

SaMC Technical Conference #2

California ISO Responses to Market Participant Comments/Questions

#	Topic	MP Comments	ISO Response
1	Readiness Survey	Market Participants request a Readiness Criteria prior to going Parallel or going Live	CAISO's intent is to work with the User Group to develop entry criteria prior to commencing parallel operation and exit criteria to complete Parallel operation and commence cut over to live operation.
2	SaMC Scope and Project Timeline	When can the Market Participants get the XSD for the configuration file? Will a standalone schema be provided for the configuration file (similar to the Statement file)?	The standalone file should be available by 3/30/05.
3		Does CAISO have a draft of the business rules document (configuration guide)?	A sample configuration guide was provided in the draft SaMC Technical Specification for Scheduling Coordinators (see page 29). Version 1.6 of the SaMC Technical Specification is posted on the CAISO web site at http://www.caiso.com/docs/2005/03/03/2005030311552023771.pdf . The final configuration guide will be based on the same format and will be published once the SaMC project has completed and tested the charge configuration in the SaMC system.
4		What happens with payments with the new single invoice, does CAISO look after the money to ensure it goes into correct accounts?	In future, preliminary and final invoice distinction is eliminated. CAISO will assign dollars (\$) to relevant bank accounts. Market Participants will just pay or be paid from one bank account. We plan on combining the FERC, GMC and Market charges in one single invoice.
5		The Schedule seems to have changed, is this correct?	The Stage 1 implementation status table shows status of what activities are in-progress and the project stages that follow including expected duration of each stage. We are still working towards a fall Parallel operations date, but do not have the exact target date at this time.
6		Will ebXML be used as a standard in the schema	No, the ISO has not adopted ebXML. ISO believes

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		design for things such as invoice, etc?	the CIM/CME with leverage from OAG already provides relevant standard definitions for market Settlement. Extensions have been applied to the invoice definitions.
7		One market participant expressed concerns about having sufficient resources ready to support all the MRTU projects simultaneously. He requests CAISO establish a corporate time line so that the SCs can prepare for and gear up resources to support both SaMC parallel operations and other MRTU design activities that seem to occur simultaneously.	The SaMC team will provide this feedback to the MRTU Program.
8		The Market Participants requests CAISO have the configuration guides available by SAT.	CAISO will ensure configuration guides will be available by SAT.
9	Restricted Schema Design	How will Market Participants be able to report back that they have had some sort of validation error in uploading the new XML file?	<p>During the SaMC project implementation (pre-parallel operations), Market Participants should report any technical questions to the SaMCUsers@caiso.com email box.</p> <p>Once in Parallel Operations, the ISO anticipates utilizing the same process as today where Market Participants can request technical support through use of the ISO Help Desk or via their Account Manager.</p>
10		Please provide some background to the CIM model.	<p>The CIM was turned over to IEC Technical Committee 57, Working Group 13&14, where it is advancing through the standards process. It covers both electric utility transmission and distribution business operations.</p> <p>In 2003, North America ISO/RTO Council and EPRI sponsored an initiative to expand CIM into Market Operations, a.k.a. CME.</p> <p>The ISO has adopted CIM/CME (Market Extensions) as its standard, and is currently using CIM for the operational systems/interfaces. The MRTU program is extending the CIM/CME and using it to forward-engineer its interfaces.</p>

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11		Is the SIBR effort also using the CIM Model?	All MRTU interfaces will be forward-engineered from the CIM/CME.
12		What further details will be provided to Market Participants on the revised settlements and invoice business processes to support the implementation of SaMC?	<p>SaMC Project is developing a training plan for market participants covering the new Market Clearing and Settlements processes. A Market Clearing overview will be available within the next two months covering the single net invoice, the handling of interest and shortfall adjustments, and cancel rebill processes.</p> <p>Additionally, ISO will conduct the necessary stakeholder process for review and discussion of the proposed tariff changes required for SaMC Stage 1 implementation. This process is targeted to begin in April 2005.</p>
13		Does ISO plan on providing business process information?	The ISO, through Client Relations, is in the planning process for sharing the current business process views with the Market Participants. Over time, the future MRTU business processes will also be shared. However, the details of these plans have not been finalized.
14		Will the validation cover business rules situations? For example, where there is an Hour Ahead shutdown and SLIC doesn't show the curtailment?	Yes, ISO is striving to accommodate as many automated validations as possible, some directly related to the schemas, and others specifically embedded within the applications.
15		When will CAISO provide the standalone schema?	The ISO anticipates providing the standalone schema by the end of March.
16	XSLT Example File	From a standards approach Market Participants request that whatever is provided to them should be easily supported by the mainstream tools.	XML Spy is the ISO standard XML tool. The ISO will consider additional tool support subject to the results of a survey of market participants.
17		Market Participants request that files CAISO provides support mainstream tools such as .Net.	. Net is supported. This item was previously identified as an issue and has been resolved. The issue was related to the schema.
18		CAISO is stating that XSLT transformation is the responsibility of market participants depending on how they want to use or load the data, however	CAISO will ensure base XSLT recognizes proposed levels in a way that results can be loaded into Excel. CAISO will separately ensure a

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		small market participants need a simple way to view and load ISO settlement statements for their business use.	printable version of the invoice is available.
19	SaMC Bill Determinants	Please explain what you define as a BA (Business Associate)?	<p>The ISO calculates Settlements' bill determinants and transactions with various Business Associates, which include Scheduling Coordinators (SCs), Transmission Owners (TOs), Utility Distribution Companies (UDCs), FTR holders, and combinations of these entities. Additional note, these entities are defined in the CAISO Masterfile as "BA" Ids.</p> <p>In most bill determinant names, it can be directly translated as SC as we are using it in SaMC implementation.</p>
20		Where the charge is for TO, will BA would not be used in the bill determinant name?	Yes, the abbreviation "TO" or "PTO" would be used in this case.
21		It would be helpful to see a framework from where the data might come from. Market Participants need to understand if the raw data is coming from the Settlements System or another system to properly validate their data.	ISO would like to further understand from participants the business need for providing the ISO source system to Settlements. This issue will be placed as an agenda item for a future User Group discussion. Please note that participants will be able to decipher what is raw vs. what is a derived/intermediate result from configuration documentation to be provided. Raw data has a source system indicator, however in Stage One the majority of source data will be from the ISO's Market systems' data store.
22		Why don't you use the business name for bill determinant name?	We have not decided this for Stage 2- we need to consider the participants' feedback in this area in a future User Group discussion. Please note, the configuration team held extensive discussions on a naming convention that would be simple to use in equations and easy to identify values. Although for some charge codes, a business name can be short, like "Day Ahead Spin Capacity", in other cases, business names can be quite long, such as "TAC Area High Voltage Existing Facilities

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			<p>Transmission Revenue Requirement" in order to be descriptive. The team felt abbreviations would be easier to work with from both a system and mathematical standpoint. Please note that in the configuration output XML a long name description can be provided for each bill determinant if this is required.</p>
23		<p>How does the market participant know if a bill determinant has changed in the recalculation?</p> <p>Also, CAISO to determine if it is necessary to provide a change flag for the statement file for records that have changed since the last version.</p>	<p>The BillDeterminant.lastModified record will indicate date time of the relevant set of records. For the raw bill determinants, the last modified date time can be used to indicate if there are changed records since the last settlement run. Please note that bill determinants that represent intermediate and total calculated values will always have a changed BillDeterminant.lastModified date time as they have been recalculated.</p> <p>Where a settlement recalculation is a true up of a previous invoiced settlement run, in addition to the BillDeterminant.lastModified date time, you can identify changed charge data where the Net price, Net qty and Net amount <> 0. Where the Net amount = 0, only the daily totals for a charge code are provided (interval totals will not be included in the MarketStatement file for the relevant set of records.)</p> <p>ISO notes that the sample statement XML file provided today in the workshop did not populate this field. The SaMC Project team will prepare an updated sample April 4, 2005.</p>
24		<p>Are we going to use the same naming convention for the URLs as when we do the file downloads from SI?</p>	<p>All downloads will be done in the same method as currently handled; however, file names will be different. The downloads will use the file name of the XML file but should be at the same URL. So, for Stage 1, SCs should be able to download the files in the same method as they</p>

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			are downloading the file today.
25		Is the invoice file going to be in the same place as the statement file on the SI Workspace?	Yes
26		It would be helpful to provide a mapping between BBS data and Stage 1 billing determinants. This will assist the Market Participants in mapping the Stage 1 bill determinants into their existing database.	CAISO does not currently have plans to provide a mapping document, however, can provide some examples of what is currently available to determine if it meets Market Participants' needs. Here is a link to the current draft billing determinants list: http://www.caiso.com/docs/2005/03/09/2005030916552221521.pdf .
27	Statement File Update	How often will the CAISO do a recalculation of settlements?	One of the features of the new settlement system is the ability to recalculate when we receive new input data and then publish it to the Market Participants. CAISO has not fully formalized the business process that will be used, but will review the process with market participants prior to finalizing. CAISO heard concerns in the last Technical Workshop that multiple recalculations could result in too much information to SCs. Some proposals that were previously discussed with the SaMC User Group include: <ul style="list-style-type: none"> - Recalculation only when there is a significant change to the results beyond a certain threshold. - Recalculation only once prior to an invoice - Planned recalculations prior to an invoice with no recalculation performed if change is below a threshold.
28		How will participants be able to determine that a version of a settlement statement is the "final" statement?	Participants can look at the invoice to determine which statement has been used in a particular invoice. CAISO will provide details on the structure of the single net invoice in a later agenda item. Additionally, participants can use the data provided in the MarketStatement.revisionNumber and MarketStatement.referenceNumber. The highest number in MarketStatement.revisionNumber

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			<p>reflects the latest version of the statement and the MarketStatement.referenceNumber will reference the last statement revisionNumber that was invoiced. If the MarketStatement.referenceNumber is non-blank, this indicates the statement is a true-up from a previous invoice. The highest number in MarketStatement.revisionNumber will be the statement used in the next scheduled invoice.</p> <p>There is no concept of a "final" invoice as such in the new system. The second invoice run can be followed by any number of reruns until it is agreed in the tariff that no further adjustments are required. The ISO Payment Calendar posted on the Web Site will continue to be the source of knowing when a trade date is finally settled and will no longer be adjusted.</p>
29		<p>Request: CAISO to clarify whether or not dispute process will change for Stage 1 if the business process allows for multiple versions of the "Preliminary" and "Final" statements to be published.</p>	<p>Response: This is an action item for CAISO and a response will be provided once dispute process is clarified.</p>
30		<p>CAISO to provide a more comprehensive answer as to why trade date with sub-hour intervals and the interval timestamp are provided. Market Participants need to understand the purpose of providing both. There is a concern from some Clients that the change will require a lot of work to support the interval timestamp as their current systems do not support.</p>	<p>Feedback from the SaMC user group confirmed this design of using date time interval ending as preferable because it was easier to load into a database. However, to provide an easier transition for participants that want to use interval numbers, the file design also provides for interval numbers in the output, with interval numbers being sequential from the first such interval in the trade date to the last.</p> <p>The ISO recognizes that terms are not consistently used in the sample files and specification documents. To further clarify the date time outputs, ISO will prepare a separate document and update the technical specification to ensure there is a clear understanding of the following:</p>

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			<ul style="list-style-type: none"> ▪ Interval ending date time ▪ Total number of intervals ▪ Interval number <p>The ISO also has to ensure a consistent approach is taken with other MRTU projects.</p>
31		Can the CAISO please confirm the time standard that will be used?	<p>UTC, with offsets is the ISO standard. The url for date/time format:</p> <p>http://www.w3.org/TR/xmlschema-2/-isoformats</p> <p>We require that the date/time format include the time zone component.</p>
32		Is Charge Code a number or a name?	<p>For Stage 1, the charge code numbers and names have not changed. They will be the same charge code numbers as we use in the current system.</p> <p>For Stage 2B (MRTU) some of the charge codes will be new and therefore CAISO can consider changing our charge code-naming process (i.e. – eliminate numbers and use names instead.) SaMC team will work with the SCs to determine what the names will be for Stage 2B.</p>
33		Is the banking information on the statement file?	No, the bank information is on the invoice. CAISO will provide more information regarding what will be shown on the invoice in the later agenda item.
34		<p>Participants expressed concerns about the use of the terms Charge Code and Charge Type in the SaMC Interface Specification. It causes confusion when using old name Charge Type.</p> <p>CAISO should review the specification and clarify the configuration structure of charge group, charge type and charge code.</p>	<p>CAISO will review the use of these terms and will note any distinction between Charge Codes and Charge Types and update the SaMC Interface Specification as needed in the next version to better clarify the distinction.</p> <p>As explained in the Configuration XML section of the SaMC Interface Specification, "Charge Type" refers to a calculation performed in the settlement</p>

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			system. This includes not just Charge Code results but also intermediate and pre-calculations. The "Charge Type" calculations are only relevant to understanding the intermediate logic in the Configuration XML file. On a statement or invoice file, results are reported on a Charge Code basis. CAISO has included in the SaMC Interface Specification the complete list of Stage 1 Charge Codes, Charge Groups and parent Charge Groups.
35		SCs requested the enumeration be placed at the attribute level.	The full set of valid attributes will be provided in the documentation. The XML file will provide enumerated attributes, where applicable.
36	PTB	Where is the PTB adjustment identified as a PTB?	A PTB adjustment to a Charge Code is identified as an explicit, optional line item on the market statement interval total and also as a raw bill determinant. Participants can review the Bill Determinant inputs for PTB Charge Adjustments, which will be specific to each charge that is adjusted, showing the interval and amount of the adjustment. An example Bill Determinant name for a PTB is: PTB_BA_HRLY_DA_SPIN_AMT.
37		Please clarify the Intervalnumber. The description in the SaMC Interface Specification does not match the XML example.	The Intervalnumber will represent the actual interval number or index. Intervaldate is the interval ending time. CAISO acknowledges that the Interface Specification needed to be corrected and has done so. Please refer to the web site at http://www.caiso.com/docs/2005/03/03/2005030311552023771.pdf . Also see question 31 above.
38		If everything is interval-ending time, will the last interval of the day have tomorrow's date?	Yes, also summations for the day would have tomorrow's date.
39		If the date is different, would it still show in the summary of the day that it relates to?	Yes
40		So depending on the interval number, there could be as many as 300 intervals?	Yes for daylight savings with 5-minute interval data.
41		Will this file format support LMP?	Yes
42		CAISO should provide a Road Map of how we can address any open items.	ISO will address next steps and follow-up as a future agenda item in the SaMC User Group.

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43		What is the bill determinant's precision number?	This is configurable. For the most part, we are using a precision of 5 for input data and calculated quantities, except in the case of invoiced amounts where we will use a precision of 2.
44		CAISO should revisit whether or not it is appropriate to put "25" when the interval granularity is hourly. Some participants felt that it makes better sense to indicate how many intervals are used in the day as it would be more intuitive. For example, for daylight savings time, the file should indicate 25 for long day, 23 for short day and 24 for all other days in the year.	Please refer to #31, same response.
45		CAISO to review the possibility of including a comprehensive table of the attributes and enumeration in Configuration documentation or SaMC Interface Specification.	Currently, there is a concern from participants that it is very generic. Please note that the details of valid attributes of charge groups, charge type components and bill determinants are included in the Configuration XML output.
46		CAISO to schedule a follow-up discussion regarding the open items	CAISO to schedule a follow up discussion.
47		Is there a cross-reference in the statement to the calculation algorithm?	Yes. Market Participants will need to use the configuration file to link the bill determinants with the calculation and the output data found in the statement file.
48	Settlement Invoice File Specification Review	Since the SaMC system will not provide an update, can Market Participants ping the SaMC system to check for new information?	CAISO will need to revisit.
49		How many invoices will be issued per bill period? Will Market Participants have one invoice per month that will contain multiple bill periods?	CAISO will provide one single Market net invoice for the month covering multiple bill periods and market, GMC, monthly FERC and TAC charges. CAISO will net the amounts and show the one net amount that will be due or owed on the invoice header. Market Participants will need to drill down from the Bill Period to the Charge code, which will include Current, Previous and Net amounts at each level. Separate invoices will be kept for annual FERC fees, which is still a Market invoice but has a different due date, and for RMR invoices. Shortfall adjustments issued as a result of a market

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			shortfall, will also be a separate adjusting Market invoice or payment advice.
50		Payment Calendar has not changed, but may have multiple invoices on the one day in the event of a short fall – is this correct?	Yes, if there is a shortfall allocation, only Accounts Payable payment advices will be reissued. Outside of shortfall allocations, we may need to cancel rebill market invoices in extreme cases where there are errors in invoice that is best corrected by the cancel rebill mechanism. Market participants' systems should be able to accommodate reversing entries from a cancelled invoice and new entries from a reissued invoice.
51		For FERC fee, will Market Participants only have one line item on the monthly Invoice?	For FERC fees that are paid monthly, the FERC charge code will appear on the Market Invoice under the FERC parent charge group and FERC charge group. For FERC Fees that are paid annually, the FERC charge code will appear on a separate Market invoice produced at the same time but with a different due date. Participants can pay early if they want. Bankruptcy invoices will also be separate with payments on hold.
52	Settlement Configuration Output File	Is the expected energy curve calculation going to be provided in the configuration output file or is it flexible enough to be provided in the future?	SaMC will not calculate the expected energy curve in Stage 1. CAISO has passed this concern to the MRTU program, as this information is required for other systems. The configuration output file will not need to be redesigned to support the upstream calculations.
53		Request: Based on the UML Model, many elements show as optional. Will more elements be required in the future?	The restricted schema concept conveys when elements are required or not. Updated UML models are provided when appropriate.
54		Will Market Participants be provided with an updated UML model?	UML changes will be provided when appropriate.
55		Which calculations will be included in the Configuration XML file?	All Charge Type calculations that are configured in eterrasettlements to produce the Charge Code results will be provided in the configuration output file.
56		Will the attributes be provided in the Configuration	Yes, the attributes will be included. There will be a

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		file?	maximum 30 attributes for a charge group, charge type component and individual bill determinant.
57		Will this configuration output file also be part of the sandbox?	Yes, our intent is to provide sample files that will be required for SCs to do their development. CAISO will ensure all needed outputs are provided for sandbox.
58	Support, Follow-up & Questions	Action: A Third Technical Workshop: Suggestion that this could be held once the configuration has been completed and all of the bill determinants are available.	
59		Action: Next Big Milestone: CAISO acknowledge that we are behind and will provide updated dates on key milestones.	
60		Action: - Tariff Filing: CAISO will need to file for any tariff changes required to go to into parallel operations, going to a single net invoice and any dispute calendar changes.	