



Release Notes – Business Rules Version 11.1x Up to Summer 2021 Release for SIBR/BSAP/RC-BSAP

Revision History

Date	Version	By	Description
5/21/2021	1.0	WT	Initial Draft for Summer 2021 set. FERC 831 (and Spring 2021 high level changes)



For the Release Notes **version 1.0 this will be the Baseline Release** and is referenced in the revision history as the Initial Draft.

For modifications and adjustments of the Business Rules(BR) for SIBR/BSAP/RC-BSAP that come after the Baseline Release the revision history will **show an Incremental change** with the new BR(vX.X.x). The incremental changes will be listed on top of the baseline.

The Baseline Release will identify all the Projects associated with the SIBR/BSAP/RC-BSAP Release and if there are any changes to the UI or API web services. Changes to the UI will be documented in the SIBR SC Users Guide, BSAP Users Guide, or the RC-BSAP Users Guide. Web services changes will be documented in the Technical Specifications and posting of the related artifacts on the application pages on our Developers site.

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//////////////////////////////////// **Baseline Release** //////////////////////////////////////

This set of Release Notes covers the changes going forward from the Business Rules Version 11.1.

Summer 2021 Release Impacts

Business Rule changes within a release may force changes to the User Interfaces or Web Services depending on the requirement changes that are needed to support new or modified functionality within system applications. The following elements defined below give a quick overview of expected changes to the systems that interface with the Business Rules.

Application	Element	Change	Comment
SIBR	SIBR UI	NO	
	SIBR Web Services	NO	
	SIBR Rules	YES	FERC 831(DA/RT CEILING)
BSAP	BSAP UI	NO	
	BSAP Web Services	NO	
	BSAP Rules	YES	<i>Spring 2021 Real-Time Settlements Review (BASE ETSR)</i>
RC-BSAP	RC-BSAP UI	NO	
	RC-BSAP Web Services	NO	
	RC-BSAP Rules	NO	

Please visit the relevant user documentation on the Release Planning page for the updates to the documents associated to a specific Release.



<http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx>

SIBR User Guide – UI changes will be documented in this document.

SIBR Interface Specifications - all web service (wsdl, xsd, xml) changes will be documented in this document.

<https://developer.caiso.com>

BSAP User Guide – UI changes will be documented in this document.

Base Schedule Interface Specification Web Services - all web service (wsdl, xsd, xml) changes will be documented in this document. <https://developer.caiso.com>

RC-BSAP User Guide – UI changes will be documented in this document.

RC Base Schedule Interface Specification Web Services - all web service (wsdl, xsd, xml) changes will be documented in this document. <https://developer.caiso.com>

Business Rules Summer 2021 Release Projects (included Independent Projects)

The **Summer 2021 Release** rules capture changes associated with the following projects targeted for implementation near June 2021 timeframe. The exception to this set of release notes is this is also capturing changes for current production prior to version 11.1 of the SIBR rules which are in production at this time.

Real-Time Settlements Review (ETSR Base) (*Spring 2021 release*)

- 1) EIM Base Schedules submitted for ETSR must be associated with the ETSR type of 'BASE'.
 - a) Previously there were ETSR with type of 'DYN' that were also submitted.

FERC 831 Phase I (Bid Cap raised) (*Spring 2021 release*)

Phase I of the FERC 831 initiative focuses on raising the Energy Bid Ceiling from \$1000.00 to \$2000.00.

1. Default Energy Bid and Threshold used to validate adjustments to Commitment Costs.
2. Default Minimum Load Cap



FERC 831 Phase II (Soft Cap Day-Ahead Ceiling / Real-Time Ceiling) (Summer 2021 release)

Phase II of the FERC 831 initiative focuses adjusting the Day-Ahead (DA) and Real-Time (RT) Ceiling between \$1000.00 to \$2000.00.

1. DA and RT ceiling is per hour based on the submitted valid Max Cost Verified Bid and/or the Maximum Import Bid Price.
2. DA ceiling will be enforced for Inter-Ties, Non Participating Load and Virtual bids.
3. RT ceiling will be enforced for Inter-Ties.

<http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx> this set may also include updates to rule modifications not tied to a release.

The full set of the Business Rules promoted to Production can be seen under the SIBR user documentation under the Application Access/ in SIBR user documentation for all rules related to SIBR/BSAP/RC-BSAP.

<http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx>

Revision History for Rules: (11.1)

Version 11.0.4.5 and below are in Production supported rules.

Version	Date	Changes	Reference
11.1	12/7/2020	Incorporated additions from v10.4 into NPM G rule flow (no change - documented changes already incorporated into v10.4).	
11.1	12/7/2020	Added terms Day-Ahead Advance Bid Ceiling Check Time, Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling, Day-Ahead Maximum Import Bid Price, Energy Bid Ceiling High Limit Flag, FERC 831 Effective Flag, Maximum Cost-Verified Bid Price, Maximum DEB Price, Real-Time Advance Bid Ceiling Check Time, Real-Time Inter-Tie Energy Bid Ceiling, and Real-Time Maximum Import Bid Price.	FERC 831
11.1	12/7/2020	Modified 10022 to support an increase in the Energy Bid Ceiling.	FERC 831
11.1	12/7/2020	Modified 33111, 34104, 35102, and 36102 to modify bid validation rules associated with implementation of FERC order 831.	FERC 831
11.1	12/7/2020	Added 10076 - 10082 to support an increase in the Energy Bid Ceiling.	FERC 831
11.1	12/7/2020	Added 31335, 32311, and 33122 to specify bid validation rules associated with implementation of FERC order 831.	FERC 831
11.1	12/7/2020	Added 38069 to add a bid validation rule for EIM PDRs.	
11.1	12/7/2020	Added 38070 to add a bid validation rule for Base ETSRs.	EIM 2020
11.1	12/7/2020	Added 41232, 41665, 43132, and 43133 to specify bid processing rules associated with implementation of FERC order 831.	FERC 831
11.1	12/7/2020	Added 50004 and 50008-50015 to specify Bid Generation and Final Processing rules associated with implementation of FERC order 831.	FERC 831
11.1	12/7/2020	Added 60028-60035 to specify Special Processing rules associated with implementation of FERC order 831.	FERC 831



Revision of Terms for Summer 2021 Release:

Name	Acronym	Definition
Day-Ahead Advance Bid Ceiling Check Time		A start time, measured in minutes before market close, when SIBR checks submitted bids to determine whether a bid cap for Inter-Tie, Virtual, and Non-Participating Load Resources may be raised.
Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling		The maximum price allowed in the Day-Ahead Market for an Energy Bid Component for Virtual Supply, Virtual Demand, Non-Participating Load, and certain Inter-Tie Resources.
Day-Ahead Maximum Import Bid Price		An hourly proxy price representing generating costs outside of the CAISO Balancing Authority Area applicable to the Day-Ahead Market.
Energy Bid Ceiling High Limit Flag		A Yes/No flag indicating whether, in each hour of the Day Ahead Market, the Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling was set to the Energy Bid Ceiling or not.
FERC 831 Effective Flag		A Yes/No flag indicating whether portions of FERC 831 are effective.
Maximum Cost-Verified Bid Price		For a given hour, the highest value of all the Energy Bid Prices submitted and validated (or generated) for Generating Resources and Non-Generator Resources.
Maximum DEB Price		For a given hour, the highest value of all DEB Prices.
Real-Time Advance Bid Ceiling Check Time		A start time, measured in minutes before market close, when SIBR checks submitted bids to determine whether a bid cap for Inter-Tie, Virtual, and Non-Participating Load resources may be raised.
Real-Time Inter-Tie Energy Bid Ceiling		The maximum price allowed in the Real-Time Market for an Energy Bid Component for certain Inter-Tie Resources.
Real-Time Maximum Import Bid Price		An hourly proxy price representing generating costs outside of the CAISO Balancing Authority Area applicable to the Real-Time Market.



Business Rules Impacted – Summer 2021 Release:

Rule changes for the Version 11. 1x are located below. Modified Text in red, new rules will be all red. Comments section will contain highlight for Spring 2021 in Production.

Modified rules are as follows:

Market	Business Rule ID	Description	Comments
ALL	10022	The configurable Energy Bid Ceiling must be initialized to \$2000/MWh.	
DAM	33111	All Energy Bid Prices of the Energy Bid Curve specified in an Energy Bid Component in an Inter-Tie Resource Bid, plus the Greenhouse Gas Price specified in the Greenhouse Gas Bid Component in that Bid, if any, must not be greater than the Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling.	
DAM	34104	All Energy Bid Prices of the Energy Bid Curve specified in a Non-Participating Load Resource Energy Bid Component must not be greater than the Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling.	
DAM	35102	All Energy Bid Prices of the Energy Bid Curve specified in a Virtual Supply Resource Energy Bid Component must not be greater than the Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling.	
DAM	36102	All Energy Bid Prices of the Energy Bid Curve specified in a Virtual Demand Resource Energy Bid Component must not be greater than the Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling.	

New rules are as follows:

Market	Business Rule ID	Description	Comments
DAM	10076	The configurable Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling must be initialized to the Energy Bid Soft Cap for each Trading Hour.	
RTM	10077	The configurable Real-Time Inter-Tie Energy Bid Ceiling must be initialized to the Energy Bid Ceiling for each Trading Hour in which the Energy Bid Ceiling High Limit Flag is set to Yes, otherwise it must be initialized to the Energy Bid Soft Cap; and all Scheduling Coordinators must be notified of Trading Hours in which the Real-Time Inter-Tie Energy Bid Ceiling was initialized to the Energy Bid Ceiling.	
DAM	10078	The Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling for a Trading Hour must be set to the Energy Bid Ceiling if either the Day-Ahead Maximum Import Bid Price or the Maximum Cost-Verified Bid Price for that Trading Hour is greater than the Energy Bid Soft Cap; otherwise it must be set to the Energy Bid Soft Cap.	ECIC: Day-Ahead Maximum Import Bid Price.
RTM	10079	The Real-Time Inter-Tie Energy Bid Ceiling for a Trading Hour must be set to the Energy Bid Ceiling if the Energy Bid Ceiling High Limit Flag for that Trading Hour is set to No and either the Real-Time Maximum Import Bid Price or the Maximum Cost-Verified Bid Price for that Trading Hour is greater than the Energy Bid Soft Cap; otherwise it must be set to the Energy Bid Soft Cap.	ECIC: Real-Time Maximum Import Bid Price.
DAM	10080	The configurable Day-Ahead Advance Bid Ceiling Check Time must be initialized as a periodic schedule every 5 minutes from 45 minutes prior to the Market Close Time until 5 minutes prior to the Market Close Time.	
RTM	10081	The configurable Real-Time Advance Bid Ceiling Check Time must be initialized to a periodic schedule every 5 minutes from 45 minutes prior to the Market Close Time until 5 minutes prior to the Market Close Time.	
DAM	10082	The configurable Energy Bid Ceiling High Limit Flag must be initialized to "No" for each Trading Hour.	



NPM	31335	All Energy Bid Prices of the Energy Bid Curve specified in an Energy Bid Component in a Generating Resource Bid must not be greater than the Energy Bid Soft Cap, if that Generating Resource is registered as an NPM Resource for the Bid Period specified in that Bid.	MFR: NPM registry for Generating Resources.
NPM	32311	All Energy Bid Prices of the Energy Bid Curve specified in an Energy Bid Component in a Non-Generator Resource Bid must not be greater than the Energy Bid Soft Cap, if that Non-Generator Resource is registered as an NPM Resource for the Bid Period specified in that Bid.	NPM registry for Non-Generator Resources.
RTM	33122	All Energy Bid Prices of the Energy Bid Curve specified in an Energy Bid Component in an Inter-Tie Resource Bid, plus the Greenhouse Gas Price specified in the Greenhouse Gas Bid Component in that Bid, if any, must not be greater than the Real-Time Inter-Tie Energy Bid Ceiling.	
BS	38070	If the Resource specified in a Base Schedule is an ETSR, it must be registered with a Type of "Base" for the Base Schedule Period specified in that Base Schedule.	Spring 2021
BS	38069	The Base Energy Schedule specified in a Base Schedule for a Generating Resource that is registered as a PDR for the Base Schedule Period specified in that Base Schedule must be zero.	Spring 2021
ALL	41232	If the Default Minimum Load Bid for an Online Generating Resource State of a Generating Resource and Bid Period is greater than the product of the Energy Bid Ceiling and the higher of the Minimum Load Cap Denominator and the registered Minimum Load for that Online Generating Resource State of that Generating Resource and Bid Period, that Default Minimum Load Bid must be replaced by the product of the Energy Bid Ceiling and the higher of the Minimum Load Cap Denominator and the registered Minimum Load for that Online Generating Resource State of that Generating Resource and Bid Period.	Spring 2021
ALL	41665	If the Reasonableness Threshold Minimum Load Bid for an Online Generating Resource State of a Generating Resource and Bid Period in a Generating Resource Bid is greater than the product of the Energy Bid Ceiling and the higher of the Minimum Load Cap Denominator and the registered Minimum Load for that Online Generating Resource State of that Generating Resource and Bid Period, then that Reasonableness Threshold Minimum Load Bid must be replaced by the product of the Energy Bid Ceiling and the higher of the Minimum Load Cap Denominator and the registered Minimum Load for that Online Generating Resource State of that Generating Resource and Bid Period.	Spring 2021

DAM	43132	If the Energy Bid Price of an Energy Bid Segment in the Energy Bid Curve specified in an Energy Bid Component for a Trading Hour in an Inter-Tie Resource Bid for an Import Resource is greater than a) the Energy Bid Soft Cap, b) the Day-Ahead Maximum Import Bid Price for that Trading Hour, and c) the Maximum Cost-Verified Bid Price for that Trading Hour, the Energy Bid Price of that Energy Bid Segment must be replaced with the greater of a) the Energy Bid Soft Cap, b) the Day-Ahead Maximum Import Bid Price for that Trading Hour, or c) the Maximum Cost-Verified Bid Price for that Trading Hour, if the RA Flag for that Import Resource and Trading Hour is "Yes".	Import RA Resource Energy Bid cap. ECIC: Day-Ahead Maximum Import Bid Price.
RTM	43133	If the Energy Bid Price of an Energy Bid Segment in the Energy Bid Curve specified in an Energy Bid Component for a Trading Hour in an Inter-Tie Resource Bid for an Import Resource, plus the Greenhouse Gas Price specified in the Greenhouse Gas Bid Component in that Bid, if any, is greater than a) the Energy Bid Soft Cap, b) the Real-Time Maximum Import Bid Price for that Trading Hour, and c) the Maximum Cost-Verified Bid Price for that Trading Hour, the Energy Bid Price of that Energy Bid Segment must be replaced with the greater of a) the Energy Bid Soft Cap, b) the Real-Time Maximum Import Bid Price for that Trading Hour, or c) the Maximum Cost-Verified Bid Price for that Trading Hour, if the RA Flag for that Import Resource and Trading Hour is "Yes".	Import RA Resource Energy Bid cap. ECIC: Real-Time Maximum Import Bid Price.
DAM	50004	If the Maximum DEB Price is greater than the Energy Bid Soft Cap for a Trading Hour, and the Day-Ahead Maximum Import Bid Price is not greater than the Energy Bid Soft Cap for that Trading Hour, the general rule for variable energy bid ceiling (10078) must re-fire for that Trading Hour.	ECIC: Day-Ahead Maximum Import Bid Price.
RTM	50009	If the Maximum DEB Price is greater than the Energy Bid Soft Cap for a Trading Hour, and the Real-Time Maximum Import Bid Price is not greater than the Energy Bid Soft Cap for that Trading Hour, the general rule for variable energy bid ceiling (10079) must re-fire for that Trading Hour.	ECIC: Real-Time Maximum Import Bid Price.
DAM	50010	If there is a change to the Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling for a Trading Hour, all Scheduling Coordinators must be notified of that change.	
RTM	50011	If there is a change to the Real-Time Inter-Tie Energy Bid Ceiling for a Trading Hour, all Scheduling Coordinators must be notified of that change.	
DAM	50012	If there is a reduction to the Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling for a Trading Hour, the bid validation	

		ules for the variable energy bid ceiling (33111, 34104, 35102, and 36102) must re-fire for that Trading Hour.	
RTM	50013	if there is a reduction to the Real-Time Inter-Tie Energy Bid Ceiling for a Trading Hour, the bid validation rule for the variable energy bid ceiling (33122) must re-fire for that Trading Hour.	
DAM	50014	The bid validation rule for RA import resources (43132) must re-fire for all Trading Hours in the Active Day.	Post close re-cap of energy prices for Import RA Resources.
RTM	50015	The bid validation rule for RA import resources (43133) must re-fire for the Active Hour.	Post close re-cap of energy prices for Import RA Resources.
DAM	50008	If the Day-Ahead Maximum Import Bid Price or the Maximum Cost-Verified Bid Price for a Trading Hour in the Active Day is greater than the Energy Bid Soft Cap, the Energy Bid Ceiling High Limit Flag must be set to "Yes" for that Trading Hour.	ECIC: Day-Ahead Maximum Import Bid Price.
DAM	60028	If there is a change to the Day-Ahead registered Gas Price Index for a Trading Day or to the Day-Ahead registered Reasonableness Threshold Gas Price Index for a Trading Day, the general rule for variable energy bid ceiling (10078) must re-fire for all Trading Hours in that Trading Day.	ECIC: Gas Price Index and Reasonableness Threshold Gas Price Index for Generating Resources.
RTM	60029	If there is a change to the Real-Time registered Gas Price Index for a Trading Day or to the Real-Time registered Reasonableness Threshold Gas Price Index for a Trading Day, the general rule for variable energy bid ceiling (10079) must re-fire for all Trading Hours in that Trading Day.	ECIC: Gas Price Index and Reasonableness Threshold Gas Price Index for Generating Resources.
DAM	60030	At a scheduled Day-Ahead Advance Bid Ceiling Check Time, if there is a change to the Maximum Cost-Verified Bid Price for a Trading Hour, the Maximum DEB Price is greater than the Energy Bid Soft Cap for that Trading Hour, and the Day-Ahead Maximum Import Bid Price is not greater than the Energy Bid Soft Cap for that Trading Hour, the general rule for variable energy bid ceiling (10078) must re-fire for that Trading Hour.	ECIC: Day-Ahead Maximum Import Bid Price.

RTM	60031	At a scheduled Real-Time Advance Bid Ceiling Check Time, if there is a change to the Maximum Cost-Verified Bid Price for a Trading Hour, the Maximum DEB Price is greater than the Energy Bid Soft Cap for that Trading Hour, and the Real-Time Maximum Import Bid Price is not greater than the Energy Bid Soft Cap for that Trading Hour, the general rule for variable energy bid ceiling (10079) must re-fire for that Trading Hour.	ECIC: Real-Time Maximum Import Bid Price.
DAM	60032	If there is a change to the Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling for a Trading Hour, all Scheduling Coordinators must be notified of that change.	
RTM	60033	If there is a change to the Real-Time Inter-Tie Energy Bid Ceiling for a Trading Hour, all Scheduling Coordinators must be notified of that change.	
DAM	60034	If there is a reduction to the Day-Ahead Inter-Tie Virtual and Non Participating Load Energy Bid Ceiling for a Trading Hour, the bid validation rules for the variable energy bid ceiling (33111, 34104, 35102, and 36102) must re-fire for that Trading Hour.	
RTM	60035	If there is a reduction to the Real-Time Inter-Tie Energy Bid Ceiling for a Trading Hour, the bid validation rule for the variable energy bid ceiling (33122) must re-fire for that Trading Hour.	



Deleted Rules: None

Market	Business Rule ID	Description	Comments

The full set of the Business Rules can be seen under SIBR user documentation under the Application Access/ in SIBR user documentation for all rules related to SIBR/BSAP/RC-BSAP.

<http://www.caiso.com/participate/Pages/ApplicationAccess/Default.aspx>

END Document