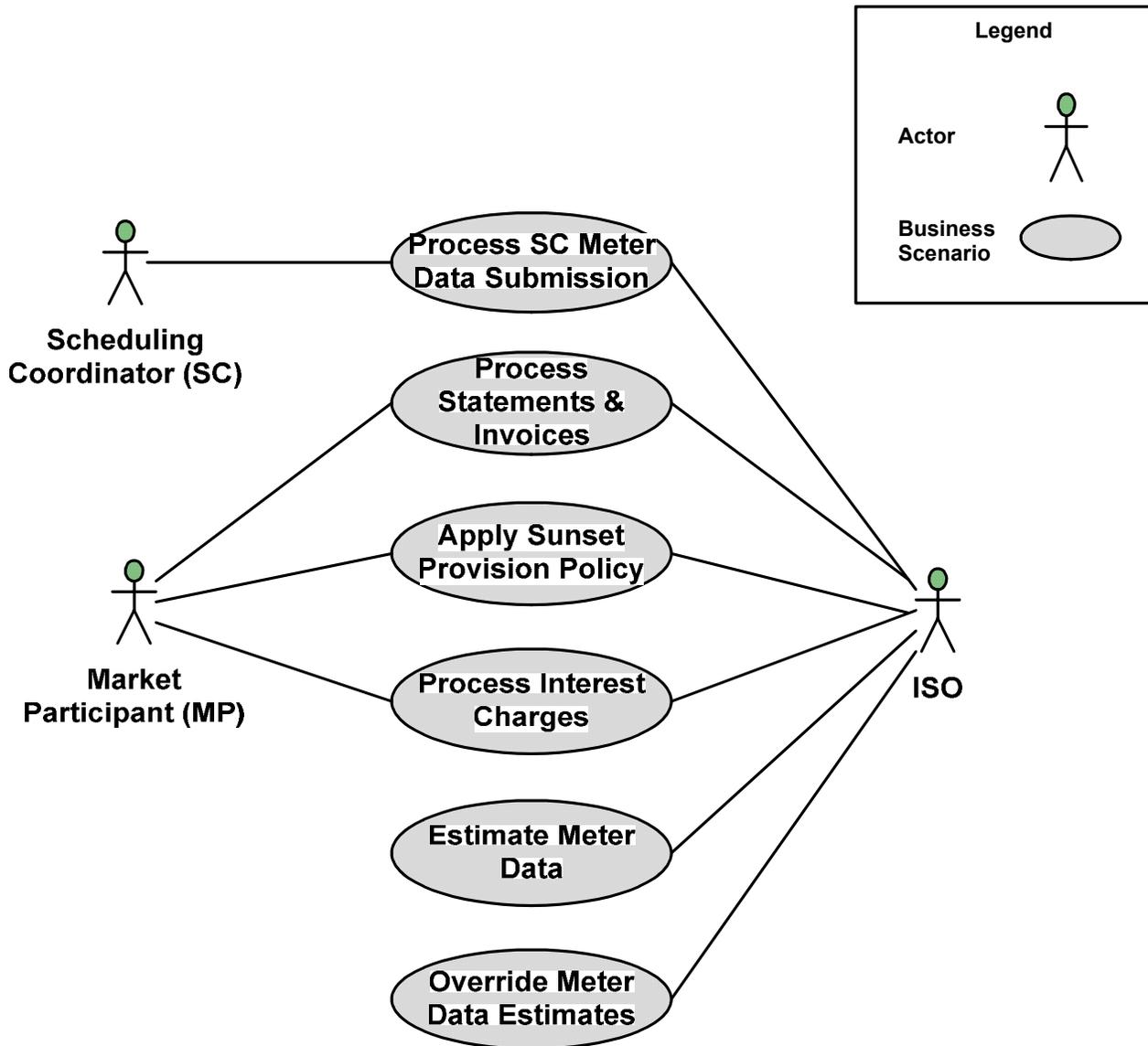


**Payment Acceleration Timeline - Entrance Strategy**



# Appendix A – Business Use Cases

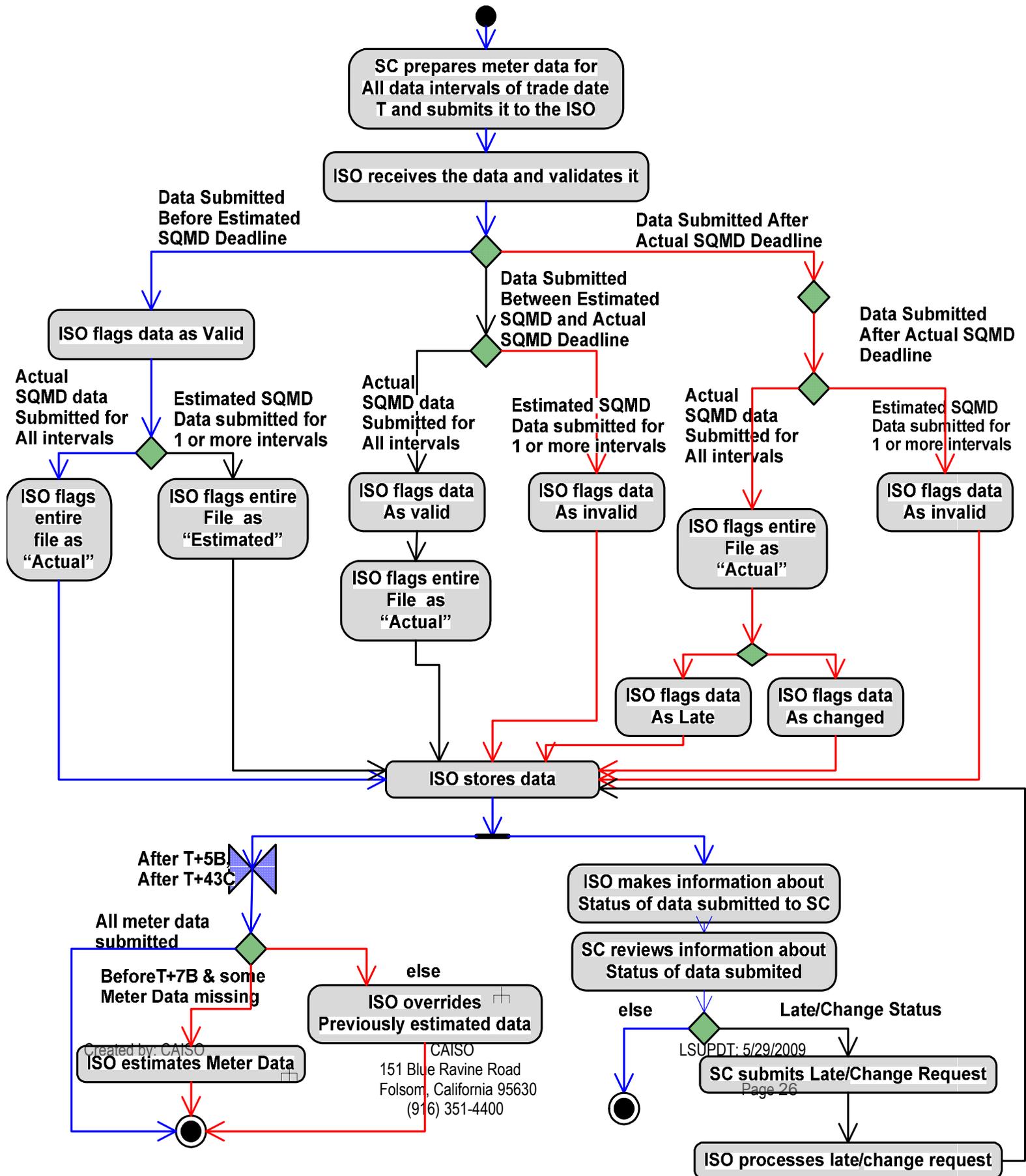
## Business Scenario Overview



## Process SC Meter Data Submission

<b>Objectives</b>	<ul style="list-style-type: none"> <li>▪ Introduce an estimated SQMD deadline at T+5B</li> <li>▪ Reject estimated SQMD submitted after T+5B deadline</li> <li>▪ Flag actual SQMD submitted after the T+43C as Late or Changed</li> <li>▪ Provide ISO meter data estimates if not provided by SC</li> <li>▪ Override ISO meter data estimates after T+43C</li> </ul>
<b>Actors</b>	<ul style="list-style-type: none"> <li>▪ Scheduling Coordinator, ISO</li> </ul>
<b>Pre Conditions</b>	<ul style="list-style-type: none"> <li>▪ SC is certified and is authorized to submit data</li> <li>▪ A specific Trade Date T is in scope and has occurred</li> </ul>
<b>Post Conditions</b>	<ul style="list-style-type: none"> <li>▪ SC submitted data is accepted by the ISO for settlement purposes</li> <li>▪ Meter data is flagged as "Actual" or "Estimated"</li> </ul>
<b>Basic Flow</b>	<ul style="list-style-type: none"> <li>▪ SC Submits Actual SQMD before the Estimated SQMD Deadline</li> </ul>
<b>Alternative Flows</b>	<ul style="list-style-type: none"> <li>▪ SC submits both actual and estimated SQMD before the estimated SQMD Deadline</li> <li>▪ SC submits estimated SQMD before the estimated SQMD deadline</li> <li>▪ SC submits actual SQMD after the estimated SQMD deadline but before the Actual SQMD deadline</li> <li>▪ SC processes late/changed meter data</li> </ul>
<b>Exception Flows</b>	<ul style="list-style-type: none"> <li>▪ SC submits estimated SQMD after the estimated SQMD deadline</li> <li>▪ SC submits actual SQMD after the actual SQMD deadline</li> <li>▪ SC does not submit any meter data before the estimated SQMD deadline</li> <li>▪ SC does not submit any meter data before the actual SQMD deadline</li> <li>▪ SC submits changes to previously submitted meter data</li> </ul>

# Process SC Meter Data Submission Activity Diagram



Created by: CAISO

CAISO  
 151 Blue Ravine Road  
 Folsom, California 95630  
 (916) 351-4400

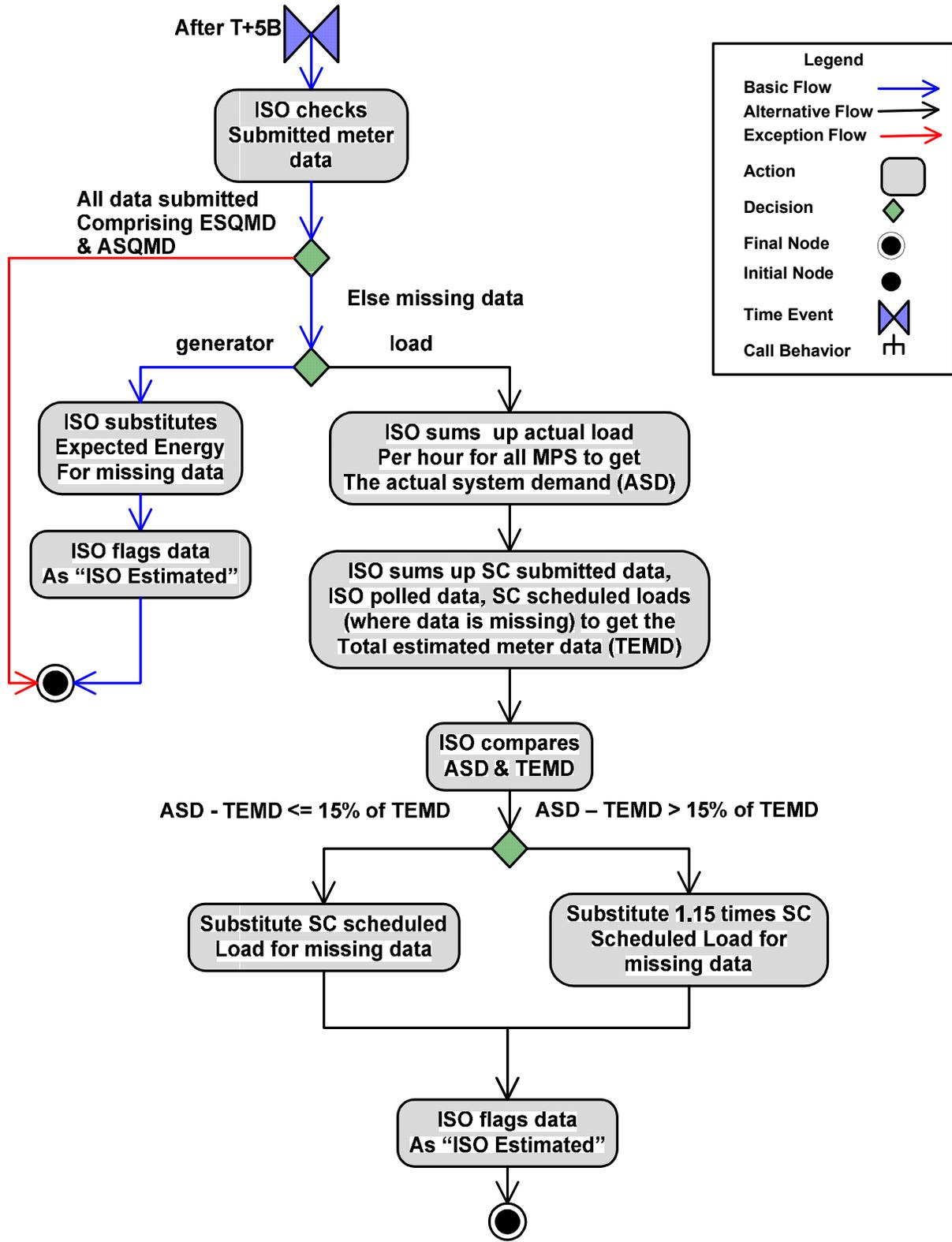
LSUPDT: 5/29/2009

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## Estimate Meter Data

<b>Objectives</b>	<ul style="list-style-type: none"><li>▪ After T+5B, provide ISO meter data estimates if not provided by SC</li></ul>
<b>Actors</b>	<ul style="list-style-type: none"><li>▪ ISO</li></ul>
<b>Pre Conditions</b>	<ul style="list-style-type: none"><li>▪ A specific trade date T is in focus and has occurred</li><li>▪ T+5B estimated SQMD deadline has passed</li></ul>
<b>Post Conditions</b>	<ul style="list-style-type: none"><li>▪ Any missing data is replaced with an estimate</li><li>▪ Estimated data is flagged as "ISO Estimated"</li></ul>
<b>Basic Flow</b>	<ul style="list-style-type: none"><li>▪ ISO estimates generator meter data</li></ul>
<b>Alternative Flows</b>	<ul style="list-style-type: none"><li>▪ ISO estimates load meter data substituting scheduled load for missing data</li><li>▪ ISO estimates load meter data substituting 1.15 times scheduled load for missing data</li></ul>
<b>Exception Flows</b>	<ul style="list-style-type: none"><li>▪ ISO finds all SQMD data available</li></ul>

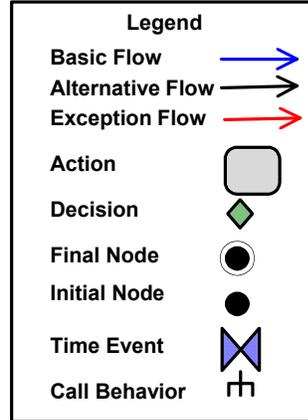
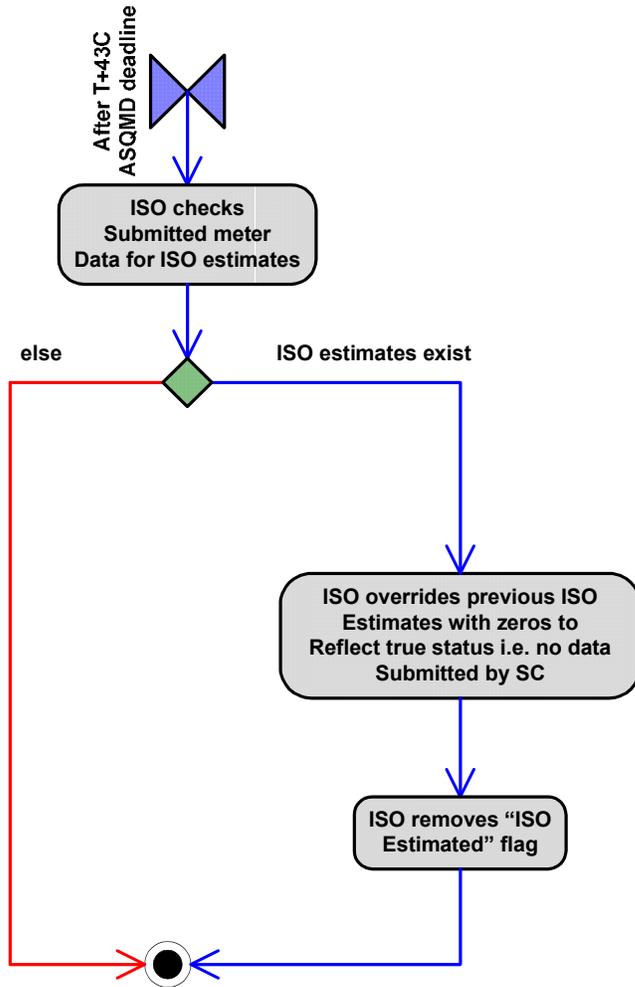
# Estimate Meter Data Activity Diagram



## Override ISO Estimated Meter Data

<b>Objectives</b>	<ul style="list-style-type: none"><li>▪ After T+43C, override ISO meter data estimates with zeros if SC still has not provided any meter data</li></ul>
<b>Actors</b>	<ul style="list-style-type: none"><li>▪ ISO</li></ul>
<b>Pre Conditions</b>	<ul style="list-style-type: none"><li>▪ A specific trade date T is in scope and has occurred</li><li>▪ T+43C actual SQMD deadline has passed</li></ul>
<b>Post Conditions</b>	<ul style="list-style-type: none"><li>▪ Any ISO estimated meter data that still exists is replaced with zeros reflecting the true status of the data</li></ul>
<b>Basic Flow</b>	<ul style="list-style-type: none"><li>▪ ISO overrides ISO estimated meter data with zeros</li></ul>
<b>Exception Flows</b>	<ul style="list-style-type: none"><li>▪ ISO finds no occurrences of ISO estimated meter data</li></ul>

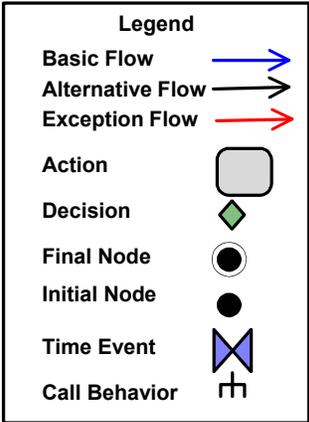
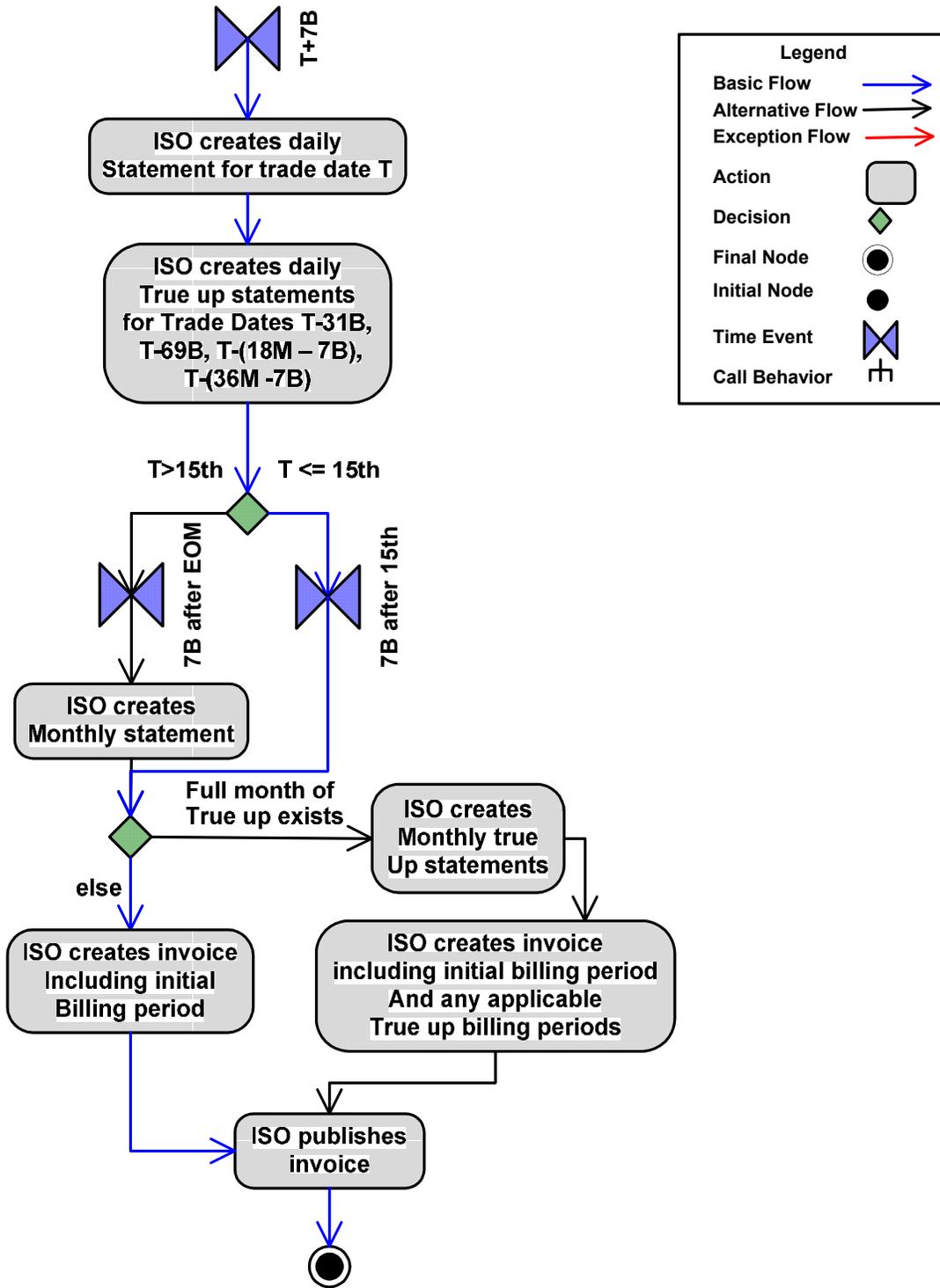
# Override ISO Estimated Meter Data Activity Diagram



## Process Statements and Invoices

<b>Objectives</b>	<ul style="list-style-type: none"><li>▪ Reduce timelines for generating statements. Initial at T+7B, 1st, 2nd , 3rd &amp; 4th true ups at T+38B, T+76B, T+18M &amp; T+35M respectively</li><li>▪ Introduce semi-monthly invoicing at 7B after the 15th and 7B after EOM</li></ul>
<b>Actors</b>	<ul style="list-style-type: none"><li>▪ ISO, Market Participant</li></ul>
<b>Pre Conditions</b>	<ul style="list-style-type: none"><li>▪ A specific trade date T is in focus and has occurred</li><li>▪ Meter data and other required input data are available</li></ul>
<b>Post Conditions</b>	<ul style="list-style-type: none"><li>▪ Statements and invoices incorporating trade date T are available</li></ul>
<b>Basic Flow</b>	<ul style="list-style-type: none"><li>▪ ISO publishes invoice for 1st half of month without any true ups</li></ul>
<b>Alternative Flows</b>	<ul style="list-style-type: none"><li>▪ ISO publishes invoice for 2nd half of month without any true ups</li><li>▪ ISO publishes invoice for 1st half of month with true ups</li><li>▪ ISO publishes invoice for 2nd half of month with true ups</li></ul>

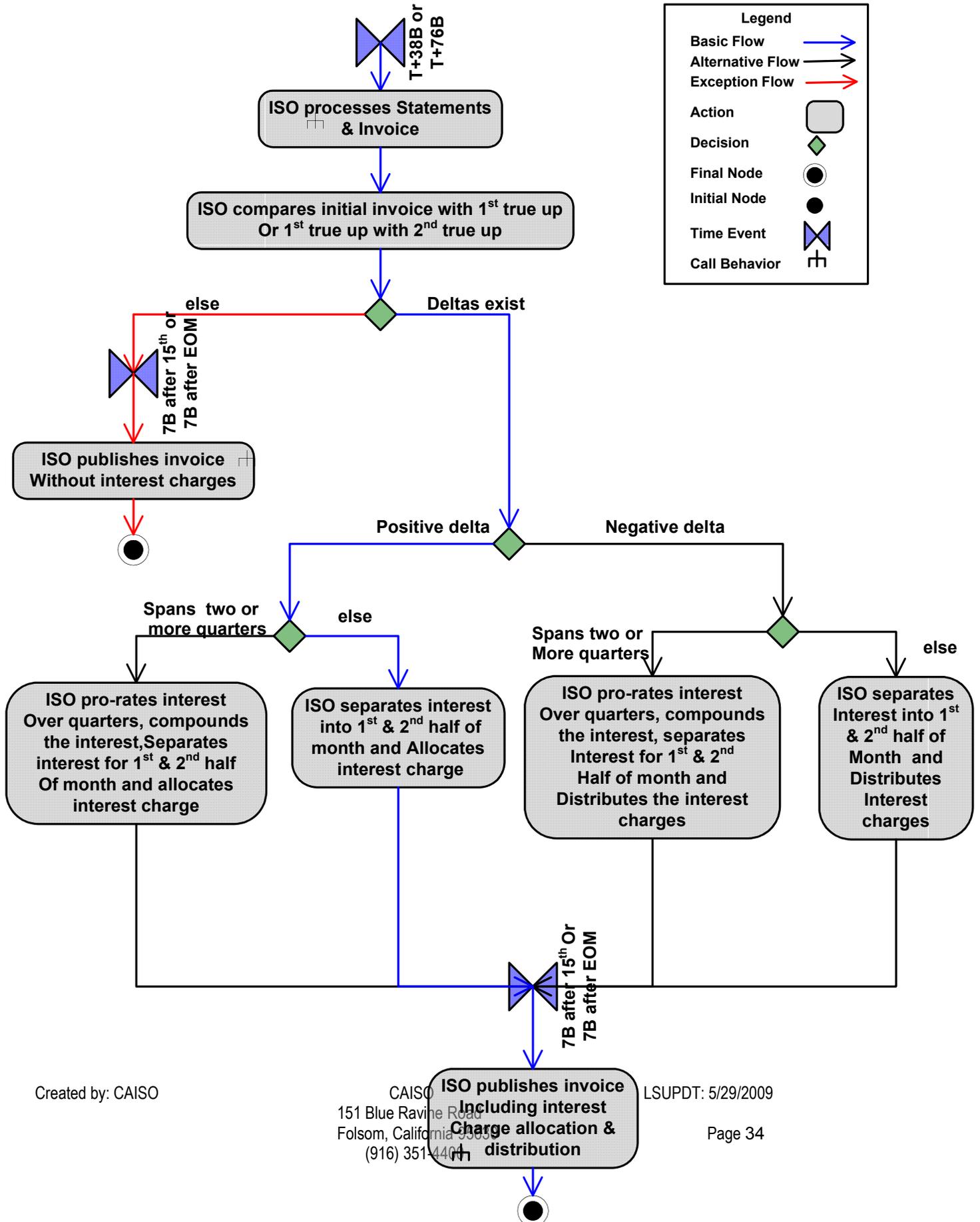
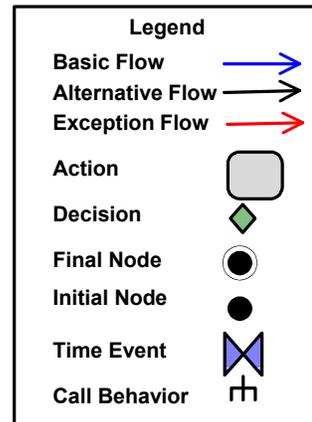
# Process Statements and Invoices Activity Diagram



## Process Interest Charges

<b>Objectives</b>	<ul style="list-style-type: none"> <li>▪ Introduce interest charge allocation &amp; distribution as a deterrent to the submission of unreasonable meter data estimates</li> <li>▪ Apply interest charges only to the difference between initial invoice &amp; 1st true up and between 1st and 2nd true ups</li> </ul>
<b>Actors</b>	<ul style="list-style-type: none"> <li>▪ ISO, Market Participant</li> </ul>
<b>Pre Conditions</b>	<ul style="list-style-type: none"> <li>▪ A specific trade date T is in scope and has occurred</li> <li>▪ An initial invoice for trade date T has been published</li> </ul>
<b>Post Conditions</b>	<ul style="list-style-type: none"> <li>▪ Interest charges are allocated or distributed as applicable for trade date T</li> </ul>
<b>Basic Flow</b>	<ul style="list-style-type: none"> <li>▪ ISO allocates interest charges for a billing period spanning one quarter</li> </ul>
<b>Alternative Flows</b>	<ul style="list-style-type: none"> <li>▪ ISO allocates interest charges for a billing period spanning two or more quarters</li> <li>▪ ISO distributes interest charges for a billing period spanning one quarter</li> </ul>
<b>Alternative Flows</b>	<ul style="list-style-type: none"> <li>▪ ISO distributes interest charges for a billing period spanning two or more quarters</li> </ul>
<b>Exception Flows</b>	<ul style="list-style-type: none"> <li>▪ ISO finds no deltas between invoices</li> </ul>

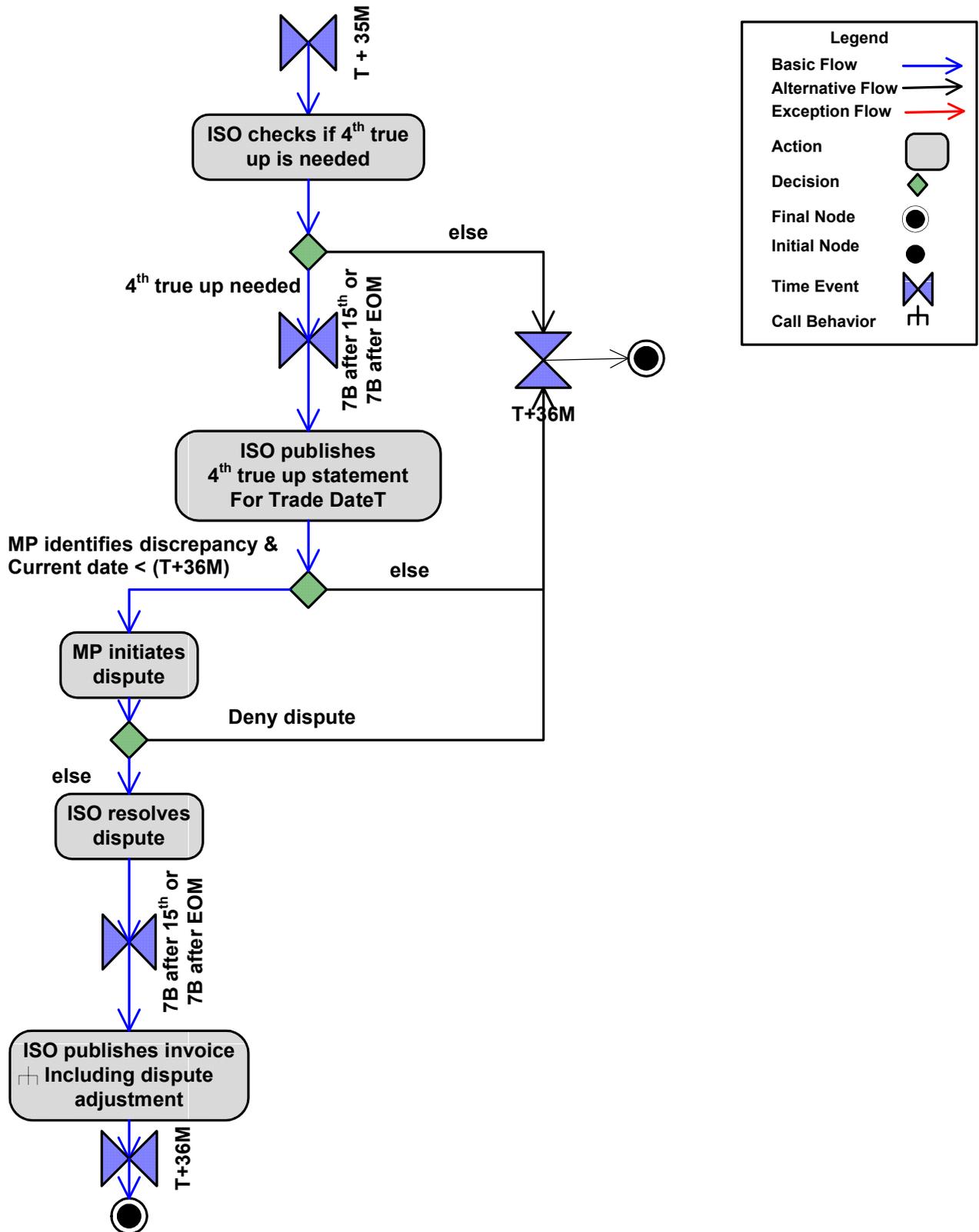
# Process Interest Charges Activity Diagram



## Apply Sunset Provision Policy

<b>Objectives</b>	<ul style="list-style-type: none"> <li>▪ Introduce sunset provision policy that takes effect at T+36M</li> <li>▪ Generate a 4th true up statement at T+35M if needed to allow time for dispute adjustments before T+36M</li> </ul>
<b>Actors</b>	ISO, Market Participant
<b>Pre Conditions</b>	<ul style="list-style-type: none"> <li>▪ A specific trade date T is in scope and has occurred</li> <li>▪ An initial statement for trade date T has been generated</li> <li>▪ 1st, 2nd and possibly 3rd true up statements for trade date T have been generated</li> </ul>
<b>Post Conditions</b>	<ul style="list-style-type: none"> <li>▪ Sunset provision policy is applied to trade date T</li> </ul>
<b>Basic Flow</b>	<ul style="list-style-type: none"> <li>▪ ISO applies dispute adjustment to a 4th true up statement</li> </ul>
<b>Alternative Flows</b>	<ul style="list-style-type: none"> <li>▪ ISO does not apply any dispute adjustment to a 4th true up statement because there are no further disputes</li> </ul>
<b>Alternative Flows</b>	<ul style="list-style-type: none"> <li>▪ ISO does not apply any dispute adjustment to a 4th true up statement because MP's dispute is rejected</li> <li>▪ ISO does not generate 4th true up statement</li> </ul>

# Apply Sunset Provision Policy Activity Diagram



**Attachment D – Memorandum to the CAISO Board of Governors  
Payment Acceleration Amendment  
ER09-\_\_\_\_-000  
Fourth Replacement CAISO Tariff  
June 1, 2009**

# Memorandum

To: ISO Board of Governors  
From: Steve Berberich, Vice President, Corporate Services  
Date: December 8, 2008  
**Re: Decision on Payment Acceleration**

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*This memorandum requires Board action.*

## EXECUTIVE SUMMARY

All market participants using transmission services provided by the California Independent System Operator (ISO) are exposed to credit risk associated with possible default by other market participants. The ISO mitigates this risk by requiring market participants to meet credit requirements described in the tariff. The ISO considered various options to lower the overall market's credit exposure and is recommending, as a critical first step, changes to shorten the settlement schedule.

Under current processes, the time between the trade date and initial settlement statement is 38 business days, and the average cash clearing schedule totals over 80 calendar days. Cash clearing occurs when the market transactions are settled, invoiced and cash is exchanged for service provided. This time delay exposes market participants to undue credit risk, which may reduce resource availability from out-of-state resources and make credit management more difficult for the ISO. Management recommends tariff changes to accelerate the settlement schedule under MRTU from 38 to seven business days and decrease the average cash clearing schedule from approximately 80 to 25 calendar days.

### **Motion:**

*Moved, that the ISO Board of Governors approves the proposal to accelerate the settlement schedule, as detailed in the memorandum dated December 8, 2008, and*

*Moved, that the ISO Board of Governors directs Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission on or before April 1, 2009.*

## **KEY ISSUES**

Management recognizes that the current payment calendar takes too long between trade dates and market clearing. This time delay presents undue credit risk to market participation. This increased risk may hinder resource availability from out-of-state resources, challenges credit management, and exposes market participants to additional risk in the event of defaults or bankruptcies. Mitigating this risk is a priority of the ISO, as discussed in the ISO's *Five-Year Strategic Plan 2008-2012*.

The ISO began the stakeholder process by publishing a discussion draft containing an initial payment acceleration proposal. Market participants reviewed the paper, participated in stakeholder meetings, and provided their feedback. In response to market participant feedback, the ISO published a feasibility analysis paper and held a stakeholder meeting to review and discuss related issues. After a thorough evaluation of all stakeholder feedback, comments, and proposals, the ISO published the payment acceleration straw proposal. Market participants provided feedback on the straw proposal through comments and in additional stakeholder meetings.

Management considered stakeholder feedback in the context of overall market design and implementation time and costs. A balance was sought that balanced the appropriate incentives for market behavior, possibilities for manipulation and impact on implementation. Further, the process considered possible bifurcation of the day ahead and real time settlements and methodologies for estimating meter data. This final proposal is the result of this process. If approved by the Board, the ISO will conduct one to two months of dry runs of the payment acceleration process before putting it into effect.

### Changes in the settlement timeline

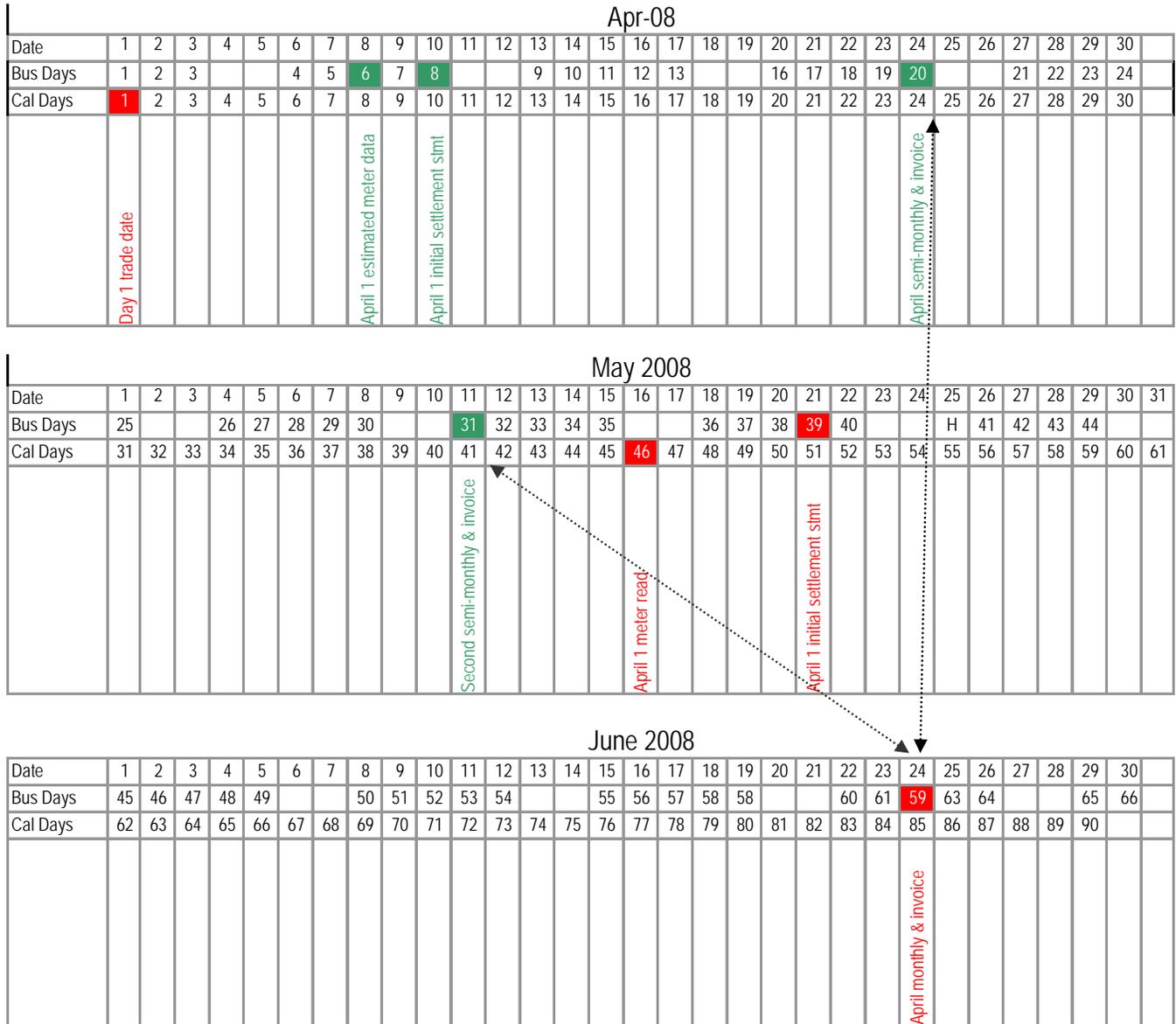
Management recommends changes to the current settlement process and related timeline as displayed below. Those changes include more frequent invoicing and quickening the process for meter data submittal and the use of estimates when meter data is not available. The final element of the timeline is allowing sufficient time to both market participants and the ISO for dispute submittal and resolution.

The following chart illustrates the critical process changes and resulting reduced timeframes.

### Current and Revised Settlement Timeline

(Based on tariff timelines)

- Current timeline
- Proposed timeline



calendar day that trade dates 15<sup>th</sup> and 31<sup>st</sup> are calculated. Following current standards, payment of all invoices will be due within five business days after the invoice publishes.

Introducing semi-monthly invoicing will require changes to the existing process and procedures. However, the mixing of invoice types (i.e. Initial, 1<sup>st</sup> true-up, etc.) on the same invoice is already being introduced in MRTU and will not impact current accounting procedures. In addition, this practice is consistent with the majority of other ISO's invoicing policies. Ultimately, the ISO would like to move to a weekly invoicing process.

#### Possible bifurcation of day-ahead and real-time settlements

As part of the stakeholder process, much consideration was given to the option of separating the day ahead and real time settlement timelines on the premise that the day ahead market would be much easier to settle on a reduced timeframe. Nonetheless, management recommends maintaining settlement of the day-ahead and real-time markets on the same schedule. This is because bifurcation could create incentives for market participants to adjust their bidding and scheduling strategy, which could impact market prices and market performance. Further complications could arise in required changes to settlement software.

#### A methodology for establishing estimated meter data

Having timely meter data is essential to accelerating settlements. Management addressed this issue by requiring accelerated submittal of estimated settlement quality meter data and development of a meter data substitution methodology to create meter data values when estimated settlement quality meter data is not available. Management recommends an interest payment mechanism to ensure that there are no financial incentives to submit unreasonable meter data estimates of load or generation.

Estimated metered demand that is not submitted by a scheduling coordinator, contrary to the requirement to submit this meter data at T+5B, will be estimated by the ISO using the value of that scheduling coordinator's scheduled demand, the MW of energy of demand cleared through the integrated forward market and set in the day-ahead scheduled for the next trading day, by *load aggregation point* and/or *custom load aggregation point*. This value will be increased by 15% if the total actual system demand in real-time, as determined by the ISO each hour, is greater than 15% of the total estimated meter demand (TEMD) at T+5B. TEMD will equal the value of scheduling coordinator submitted metered demand + ISO polled estimated Settlement quality metered demand + Scheduled Demand for un-submitted metered demand, available at T+5B.

Management proposes to apply interest charges to any deviations through the second true-up invoice. Management is proposing that, initially, interest stop after the second true-up invoice and not carry on into subsequent invoices that could occur for the T + 18 month and T+ 35 month statements. Since payment acceleration is expected to be implemented sometime between three and five months after MRTU start-up, the ISO will have time to evaluate prior to the first T + 18 month statement whether or not interest charges are necessary beyond the second true-up invoice by evaluating settlements and market data. Interest rates will be calculated in accordance with FERC regulations for the calculation of interest for refunds specified in 18 C.F.R. § 35.19a (a)(2)(iii). If the interest period spans multiple quarters, the interest rate will be prorated for the period of days in each quarter. Interest will be charged or paid through separate charge codes in the ISO Settlements system.

Benefits of this accelerated meter data submission and estimation proposal are:

- Provides flexibility allowing scheduling coordinators the ability to be part of the solution;
- Recognizes technology advancement in meter data collection and estimation (i.e., advanced metering infrastructure and smart metering);
- Follows current SQMD submittal requirements and processes;
- Requires no additional submittal or compliance processes required and leverages current compliance programs and enforcement protocols; and
- Leverages current metering infrastructures and file formats.

### Sunset Provision

The design calls for scheduled true-up statements eighteen (18) and thirty five (35) months after the trade date. To manage the large volumes of data associated with settlements, the design includes a sunset provision on the data after a thirty six (36) month period. After the sunset period, the settlement is considered final and is not subject to dispute unless ordered by FERC. This provision will allow the ISO to move data to lower cost storage and reduce costs for long-term maintenance of data.

## **POSITIONS OF THE PARTIES**

A complete stakeholder process was conducted that included the following collaboration between market participants and the ISO:

- Document publication: discussion draft (white paper), feasibility analysis, meter data estimation options, straw proposal, final proposal
- Market participant proposals: *Bifurcation of DA/RT Settlements* (Calpine), *Interest Provision* (SCE)
- Stakeholder meetings: three in-person and three conference calls.
- Five rounds of market participant written comments to the ISO.

Stakeholders generally agreed on the ISO's proposal to accelerate the settlement timeline, change the process for submitting meter data and invoicing based on a meter data estimation methodology, and the sunset provision for settlement true-up.

In other cases, stakeholders did not agree:

- Interest payments – main discrepancy is in regards to how far out interest should be applied. Some participants feel interest should be applied throughout all invoice cycles. They argue that since monies are being held incorrectly by the wrong party, interest is the only fair compensation mechanism.
- Deployment schedule – many participants are concerned about the distraction payment acceleration may have on MRTU. They feel a longer deployment window is necessary in order to ensure MRTU stability and accuracy prior to deploying payment acceleration. Others argue the credit risk is too high to wait and an immediate deployment post MRTU is necessary.

Please refer to Attachment A for a detailed matrix of stakeholder positions.

## **MANAGEMENT RECOMMENDATION**

Management recommends that the Board approve implementation of the payment acceleration policy as outlined in this memo.