

Section	Issue or Concern	Question	CAISO Response
General comments on SaMC specification	(a) This document often reads like a white paper, an advocacy piece, and a work in progress.	(a) Please make it authoritative to the extent reasonable. Use “is” rather than “proposed” or “will be.”	Agreed. Many of the items that were originally proposed are already implemented and under change control. The specification will be updated accordingly.
	(b) Further, some material in sections 3 and 4 seems to be repeated in the remaining sections.	(a’) Remove material stressing the benefits of SaMC. It is a done deal, isn’t it? If it is necessary to make comparisons between the existing system, with which everyone is familiar, and SaMC, then consolidate the comparison in one section. Stick to specifications and explanation everywhere else.	Agreed. This specification was written before the program had other documentation, such as Business Practice Manuals, training material, and other communication literature. The specification will be slimmed down to only include interface specific material and follow a format similar to other CAISO Interface Specifications.
	(c) There is also some material that seems to apply only to internal CAISO systems, not to BAs (for example sec. 6.3.1, GeneralLedger.xsd).	(b) Remove material in sections 3 and 4 that is repeated in later sections, except perhaps for high-level summary material.	See response to #2
	(d) There are instances where terminology in a diagram does not match terminology in the accompanying text (for example, Fig. 23, MarketStatementLineItem vs. Erpinvoice line items).	(c) Remove material regarding exclusively CAISO internal systems.	This is illustrating the Statement cross reference on the Invoice.

	<p>It is important for people implementing and maintaining BA systems to have reference materials that are comprehensive, clear, concise, and authoritative.</p> <p>Unnecessary material, information regarding old systems, information regarding exclusively CAISO internal systems is confusing.</p>	<p>(d) Please check figures for consistent terminology.</p>	<p>Please be more specific, this may be a misinterpretation, such as the item above.</p> <p>Agreed. See response to #2</p>
<p>General comments on sample XML files</p>	<p>Sample XML files still lack some meaningful data.</p> <p>Meaningful sample data are necessary to understand formats and relationships of data elements.</p>	<p>Please provide sample XML files with meaningful data, for example:</p> <p>(a) configuration file with meaningful equations;</p> <p>(b) invoice file with statement cross-reference data.</p>	<p>The file samples published in August were system generated and valid samples.</p> <p>The file posted in early August was generated from our system and has valid formats and relationships. What you don't have are MRTU charge code formulas, however the schema and relationships needed for building an interface are unchanged. Until a sample with MRTU charge codes can be published, the Business Practice Manuals can be used to understand the MRTU formulas.</p> <p>The invoice file posted in early August has this example on the first Bill Period line item: ErpInvoiceLineItem.Settlement</p>
<p>1.3</p>	<p>General comment on definitions: The definitions in the SaMC Interface Specification and in the BPM for Definitions and Acronymns overlap. It may be more efficient to delete definitions in the SaMC Interface Specification and consolidate them in the BPM for Definitions and Acronymns. Exceptions might be made for terms that apply only to SaMC and have no relevance anywhere else, such as "Major Charge Group."</p>	<p>Please consider consolidating a definitions in the BPM for Definitions and Acronymns.</p>	<p>Agreed. See response to #2</p>

1.3 and elsewhere	<p>The definitions list defines Major Group and Parent Charge Group.</p> <p>The BPM for Settlements & Billing, sec. 3.2 describes charge grouping, but nowhere mentions Major Group.</p>	<p>What is the relationship between a Major Group and a Parent Charge Group?</p> <p>Please reconcile the terminology regarding charge code grouping between the BPM and XML specification.</p>	<p>Major Groups refer to Settlement Run Types which contain Parent Charge Groups. Parent Charge Groups are composed of one or more Charge Codes.</p> <p>See above</p>
1.3	<p>Definitions are provided for Pass through Bill (PTB) and PTB Bill Determinant. But it is not clear what the relationship between the two terms is.</p>	<p>Please clarify the relationship between Pass through Bill (PTB) and PTB Bill Determinant.</p>	<p>This will be removed from the document, at this time. The PTB xsd may be used for a BA to submit data to the CAISO to be processed and shown on the statement, however this is not currently in scope for the first release to MRTU.</p>
1.3	<p>The definition for Recalculation Statement Run seems to be missing some words.</p>	<p>Please revise.</p>	<p>The Business Practice Manual is a better source for this explanation.</p>
3.2.2	<p>This section mentions “PTB Historic Rerun,” but the term is not defined in either the SaMC Interface Specification or the BPM for Definitions and Acronymns.</p>	<p>Please provide a definition.</p>	<p>This is a pass through amount that was calculated from our legacy settlement system. Since our new system will not have pre MRTU configuration, reruns prior to MRTU trade dates, will need to be calculated in our legacy system and the amounts will be input into the new system for invoicing.</p>
3.2.3	<p>This is confusing:</p>	<p>(a) Will there be two separate market invoices for each trading month – Initial and Recalculation – reflecting the Initial and First Reconciliation statements for that trading month?</p>	<p>Please refer to the Business Practice Manual for a better explanation.</p>

	<p>“The net Invoice also effectively nets the Initial Settlement Run amounts and Recalculation Settlement Run amounts (currently shown on preliminary and final invoices) on a single Recalculation Invoice for the month. The single Invoice will cover the current Bill Period and all prior Bill Periods resettled during the current invoicing period.”</p>	<p>(b) In which of these two invoices may prior month recalculations be reflected – Initial, Recalculation, or both?</p>	<p>Both. Prior month recalculations could be reflected in either an Initial or Recalculation Invoice, whichever falls next in accordance with the CAISO Payment Calendar.</p>
4.3.1	<p>A cell in the table says, “Rounding Amounts will be Written off ...” This description is inadequate, and “written off” is a misleading term.</p>	<p>Replace this with a reference to the BPM for Settlements and Billing, section 3.4.</p>	<p>Agreed</p>
4.3.2	<p>Section header says “Proposed”. “Proposed” implies that the specification is not really definitive, that it still has to go through an approval process.</p>	<p>Delete “proposed” wherever the word is tied to formats or other items that have been adopted.</p>	<p>Agreed</p>
4.3.2	<p>The text following Figure 7 starts, “As this structure shows, the statement is structured into four major data types.” But only three are listed.</p>	<p>Please reconcile.</p>	<p>This will be updated or removed. There are now three types, since the Bill Determinant data has been removed.</p>
4.3.2	<p>It appears that Figure 9 is covering text.</p>	<p>Please fix layout of Figure 9.</p>	<p>This will likely be removed in the updated version.</p>

4.6	The table says, “Monthly charges will be calculated daily where applicable,” and “‘actual’ monthly totals are only available near time of invoicing.”	<p>(a) Is there a flag to distinguish “actual” from other values?</p> <p>(b) What values will appear on days prior to the “actual” values: daily or cumulative month-to-date amounts?</p>	<p>No, there is no flag. By the statement "Monthly charges will be calculated daily, where applicable" means that to the extent Charge Codes that are traditionally calculated on a monthly basis (that is, on the last day of a trade month) can be calculated daily, they will be. The Charge Code will determine whether it is a monthly or charge. MarketStatement.description will indicate whether it is a monthly or daily run. By the statement, "actual" monthly totals are only available near the time of invoicing" means that Charge Codes that cannot be calculated daily, they are actually true monthly totals, can only be generated on the last day of a trade month, hence, "near the time of invoicing." The term "actual" as used here does not mean actual as opposed to estimated, it means "real" monthly totals.</p> <p>Niether. Actual means real, that is, it is a monthly total.</p>
5.2.3	This section says, “An BA could receive up to seven statements in a day ...” What limits the number of statements to seven?	What limits the number of statements to seven? Rules? Systems? Does this imply a limit on the maximum number of days that a trading day will be resettled?	Our batch performances are based on seven statements, however there is no system limitation. Please refer to the Business Practice Manuals for the MRTU run schedule.
5.2.8	This section says, “California ISO will publish validation-performed presettlements.”	<p>(a) What is this?</p> <p>(b) Is this available for BAs to download? Delete “proposed” wherever the word is tied to formats or other items that have been adopted.</p>	This statement is incorrect and shall be removed from the specification.

5.3.1	Figure 18 seems to be missing some levels, specifically Charge Group Total and Charge Interval Total.	Please check figure.	The intention was to show the level that contains PTB items, not all the levels in the statement. This will likely be removed from the next version.
5.3.4.1	In the listing of SettlementData.xsd, billRunType has only one enumeration value, "INITIAL". Shouldn't it also have "RECALCULATION"?	Please clarify the allowed values of billRunType and where recalculation statements are indicated.	This is only intended to be a sample only, not an entire listing. A full set of enumerations must be provided in either the xsd or documentation. In the interim, please refer to the Business Practice Manuals.
5.3.4.3	The mapping table, regarding Customer.organisationCode (and several other places), says, "In Stage 1 ..." But Stage 1 was cancelled.	Please delete reference to Stage 1 and replace with valid information for MRTU.	Agreed.
5.3.4.3	Under MarketStatementLineItem, MarketStatementLineItem.name, the valid data is "111". Does this imply that only three digits are allowed, or should there be four?	Please clarify.	The attribute is a string and the xsd. Our current charge codes have both three and four digits.
6.2.1	Four proposed invoice types are listed. Multiple invoice types are also listed in 3.2.3 and 7.3.4 (Invoice Type under Major Charge Group). But these lists are not consistent.	(a) Please provide a full list of the invoice types to be used in MRTU. (b) Where do CRR auctions get invoiced? Sections 3.2.3 and 6.2.1 are inconsistent on this.	3.2.3 lists market charge groups. 7.3.4 lists two sample invoice types. The data samples in section 7.3.4 is not an exhaustive list. CRR (daily and auction charges) will be included on the Market Invoice.

6.3.1	The first paragraph mentions GeneralLedgerData.xsd, but this file doesn't seem to be included in any recent settlement xsd packages.	(a) Is this file relevant to BA? (b) If so, where is it? (c) If not, please delete the reference.	The GeneralLedgerData.xsd is internal only, but shares the same structure as the InvoiceData.xsd. Both xsds are mentioned to help explain why certain classes are present in the Invoice. n/a References to the GeneralLedgerData.xsd will be removed.
7.3.1	The first paragraph refers to InvoiceData.xsd, but the context is the Configuration File.	Change it to Configuration and delete GeneralLedger.	Agreed
7.3.2	The first bullet under the UML model refers to "BA-specific configuration rules."	Is there a separate configuration file for each BA with the BA-specific configuration rules, or are the BA-specific configuration rules, for all BAs included in a single configuration file?	The xsd will support a separate file for an individual BA, however this is not planned for MRTU. All configuration will be output in a single file.
7.3.2	The term "Charge Type" is used in the section and elsewhere in the spec, and in the xsd, but the MRTU term is "Charge Code."	Please use consistent terminology.	A charge type represents any calculation level within the settlements engine and the Configuration Output File is at the charge type level. . A Charge Code is defined a numeric identifier used to specify Settlement calculations authorized by the CAISO Tariff. Therefore, all charge types are Charge Codes, but not vice versa
7.3.3.1	The last sentence refers to "Section 3.5," but there is no such section.	Please check section reference.	Done
7.3.4	The mapping table, for deleteStatus under Charge Type Component, Charge Type Charge Component Bill Determinant, Bill Determinant, and Charge Component, says, "Flag to indicate logical deletion..." But "logical deletion" is not defined or explained.	Please define and explain.	The correct enumeration is "Y" and "N" (The sample data in the spec. will be updated). An externally published configuration file will only have delete status of "N".

7.3.4	The mapping table, under Charge Type Attribute Property, indicates "EXCEPTION," which is not defined.	Please define and explain.	"Sum" will indicate that the Bill Determinant is being summed by the attribute. "Exception" means that the attribute was used in a "where equal to" condition to create the Bill Determinant.
7.3.4	The mapping table, under Bill Determinant, includes docType, which is not defined.	Please define and explain.	"Exception" is used as a flag to communicate that the Bill Determinant has some type of exception or exemption logic that must be considered.
8.1	It says, "External Market Participant PTB Web Services will not be supported for the initial MRTU delivery."	When, or under what conditions will this be supported?	This will be removed from the document, at this time. The PTB xsd may be used for a BA to submit data to the CAISO to be processed and shown on the statement, however this is not currently in scope for the first release to MRTU.
8.2.1	This section contains much descriptive and process material that belongs in the BPM for Settlements & Billing.	Please include the information in this section in the BPM for Settlements & Billing. Include only summary information in the SaMC spec.	This will be removed from this specification

Additional Questions 11/1/06

Section	Issue or Concern	Question	
General	The relationship between BAs and SCs is unclear.	(a) Is there a one-to-one relationship between BAs and SCs? If not, then please explain. (b) Will each settlement statement and invoice produced by SaMC represent one and only one BA? Or might a file include more than one? Please explain.	Yes, there is currently a 1 to 1 relationship between SCID and BAID Each Statement or Invoice will only include information for the BAID that is listed in the file name.
5.3.3.1	The first table list charge details. However, settlement statements available for download in RV-CS market simulation have details that are not listed here.	Please make sure this list is complete.	

		<p>In particular, what do the following mean?</p> <p>@BIL</p> <p>@ANEXTURE</p> <p>[any others/]</p>	<p>No, these are not defined in the BPM, nor will they be. This type of information is more technical than the scope of the BPM.</p> <p>This is from our internal billing run, and will be considered a variance if it is output externally.</p> <p>@ANEXTURE means the "un-summed" amount an is automatically generated by the system whenever a summation occurs. If, from a calculation efficient perspective, it can be used in subsequent calculation logic, it is used and output. If it is not used, its only stored for the course of the settlement run</p>
5.3.3.1	<p>In the first table, items in Input Detail are listed in two difference formats, for example, @AMOUNT and _AMT. But the difference is not defined.</p>	<p>What is meant by the difference between the two formats?</p>	<p>Any Bill Determinant with @ means it was calculated. Any Bill Determinant without means it is a Raw Bill Determinant (provided by a source system to settlements).</p>
5.3.3.1 / 5.3.4.3	<p>In settlement statement amount files available for download in RV-CS market simulation, the following three levels are included under line items:</p> <p>CHARGE_CODE_INTERVAL_TOTAL</p> <p>CHARGE_CODE_INTERVAL_SUBTOTAL</p> <p>CHARGE_CODE_INTERVAL_DETAIL</p> <p>But the subtotal level seems to be missing from the figures in sec. 5.3.3.1 and the mapping table in sec. 5.3.4.3. Further it is not obvious from the sample files what is in the subtotal level that is not provided in the interval detail level.</p>	<p>Please clarify the role of the subtotal level and its distinctions relative to the other hierarchical levels.</p>	<p>CHARGE_CODE_INTERVAL_SUBTOTAL was recently added and the Specification will be updated.</p> <p>CHARGE_CODE_INTERVAL_TOTAL - includes PTB totals</p> <p>CHARGE_CODE_INTERVAL_SUBTOTAL - excludes PTB totals</p>

5.3.4.3	Not enough detail is provided on handling of daylight savings time transitions.	How will the 23 and 25 hour days be handled in settlement statements? Specifically, how will the trade hours be indicated in bill determinant and charge code data? Please provide examples.	<p>Long days occur in fall on the last Sunday in October. During that time, there are 25 hours in the operation day. The operation hour for the long day shall be numbered 1 through 25. The repeating hour from 1am to 2am is indicated as 25. Therefore, when looking at a chronological progression of operation hours, the progression will be indicated as 1,2,25,3,4,5 ... 24.</p> <p>Short days occur in the spring on the first Sunday in April. On this day, there are 23 operating hours in the day. In this case, the operation hour 3 is not used. Therefore, when looking at a chronological progression of operation hours, the progression will be indicated as 1,2,4,5 ... 24. The block for Interval 3 will not be displayed.</p>
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