Release Notes – SIBR Rules Version 9.8x
Winter 2017 Release

Revision History

Date	Version	By	Description
12/14/2015	1.0	WT	Initial Draft for Winter 2017 set. BR(v9.8)+

For the 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 SIBR Rules 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 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 or the BSAP Users Guide, web services changes will be documented in the Technical Specifications and posting of the related artifacts on the Release Planning page.

Contents

// Baseline Release //

This set of Release Notes covers the changes going forward from SIBR Rules Version 9.8 to 9.9.2 (Note there is no ruleset for 9.9.2 set is primarily for bringing back Ramp Rate rules removed in 9.8)

SIBR Winter 2017 Release Impacts

SIBR UI	**NO**
SIBR Web Services	**NO**
SIBR Rules	**Yes (9.8 removed Ramp Rate rules / 9.9.2 re-introduces Ramp Rate)**

Please visit the SIBR user documentation on the Release Planning page for the updates to the documents.
http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

SIBR SC Users 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.
SIBR Business Rules for Bidding – Complete set of SIBR Business Rules.

SIBR Winter Release Projects (included Independent Projects)

The **2017 Winter Release** SIBR Rules capture changes associated with the following projects targeted for implementation near April 1st 2018. http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

Commitment Cost Enhancement (CCE3)
Introduction of Opportunity Cost adders, Removal of Ramp Rates. Rules for Opportunity Cost also require data from upstream sources.
http://www.caiso.com/Documents/BusinessRequirementsSpecification-CommitmentCostPhase3.pdf

EIM Enhancements Winter 2017
BSAP changes for adding Distribution Factors for Base Schedule.
http://www.caiso.com/Documents/BusinessRequirementsSpecification-BiddingRulesEnhancements-GeneratorCommitmentCostImprovements.pdf

Tie Non-Generating Resource (TNGR) NGR RUC support
Introduction of NGR associated to Inter-Ties. Also support for RUC on NGR model.

Revision History for Rules: (9.8.)

Version	Date	Changes
9.8	5/5/2017	Added terms for Start-Up Opportunity Cost, Minimum Load Opportunity Cost, Energy Opportunity Cost, and Online State Transition Opportunity Cost.
9.8	5/5/2017	Modified 41127 to add the Start-Up Opportunity Cost in Start-Up Cost Bid Validation.
9.8	5/5/2017	Modified 41212 to add the Minimum Load Opportunity Cost in Minimum Load Cost Bid Validation.
9.8	5/5/2017	Modified 41318 to add the Energy Opportunity Cost in the generated/extended Energy Bid Curve and cap the latter by the Energy Bid Ceiling.
9.8	5/5/2017	Modified 41986 to add the Online State Transition Opportunity Cost in State Transition Cost Bid Validation.
9.8 *Corrected in 9.9.2*	5/5/2017	*Deleted terms for (Best/Worst) Operating/Operational/Regulating Reserve Ramp Rate, (Generating/Non-Generator Resource) Ramp Rate Bid Component, Maximum Ramp Rate, Maximum Ramp Rate Curve Segment Number, NGR Maximum Ramp Rate Curve Segment Number, Operating Level Break Point, (Operational) Ramp Rate Bid Curve.*
9.8	5/5/2017	Deleted all old and unused Participating Load Resource terms.
9.8	5/5/2017	Removed Ramp Rate Bid Component from 21017-21018 and 22002-22003.
9.8	5/5/2017	Deleted Ramp Rate Bid Component Content rules (216xx and 226xx).
9.8	5/5/2017	Deleted Ramp Rate Bid Component Validation rules (316xx and 326xx).
9.8	5/5/2017	Removed Ramp Rate Bid Component from 41009.
9.8	5/5/2017	Deleted Ramp Rate Bid Component Processing rules (416xx and 426xx).

Version	Date	Changes
9.9	9/8/2017	Added term for Base Schedule Distribution Bid Component
9.9	9/8/2017	Modified 28001 to add Distribution Bid Components for Base Schedule submissions for EIMNPRs.
9.9	9/8/2017	Added 28101, 28102, and 28103 to add content rules for Base Schedule Distribution Bid Components.
9.9	9/8/2017	Added 38101 - 38104 to add validation rules for Base Schedule Distribution Bid Components.
9.9	9/8/2017	Added 48101 to add processing rules for Base Schedule Distribution Bid Components.

Version	Date	Changes
9.9.1	10/11/2017	Incorporated changes from 9.7.1.
9.9.1	10/11/2017	Added term for new resource type: Inter-Tie Non-Generator Resource (TNGR).
9.9.1	10/11/2017	Modified 20014, 20052, 22001, 22002, and 22612 to include TNGRs and clarify that NGRs/TNGRs may submit AS Base Schedules and participate in RUC.
9.9.1	10/11/2017	Added 22005 and 22613 to add content rules for TNGRs.
9.9.1	10/11/2017	Added 22901 and 22902 to add NGR/TNGR content rules for RUC.
9.9.1	10/11/2017	Added 32005, 32309, 32411-32414, 32542 and 32620-32622 to add validation rules for TNGRs.
9.9.1	10/11/2017	Modified comments in 32517, 32519, 32521, and 32523 for special Master File treatment of TNGRs.
9.9.1	10/11/2017	Added 32901-32904 and 32615-32619 to add NGR/TNGR content rules for RUC.
9.9.1	10/11/2017	Modified 38024 and 38034-38037 to include TNGRs.
9.9.1	10/11/2017	Generalized 38102 to include NGRs in Base Schedule Distribution Components.
9.9.1	10/11/2017	Added 38105 to include NGRs in Base Schedule Distribution Components.
9.9.1	10/11/2017	Added 42002-42004 and 42608-42610 to add bid processing rules for TNGRs.
9.9.1	10/11/2017	Added 42302-42305 to add NGR/TNGR bid processing rules for RUC.
9.9.1	10/11/2017	Modified 52001 to include NGR/TNGR final processing rules for RUC.
9.9.1	10/11/2017	Added 62001-62006 to add bid special processing rules for TNGRs.

9.9.1	10/11/2017	Added 72017 to include NGR/TNGR multi-period bid generation rules for RUC.
9.9.1	11/1/2017	Added 32415 to prevent NGR Load Self-Schedule undercutting RUC Schedule.
9.9.1	11/6/2017	Modified 58001, 58003, 58005, 58007, and 68001-68004 to add Inter-Tie Non-Generator Resources.

Version	Date	Changes
9.9.2	12/6/2017	Restored terms for (Best/Worst) Operating/Operational/Regulating Reserve Ramp Rate, (Generating/Non-Generator Resource) Ramp Rate Bid Component, Maximum Ramp Rate, Maximum Ramp Rate Curve Segment Number, NGR Maximum Ramp Rate Curve Segment Number, Operating Level Break Point, (Operational) Ramp Rate Bid Curve.
9.9.2	12/6/2017	Added term for Ramp Rate Bid Option.
9.9.2	12/6/2017	Restored Ramp Rate language in 10004.
9.9.2	12/6/2017	Restored initialization rules 10007 and 10048.
9.9.2	12/6/2017	Resotred Ramp Rate Bid Component language in 21017-21018 and 22002-22003.
9.9.2	12/6/2017	Restored Ramp Rate Bid Component Content rules (216xx and 226xx).
9.9.2	12/6/2017	Restored Ramp Rate Bid Component Validation rules (316xx and 326xx).
9.9.2	12/6/2017	Restored Ramp Rate Bid Component language in 41009.
9.9.2	12/6/2017	Restored Ramp Rate Bid Component Processing rules (416xx and 426xx).
9.9.2	12/6/2017	Added 10066 to initialize the Ramp Rate Bid Option value.
9.9.2	12/6/2017	Added 41608 and 42611 to control the ability to submit ramp rate bids.
9.9.2	12/6/2017	Modified 41501, 41502, 41503, 41504, 41505, 51506, 41507, 41508 to exclude TGs from A/S bid insertion/extension rules.

Revision of Terms for the Winter 2017 Release:

Energy Opportunity Cost	The long term opportunity cost of a ULR for incremental Energy above Minimum Load per Online Generating Resource State.
Minimum Load Opportunity Cost	Long term opportunity cost for a ULR at Minimum Load per Online Generating Resource State.
Online State Transition Opportunity Cost	Long term opportunity cost for a ULR MSG Online State Transition Definition.
Start-Up Opportunity Cost	Long term opportunity cost for a ULR Start-Up.
Base Schedule Distribution Bid Component	A Bid Component for distributing the Schedule of an Aggregate Generating Resource that is an EIMNPR.
Inter-Tie Non-Generator Resource (TNGR)	A Non-Generator Resource at an Inter-Tie Scheduling Point.

SIBR Impacted Rules - Winter 2017 Release:

Rule changes for the SIBR Rules up to Version 9.9.2 x are located below. Modified Text in red, new rules will be all red.

New rules 9.8 are as follows:

Market	Business Rule ID	Description	Comments
ALL	10004	All Submitted Bids and Submitted Trades must adhere to the following numerical precision rules: a) all time quantities must have a precision no finer than the configurable Time Precision, b) all Energy~~,~~ and Capacity~~, and Ramp Rate~~ quantities must have a precision no finer than the configurable Quantity Precision, and c) all prices must have a precision no finer than the configurable Price Precision.	
DAM	21017	A Generating Resource Bid may include the following: 1) at most one Start-Up Bid Component for each registered Online Generating Resource State of the Generating Resource specified in that Bid; 2) at most one Minimum Load Cost Bid Component for each registered Online	MFR: Pseudo-Tie registry for Generating Resources. MSG registry for Generating

		Generating Resource State; 3) at most one Energy Bid Component for each Trading Hour in the Bid Period specified in that Bid and each registered Online Generating Resource State; 4) at most one Self-Schedule Bid Component for each Trading Hour in that Bid Period and each registered Online Generating Resource State; ~~6) at most one Ramp Rate Bid Component for each registered Online Generating Resource State;~~ 7) at most one Energy Limit Bid Component; 8) at most one Distribution Bid Component for each Trading Hour in that Bid Period; 9) at most one RUC Bid Component for each Trading Hour in that Bid Period and each registered Online Generating Resource State; 10) at most one Wheeling Bid Component for each Trading Hour in that Bid Period, if and only if the Generating Resource specified in that Bid is registered as an Inter-Tie Generating Resource for that Bid Period; 11) at most one Pumping Bid Component for each Trading Hour in that Bid Period, if and only if that Generating Resource is registered as a Pumped Storage Hydro Unit or a Pump for that Bid Period; 12) at most one State Transition Bid Component, if and only if that Generating Resource is registered as a MSG for that Bid Period; 13) at most one Miscellaneous Bid Component for each Trading Hour in that Bid Period, and 14) at most one Contingency Dispatch Indicator.	Resources; MSG must not be COG, Pump, LFR, or Pseudo-Tie.
RTM	21018	A Generating Resource Bid may include the following: 1) at most one Start-Up Bid Component for each registered Online Generating Resource State of the Generating Resource specified in that Bid; 2) at most one Minimum Load Cost Bid Component for each registered Online Generating Resource State; 3) at most one Energy Bid Component for each registered Online Generating Resource State; 4) at most one Self-Schedule Bid Component for each registered Online Generating Resource State; 5) at most one Ancillary Service Bid Component for each registered Online Generating Resource State; ~~6) at most one Ramp Rate Bid Component for each registered Online Generating Resource State;~~ 7) at most one Distribution Bid Component; 8) at most one Wheeling Bid Component, if and only if the Generating Resource specified in the Bid is registered as an Inter-Tie Generating Resource for the Trading Hour specified in that Bid; 9) at most one Pumping Bid Component, if and only if the Generating Resource specified in the Bid is registered as a Pump Storage Hydro or a Pump for that Trading Hour; 10) at most one State Transition Bid Component, if and only if the Generating Resource specified in the Bid is registered as a MSG for that Trading Hour; 11) at most one Miscellaneous Bid Component; and 12) at most one Greenhouse Gas Bid Component, if and only if the Generating Resource specified in the Bid is registered as an EIM Resource for that Trading Hour.	
DAM	22002	A Non-Generator Resource Bid may include the following: 1) at most one Energy Bid Component for each Trading Hour in the Bid Period specified in that Bid; 2) at most one Self-Schedule Bid Component for each Trading Hour in that Bid Period; 3) at most one Ancillary Service Bid Component for each Trading Hour in that Bid Period; ~~4) at most one Ramp Rate Bid Component;~~ 5) at most one Energy Limit Bid Component, if and only if the Non-Generator	MFR: LESR registry.

		Resource specified in that Bid is registered as a LESR for that Bid Period; 6) at most one Distribution Bid Component for each Trading Hour in that Bid Period; 7) at most one Miscellaneous Bid Component for each Trading Hour in that Bid Period; 8) at most one Contingency Dispatch Indicator; and 9) at most one Initial State of Charge Bid Component.	
RTM	22003	A Non-Generator Resource Bid may include the following: 1) at most one Energy Bid Component; 2) at most one Self-Schedule Bid Component; 3) at most one Ancillary Service Bid Component; ~~4) at most one Ramp Rate Bid Component;~~ 5) at most one Energy Limit Bid Component, if and only if the Non-Generator Resource specified in that Bid is registered as a LESR for the Trading Hour specified in that Bid; 6) at most one Distribution Bid Component; 7) at most one Miscellaneous Bid Component; and 8) at most one Greenhouse Gas Bid Component, if and only if the Non-Generator Resource specified in the Bid is registered as an EIM Resource for that Trading Hour.	
ALL	41009	If there is no Self-Schedule Bid Component, no Energy Bid Component, no Ancillary Service Bid Component, and no Pumping Bid Component for an Online Generating Resource State in a Generating Resource Bid, the Start-Up Bid Component, the Minimum Load Cost Bid Component, ~~the Ramp Rate Bid Component,~~ and the RUC Bid Components, if any, for that Online Generating Resource State in that Bid must be erased.	IFM Self-Schedule is considered as a Self-Schedule Bid Component.
ALL	41127	If a Start-Up Cost of the Start-Up Cost Bid Curve specified in a Start-Up Bid Component for an Online Generating Resource State in a Generating Resource Bid is greater than the corresponding Start-Up Cost of the Proxy Start-Up Cost Curve for that Online Generating Resource State of the Generating Resource and Bid Period specified in that Bid, multiplied by the Relative Proxy Start-Up Cost Ceiling, plus the Start-Up Opportunity Cost for that Online Generating Resource State, that Start-Up Cost must be replaced by the corresponding Start-Up Cost of that Proxy Start-Up Cost Curve multiplied by the Relative Proxy Start-Up Cost Ceiling, plus that Start-Up Opportunity Cost, if that Generating Resource is registered with a Start-Up Cost Basis of "Proxy Cost" for that Bid Period.	ECIC: Start-Up Opportunity Cost for each startable Online Generating Resource State of each Generating Resource; zero if not applicable. Start-Up Cost capped by the Relative Proxy Start-Up Cost Ceiling plus the Start-Up Opportunity Cost.
ALL	41212	If the Minimum Load Cost specified in the Minimum Load Cost Bid Component for an Online Generating Resource State in a Generating Resource Bid is greater than the Proxy Minimum Load Cost for that Online Generating Resource State of the Generating Resource and Bid Period specified in that Bid, multiplied by the Relative Proxy Minimum Load Cost Ceiling, plus the Minimum Load Opportunity Cost for that Online Generating Resource State, that Minimum Load Cost must be replaced by that Proxy Minimum Load Cost multiplied by the Relative Proxy Minimum Load Cost Ceiling, plus that Minimum Load Opportunity Cost, if that Generating Resource is registered with a Minimum Load Cost Basis of "Proxy Cost" for that Bid Period.	ECIC: Minimum Load Opportunity Cost for each Online Generating Resource State of each Generating Resource; zero if not applicable. Minimum Load Cost capped by the Relative Proxy Minimum Load Cost Ceiling plus the Minimum Load Opportunity Cost.
ALL	41318	The Energy Bid Curve of a generated Energy Bid Component, or the Energy Bid Curve extension of an Energy Bid Component, for a Trading Hour and an Online Generating	RLC: Greenhouse Gas Energy Cost Allowance Curve for

		Resource State in a Generating Resource Bid for a Generating Resource that is not registered as a COG for that Trading Hour, must be calculated as the lower of a) the sum of i) the Incremental Fuel Cost Curve, ii) the registered Operation and Maintenance Cost ($/MWh), iii) the registered Greenhouse Gas Energy Cost Allowance Curve, iv) the Grid Management Charge Energy Cost Rate, and v) the Energy Opportunity Cost, for that Online Generating Resource State of that Generating Resource and Trading Hour, or b) the Energy Price Ceiling.	Generating Resources by Online Generating Resource State ($0/MWh by default). The curve breakpoints must be the same as the breakpoints of the Incremental Fuel Cost Curve or the Incremental Heat Rate Curve for that Online Generating Resource State. RLC: Grid Management Charge Energy Cost Rate ($0/MWh by default). ECIC: Energy Opportunity Cost for each Online Generating Resource State of each Generating Resource; zero if not applicable.
ALL	41986	If the State Transition Cost specified in a State Transition Definition of the State Transition Bid Component in a Generating Resource Bid is greater than the corresponding Proxy State Transition Cost for that State Transition Definition of the State Transition Bid Component of the Generating Resource and Bid Period specified in that Bid, multiplied by the Relative Proxy State Transition Cost Ceiling, plus the Online State Transition Opportunity Cost for that State Transition Definition, that State Transition Cost must be replaced by that Proxy State Transition Cost multiplied by the Relative Proxy State Transition Cost Ceiling, plus that Online State Transition Opportunity Cost, if that Generating Resource is registered with a State Transition Cost Basis of "Proxy Cost" for that Bid Period.	MSG only. ECIC: Online State Transition Opportunity Cost for each Online State Transition Definition of each Generating Resource; zero if not applicable.

New and revised rules 9.9 are as follows:

Market	Business Rule ID	Description	Comments
BS	28001	The Base Schedule must include a Base Energy Schedule (MW); it must also include a Base Generating Resource State, if and only if the Resource specified in the Base Schedule is a Generating Resource registered as a MSG for the Base Schedule Period specified in the Base Schedule; if the Resource specified in the Base Schedule is a Generating Resource not registered as an ETSR or a DSR for that Base Schedule Period, the Base Schedule may also include any of the following: 1) a Base Regulation Up Schedule (MW); 2) a Base Regulation Down Schedule (MW); 3) a Base Spinning Reserve Schedule (MW); 4) a Base Non-Spinning Reserve Schedule (MW); and 5) at most one Distribution Bid Component, if and only if the Resource specified in the Base Schedule is registered as an EIMNPR for the Base Schedule Period specified in the Base Schedule.	MFR: ETSR and DSR registration; ETSR/DSR are System Resources defined in mirrored pairs (Import to an Export and vice-versa). A non-zero Base Energy Schedule or an Online Base Generating Resource State indicates self-commitment.
BS	28101	The Base Schedule Distribution Bid Component must be associated with a Trading Hour in the Base Schedule Period specified in the Base Schedule.	The Base Schedule Distribution Bid Component is an hourly bid common for all online states.
BS	28102	A Base Schedule Distribution Bid Component must have at least one Distribution Pair.	
BS	28103	The Distribution Pair specified in a Base Schedule Distribution Bid Component must specify a Distribution Location and a Distribution Factor.	
BS	38101	The Generating Resource specified in a Base Schedule that has a Base Schedule Distribution Bid Component must be registered as an Aggregate Generating Resource for the Base Schedule Period specified in the Base Schedule.	MFR: Aggregate Generating Resource registry.
BS	38102	The Distribution Location of a Distribution Pair specified in a Base Schedule Distribution Bid Component must be a registered Location for the Aggregate Location of the Generating Resource and the Base Schedule Period specified in the Base Schedule.	MFR: Distribution Location registry for Aggregate Locations of Aggregate Generating Resources.
BS	38103	The Distribution Factor of a Distribution Pair specified in a Base Schedule Distribution Bid Component must be between 0 and 1 inclusive.	
BS	38104	The sum of the Distribution Factors of all Distribution Pairs specified in a Distribution Bid Component in a Base Schedule must be equal to one (1) within the Distribution Factor Precision.	

BS	48101	If there is no Distribution Bid Component for a Trading Hour in a Base Schedule, but the Generating Resource specified in that Base Schedule is registered as an Aggregate Generating Resource for that Trading Hour, a Distribution Bid Component must be generated for that Trading Hour in that Base Schedule with the applicable Distribution Pairs from the GDF Library for that Generating Resource and Trading Hour. ~~If the External Bid Status is not set to "M" (Modified) or "CM" (Conditionally Modified), set the External Bid Status to "MI" (Valid).~~	GDF Library Requirement: Distribution Pairs (Distribution Location, Distribution Factor) for Aggregate Generating Resources.

New and revised rules 9.9.1 are as follows:

Market	Business Rule ID	Description	Comments
ALL	20014	The Resource Type specified in a Bid must be one of the following: 1) a Generating Resource ("G"); 2) a Non-Generator Resource ("NGR"); 3) an Inter-Tie Generating Resource ("TG"); 4) an Inter-Tie Non-Generator Resource ("TNGR"); 5) a Registered Import Resource ("I"); 6) a Registered Export Resource ("E"); 7) an Import Transaction ("IT"); 8) an Export Transaction ("ET"); 9) a Non-Participating Load Resource ("L"); 10) a Virtual Generating Resource ("VG"); 11) a Virtual Load Resource ("VL"); 12) a Virtual Import Resource ("VI"); or 13) a Virtual Export Resource ("VE").	
BS	20052	The Resource Type specified in a Base Schedule must be one of the following: 1) a Generating Resource ("G"); 2) a Non-Generator Resource ("NGR"); 3) an Inter-Tie Generating Resource ("TG"); 4) an Inter-Tie Non-Generator Resource ("TNGR"); 5) a Registered Import Resource ("I"); 6) a Registered Export Resource ("E"); 7) an Import Transaction ("IT"); or 8) an Export Transaction ("ET")	

ALL	22001	A Bid with Resource Type set to "NGR" or "TNGR" must be considered a Non-Generator Resource Bid.	MFR: NGR registry. A NGR/TNGR is a Resource with a continuous operating range that may span load and/or generation with no inter-temporal constraints. A NGR may not be an RA Resource or a Supporting Resource, it may not bid Ancillary Service Self-Provision, it may not be certified for Load Following, and it may not bid Self-Schedules other than Price-Taker Self-Schedules. An NGR/TNGR may submit AS Base Schedules and may participate in RUC.
ALL	22005	A Bid with Resource Type set to "TNGR" must be considered an Inter-Tie Non-Generator Resource Bid.	
DAM	22002	A Non-Generator Resource Bid may include the following: 1) at most one Energy Bid Component for each Trading Hour in the Bid Period specified in that Bid; 2) at most one Self-Schedule Bid Component for each Trading Hour in that Bid Period; 3) at most one Ancillary Service Bid Component for each Trading Hour in that Bid Period; 4) at most one Energy Limit Bid Component, if and only if the Non-Generator Resource specified in that Bid is registered as a LESR for that Bid Period; 5) at most one Distribution Bid Component for each Trading Hour in that Bid Period; 6) at most one RUC Bid Component for each Trading Hour in that Bid Period and each registered Online Generating Resource State; 7) at most one Miscellaneous Bid Component for each Trading Hour in that Bid Period; 8) at most one Contingency Dispatch Indicator; and 9) at most one Initial State of Charge Bid Component.	MFR: LESR registry.
DAM	22901	A Non-Generator Resource RUC Bid Component must be associated with a Trading Hour in the Bid Period specified in that Bid.	The Non-Generator Resource RUC Bid Component is an hourly bid.
DAM	22902	A Non-Generator Resource RUC Bid Component must specify a RUC Capacity (MW) and a RUC Price ($/MW).	

DAM	22612	A Miscellaneous Bid Component for a Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid must include at least one of the following: a) a Generating Capacity Limit (MW); b) a Load Capacity Limit (MW); and c) a NERC Tag, if and only if that Non-Generator Resource is registered as an Inter-Tie Non-Generator Resource for that Trading Hour.	
RTM	22613	A Miscellaneous Bid Component for a Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid must include at least one of the following: a) a Generating Capacity Limit (MW); b) a Load Capacity Limit (MW); c) a NERC Tag, if and only if that Non-Generator Resource is registered as an Inter-Tie Non-Generator Resource for that Trading Hour; and d) a Dispatch Option, if and only if that Non-Generator Resource is registered as an Inter-Tie Non-Generator Resource for that Trading Hour.	
DAM	32005	The Contingency Dispatch Indicator specified in a Non-Generator Resource Bid, if any, must be "Yes" if the Non-Generator Resource specified in that Bid is registered as an Hourly Pre-Dispatched Inter-Tie Non-Generator Resource for the Bid Period specified in that Bid.	MFR: HPD TNGR registration. The Contingency Dispatch Indicator is a daily bid.
ALL	32309	All Energy Bid Quantities of the Energy Bid Curve specified in an Energy Bid Component of a Non-Generator Resource Bid must be integers if the Non-Generator Resource specified in that Bid is registered as an Inter-Tie Non-Generator Resource for the Bid Period specified in that Bid.	TNGRs only. MFR: Minimum Load and Maximum Capacity for TNGRs must be integers. Zero is considered an integer.
DAM	32411	The Total Self-Schedule Quantity derived from all Generating Self-Schedule Bid Components for the Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid must be an integer if the Non-Generator Resource specified in that Bid is registered as an Inter-Tie Non-Generator Resource for the Bid Period specified in that Bid.	TNGR only. Zero is considered an integer in this rule. This rule should not be enforced in RTM because the DAS is not rounded for TNGRs.
DAM	32412	The Total Self-Schedule Quantity derived from all Load Self-Schedule Bid Components for the Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid must be an integer if the Non-Generator Resource specified in that Bid is registered as an Inter-Tie Non-Generator Resource for the Bid Period specified in that Bid.	TNGR only. Zero is considered an integer in this rule. This rule should not be enforced in RTM because the DAS is not rounded for TNGRs.
RTM	32413	The Total Self-Schedule Quantity derived from all Generating Self-Schedule Bid Components specified in a Non-Generator Resource Bid must not be greater than the Day-Ahead Schedule of the Non-Generator Resource and Trading Hour specified in that Bid, if that Non-Generator Resource is registered as an Hourly Pre-Dispatched Inter-Tie Non-Generator Resource certified for Spinning or Non-Spinning Reserve for that Trading Hour.	HPD TNGR certified for AS only.

RTM	32414	The Total Self-Schedule Quantity derived from all Load Self-Schedule Bid Components specified in a Non-Generator Resource Bid must not be less than the Day-Ahead Schedule of the Non-Generator Resource and Trading Hour specified in that Bid, if that Non-Generator Resource is registered as an Hourly Pre-Dispatched Inter-Tie Non-Generator Resource certified for Spinning or Non-Spinning Reserve for that Trading Hour.	HPD TNGR certified for AS only.
RTM	32415	If there is a Load Self-Schedule Bid Component for a Trading Hour in a Non-Generator Resource Bid and the RUC Schedule is greater than the Day-Ahead Schedule for that Non-Generator Resource and Trading Hour, the Total Load Self-Schedule Quantity derived from all Load Self-Schedule Bid Components specified in that Bid must not be less than that RUC Schedule.	Load Self-Schedule must accommodate RUC Schedule.
ALL	32542	The Ancillary Service Capacity specified in a Non-Generator Resource Ancillary Service Bid Component must be an integer if the Non-Generator Resource specified in that Bid is registered as an Inter-Tie Non-Generator Resource for the Bid Period specified in that Bid.	TNGRs only.
RTM	32620	The Dispatch Option specified in a Miscellaneous Bid Component in a Non-Generator Resource Bid must be one of the following: 1) "Hourly"; 2) "Once"; 3) "15min"; or 4) "Dynamic".	TNGR only.
RTM	32621	The Dispatch Option specified in a Miscellaneous Bid Component for an Inter-Tie Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid must be either "Hourly" or "Once", if that Inter-Tie Non-Generator Resource is registered as an Hourly Pre-Dispatched Resource for that Trading Hour.	TNGR only.
RTM	32622	The Dispatch Option specified in a Miscellaneous Bid Component for an Inter-Tie Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid must be "Dynamic", if and only if that Inter-Tie Non-Generator Resource is registered as a Dynamic Resource for that Trading Hour.	TNGR only. MFR: Dynamic Resource registry for Non-Generator Resources.
DAM	32517	If there is a Regulation Down Bid Component for the Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid, the Regulation Down Capacity specified in that Regulation Down Bid Component must not be greater than the certified Regulation Down Capacity for that Non-Generator Resource and Trading Hour.	MFR: Regulation Down Capacity certification for NGR. TNGR certified Regulation Down Capacity must be an integer.
DAM	32519	If there is a Regulation Up Bid Component for the Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid, the Regulation Up Capacity specified in that Regulation Up Bid Component must not be greater than the certified Regulation Up Capacity for that Non-Generator Resource and Trading Hour.	MFR: Regulation Up Capacity certification for NGR. TNGR certified Regulation Up Capacity must be an integer.
DAM	32521	If there is a Spinning Reserve Bid Component for the Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid, the Spinning Reserve Capacity specified in that Spinning Reserve Bid Component must not be greater than the certified Spinning Reserve Capacity for that Non-Generator Resource and Trading Hour.	MFR: Spinning Reserve Capacity certification for NGR. TNGR certified Spinning Reserve Capacity must be an

			integer.
DAM	32523	If there is a Non-Spinning Reserve Bid Component for the Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid, the Non-Spinning Reserve Capacity specified in that Non-Spinning Reserve Bid Component must not be greater than the certified Non-Spinning Reserve Capacity for that Non-Generator Resource and Trading Hour.	MFR: Non-Spinning Reserve Capacity certification for NGR. TNGR certified Non-Spinning Reserve Capacity must be an integer.
DAM	32901	The RUC Capacity specified in a Non-Generator Resource RUC Bid Component must be greater than zero and less than the difference between the Maximum NGR Generation and the Maximum NGR Load for that Non-Generator Resource and Trading Hour.	
DAM	32902	The RUC Price specified in a Non-Generator Resource RUC Bid Component must not be less than the registered RUC Bid Floor.	
DAM	32903	The RUC Price specified in a Non-Generator Resource RUC Bid Component must not be greater than the registered RUC Bid Ceiling.	
DAM	32904	The Non-Generator Resource specified in a Bid that has a Non-Generator Resource RUC Bid Component must be certified for RUC for the Bid Period specified in the Bid.	MFR: RUC certification for Non-Generator Resources. EIMPR must not be certified for RUC.
DAM	32615	If there is a Generating Capacity Limit specified in a Miscellaneous Bid Component and there is a RUC Bid Component for a Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid, that Generating Capacity Limit minus the Maximum NGR Load for that Non-Generator Resource and Trading Hour must not be less than the RUC Capacity specified in that RUC Bid Component.	The Generating Capacity Limit must not limit the RUC Capacity Bid.
DAM	32616	If there is a Load Capacity Limit specified in a Miscellaneous Bid Component and there is a RUC Bid Component for a Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid, the Maximum NGR Generation for that Non-Generator Resource and Trading Hour minus that Load Capacity Limit must not be less than the RUC Capacity specified in that RUC Bid Component.	The Load Capacity Limit must not limit the RUC Capacity Bid.
DAM	32617	If there is a Generating Capacity Limit and a Load Capacity Limit specified in a Miscellaneous Bid Component and there is a RUC Bid Component for a Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid, that Generating Capacity Limit minus that Load Capacity Limit must not be less than the RUC Capacity specified in that RUC Bid Component.	The Generating and Load Capacity Limits must not limit the RUC Capacity Bid.

RTM	32618	The Generating Capacity Limit specified in a Miscellaneous Bid Component for a Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid must not be less than the RUC Schedule for that Non-Generator Resource and Trading Hour, if that RUC Schedule is greater than the Day-Ahead Schedule for that Non-Generator Resource and Trading Hour.	The Generating Capacity Limit must not limit RUC Schedules.
RTM	32619	The Load Capacity Limit specified in a Miscellaneous Bid Component for a Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid must not be greater than the RUC Schedule for that Non-Generator Resource and Trading Hour, if that RUC Schedule is greater than the Day-Ahead Schedule for that Non-Generator Resource and Trading Hour.	The Load Capacity Limit must not limit RUC Schedules.
BS	38034	The Base Regulation Down Schedule specified in a Base Schedule for an Inter-Tie Generating Resource, an Inter-Tie Non-Generator Resource, or an Inter-Tie Resource must be a positive integer.	
BS	38035	The Base Regulation Up Schedule specified in a Base Schedule for an Inter-Tie Generating Resource, an Inter-Tie Non-Generator Resource, or an Inter-Tie Resource must be a positive integer.	
BS	38036	The Base Spinning Reserve Schedule specified in a Base Schedule for an Inter-Tie Generating Resource, an Inter-Tie Non-Generator Resource, or an Inter-Tie Resource must be a positive integer.	
BS	38037	The Base Non-Spinning Reserve Schedule specified in a Base Schedule for an Inter-Tie Generating Resource, an Inter-Tie Non-Generator Resource, or an Inter-Tie Resource must be a positive integer.	
BS	38024	The Base Energy Schedule specified in a Base Schedule for an Inter-Tie Generating Resource, an Inter-Tie Non-Generator Resource, or an Inter-Tie Resource must be either zero or a positive integer.	Inter-Tie Resource.
BS	38105	The Non-Generator Resource specified in a Base Schedule that has a Base Schedule Distribution Bid Component must be registered as an Aggregate Non-Generator Resource for the Base Schedule Period specified in the Base Schedule.	MFR: Aggregate Non-Generator Resource registry.
BS	38102	The Distribution Location of a Distribution Pair specified in a Base Schedule Distribution Bid Component must be a registered Location for the Aggregate Location of the Aggregate Resource and the Base Schedule Period specified in the Base Schedule.	MFR: Distribution Location registry for Aggregate Locations of Aggregate ~~Generating~~ Resources.
ALL	42002	If the Non-Generator Resource specified in a Non-Generator Resource Bid is registered as an Inter-Tie Non-Generator Resource for the Bid Period specified in that Bid, the Open Tie Status must be set to "No" for each Trading Hour in that Bid. If the External Bid Status is not set to “M” (Modified) or “CM” (Conditionally Modified), set the	TNGR only. OTS initialization.

		External Bid Status to "MI" (Valid).	
ALL	42003	If the Non-Generator Resource specified in a Non-Generator Resource Bid is registered as an Inter-Tie Non-Generator Resource for the Bid Period specified in that Bid, the Open Tie Status for a Trading Hour in that Bid must be set to "Yes" if any of the following conditions hold for any ITC associated with the registered Inter-Tie Scheduling Point of that Inter-Tie Non-Generator Resource and Trading Hour: a) both import and export OTCs are zero; or b) the Isolated ITC Indicator is "Yes".	TNGR only. OTS setting due to ITC. MFR: ITC registry. MFR: one-to-many ITC to Inter-Tie Scheduling Point association. ETCC: directional OTC publication for each ITC and Trading Hour. ETCC: Isolated ITC Indicator publication for each ITC and Trading Hour.
ALL	42004	If the Non-Generator Resource specified in a Non-Generator Resource Bid is registered as an Inter-Tie Non-Generator Resource for the Bid Period specified in that Bid, the Open Tie Status for a Trading Hour in that Bid must be set to "Yes" if any of the following conditions hold for the ISL on the registered Primary Inter-Tie, and the ISL on the registered Alternate Inter-Tie, if any, for that Inter-Tie Non-Generator Resource and Trading Hour: a) both import and export OTCs are zero; or b) the Isolated ISL Indicator is "Yes".	TNGR only. OTS setting due to ISL. MFR: ISL registry. MFR: Primary and optional Alternate Inter-Tie association with Inter-Tie Resources. ETCC: directional OTC publication for each ISL and Trading Hour. ETCC: Isolated ISL Indicator publication for each ISL and Trading Hour.
DAM	42302	If there is a RUC Capacity specified in a RUC Bid Component for a Trading Hour in a Non-Generator Resource Bid, there is no Energy Bid Component and no Load Self-Schedule Bid Component for that Trading Hour in that Bid, and the Total Generating Self-Schedule Quantity derived from all Generating Self-Schedule Bid Components for that Trading Hour in that Bid is less than that RUC Capacity, an Energy Bid Component must be generated for that Trading Hour in that Bid with an Energy Bid Curve from the higher of the registered Minimum NGR Generation for that Non-Generator Resource and Trading Hour or that Total Generating Self-Schedule Quantity, to that RUC Capacity.	Non-Generator Resource with RUC Bid and no Energy Bid. This rule must fire after Self-Schedule Bid Component Generation (42401-42405).

DAM	42303	If there is a RUC Capacity specified in a RUC Bid Component for a Trading Hour in a Non-Generator Resource Bid, and there is an Energy Bid Component but no Load Self-Schedule Bid Component for that Trading Hour in that Bid, the Energy Bid Curve specified in that Energy Bid Component must be extended upwards, if necessary, so that the Energy Bid Range is not less than that RUC Capacity.	Non-Generator with RUC Bid and Energy Bid. This rule assumes continuous operation across zero.
RTM	42304	If there is no Energy Bid Component and no Load Self-Schedule Bid Component for a Non Generator Resource and a Trading Hour in a Non-Generator Resource Bid, and the RUC Schedule is greater than the Day-Ahead Schedule for that Non-Generator Resource and Trading Hour, and greater than the Total Generating Self Schedule Quantity derived from all Generating Self-Schedule Bid Components in that Bid, an Energy Bid Component must be generated in that Bid with an Energy Bid Curve from the higher of the registered Minimum NGR Generation for that Non-Generator Resource and Trading Hour or that Total Self-Schedule Quantity, to that RUC Schedule.	RUC Schedule greater than Day-Ahead Schedule, without Energy Bid. This rule must fire after Self-Schedule Bid Component Generation (42401-42405).
RTM	42305	If there is an Energy Bid Component and no Load Self-Schedule Bid Component for a Non Generator Resource and a Trading Hour in a Non-Generator Resource Bid, and the RUC Schedule is greater than the Day-Ahead Schedule for that Non-Generator Resource and Trading Hour, the Energy Bid Curve specified in that Energy Bid Component must be extended upwards, if necessary, to that RUC Schedule.	RUC Schedule greater than Day-Ahead Schedule, with Energy Bid. This rule assumes continuous operation across zero.
RTM	42608	If there is no Dispatch Option specified in a Miscellaneous Bid Component for a Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid and that Non-Generator Resource is registered as an Inter-Tie Non-Generator Resource and as an Hourly Pre-Dispatched Resource for that Trading Hour, a Dispatch Option of "Hourly" must be specified in that Miscellaneous Bid Component. If the External Bid Status is not set to “M” (Modified) or “CM” (Conditionally Modified), set the External Bid Status to "MI" (Valid).	TNGR only.
RTM	42609	If there is no Dispatch Option specified in a Miscellaneous Bid Component for a Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid and that Non-Generator Resource is registered as an Inter-Tie Non-Generator Resource and as a Dynamic Resource for that Trading Hour, a Dispatch Option of "Dynamic" must be specified in that Miscellaneous Bid Component. If the External Bid Status is not set to “M” (Modified) or “CM” (Conditionally Modified), set the External Bid Status to "MI" (Valid).	TNGR only.
RTM	42610	If there is no Dispatch Option specified in a Miscellaneous Bid Component for a Non-Generator Resource and a Trading Hour in a Non-Generator Resource Bid and that Non-Generator Resource is registered as an Inter-Tie Non-Generator Resource, a Dispatch Option of "15min" must be specified in that Miscellaneous Bid Component. If the External Bid Status is not set to “M” (Modified) or “CM” (Conditionally Modified), set the External Bid Status to "MI" (Valid).	TNGR only.

RTM	52001	If there is no Non-Generator Resource Bid for a Non-Generator Resource and the Active Hour, but there is a Day-Ahead Schedule, a RUC Schedule, or a Day-Ahead Ancillary Service Award for that Non-Generator Resource and Active Hour, a Non-Generator Resource Bid must be generated for that Non-Generator Resource and Active Hour. Any Day-Ahead Schedule and Ancillary Service Awards for that Non-Generator Resource and Active Hour must be transferred into this Bid.	RTM Bid Generation and transfer of DA Schedule and AS Awards.
DBS	58001	If the ISO Demand Forecast Indicator is set for an EIM Entity, the EIM Entity BSC for that EIM Entity must be notified after the Day-Ahead Base Schedule Cutoff Time for each Base Schedule Period in the Active Day of the algebraic difference between a) the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Generating Resources in each EIM BAA for that EIM Entity, plus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Import Resources, Inter-Tie Generating Resources, and Inter-Tie Non-Generator Resources at Inter-Ties with each EIM BAA for that EIM Entity, minus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Export Resources at Inter-Ties with each EIM BAA for that EIM Entity, and b) the latest Demand Forecast for that EIM BAA obtained by the Day-Ahead Demand Forecast Cutoff Time.	MFR: ISO Demand Forecast Indicator for EIM Entities. MFR: Inter-Tie registry with From-To BAA specification. ALFS: Hourly demand forecast for EIM BAAs.
RBS	58003	If the ISO Demand Forecast Indicator is set for an EIM Entity, the EIM Entity BSC for that EIM Entity must be notified after the Real-Time Base Schedule First Cutoff Time for each Base Schedule Period in the Active Hour of the algebraic difference between a) the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Generating Resources in each EIM BAA for that EIM Entity, plus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Import Resources, Inter-Tie Generating Resources, and Inter-Tie Non-Generator Resources at Inter-Ties with each EIM BAA for that EIM Entity, minus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Export Resources at Inter-Ties with each EIM BAA for that EIM Entity, and b) the latest Demand Forecast for that EIM BAA obtained by the Real-Time Demand Forecast First Cutoff Time.	
RBS	58005	If the ISO Demand Forecast Indicator is set for an EIM Entity, the EIM Entity BSC for that EIM Entity must be notified after the Real-Time Base Schedule Second Cutoff Time for each Base Schedule Period in the Active Hour of the algebraic difference between a) the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Generating Resources in each EIM BAA for that EIM Entity, plus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Import Resources, Inter-Tie Generating Resources, and Inter-Tie Non-Generator Resources at Inter-Ties with each EIM BAA for that EIM Entity, minus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Export Resources at Inter-Ties with each EIM BAA for that EIM Entity, and b) the latest Demand Forecast for that EIM BAA obtained by	

		the Real-Time Demand Forecast Second Cutoff Time.	
RBS	58007	If the ISO Demand Forecast Indicator is set for an EIM Entity, the EIM Entity BSC for that EIM Entity must be notified after the Real-Time Base Schedule Third Cutoff Time for each Base Schedule Period in the Active Hour of the algebraic difference between a) the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Generating Resources in each EIM BAA for that EIM Entity, plus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Import Resources, Inter-Tie Generating Resources, and Inter-Tie Non-Generator Resources at Inter-Ties with each EIM BAA for that EIM Entity, minus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Export Resources at Inter-Ties with each EIM BAA for that EIM Entity, and b) the latest Demand Forecast for that EIM BAA obtained by the Real-Time Demand Forecast Third Cutoff Time.	
DAM	62001	If there is a change in the import or export OTC or in the Isolated ITC Indicator for a Trading Hour in the Active Day and an ITC, and the current time is before the ETCC Cutoff Time for that Active Day, the Bid Processing rules for Open Tie Status (42002-42004) must refire for that Trading Hour in all Inter-Tie Non-Generator Resource Bids for that Active Day for Inter-Tie Non-Generator Resources at that Inter-Tie Scheduling Point.	TNGR only. Open Tie enforcement.
DAM	62002	If there is an increase in the import or export OTC or the Isolated ITC Indicator is changed from "Yes" to "No" for a Trading Hour in the Active Day and an ITC, and the current time is after the ETCC Cutoff Time for that Active Day, the Bid Processing rules for Open Tie Status (42002-42004) must refire for that Trading Hour in all Inter-Tie Non-Generator Resource Bids for that Active Day for Inter-Tie Non-Generator Resources at that Inter-Tie Scheduling Point.	TNGR only. Open Tie enforcement.
RTM	62003	If there is a change in the import or export OTC or in the Isolated ITC Indicator for the Active Hour and an ITC, the Bid Processing rules for Open Tie Status (42002-42004) must refire for all Inter-Tie Non-Generator Resource Bids for that Active Hour for Inter-Tie Non-Generator Resources at that Inter-Tie Scheduling Point.	TNGR only. Open Tie enforcement.
DAM	62004	If there is a change in the import or export OTC or in the Isolated ISL Indicator for a Trading Hour in the Active Day and an ISL, and the current time is before the ETCC Cutoff Time for that Active Day, the Bid Processing rules for Open Tie Status (42002-42004) must refire for that Trading Hour in all Inter-Tie Non-Generator Resource Bids for that Active Day for Inter-Tie Non-Generator Resources with a registered Primary or Alternate Inter-Tie with that ISL.	TNGR only. Open Tie enforcement.
DAM	62005	If there is an increase in the import or export OTC or the Isolated ISL Indicator is changed from "Yes" to "No" for a Trading Hour in the Active Day and an ISL, and the current time is after the ETCC Cutoff Time for that Active Day, the Bid Processing rules for Open Tie Status (42002-42004) must refire for that Trading Hour in all Inter-Tie Non-Generator Resource Bids for that	TNGR only. Open Tie enforcement.

		Active Day for Inter-Tie Non-Generator Resources with a registered Primary or Alternate Inter-Tie with that ISL.	
RTM	62006	If there is a change in the import or export OTC or in the Isolated ISL Indicator for the Active Hour and an ISL, the Bid Processing rules for Open Tie Status (42002-42004) must refire for all Inter-Tie Non-Generator Resource Bids for that Active Hour for Inter-Tie Non-Generator Resources with a registered Primary or Alternate Inter-Tie with that ISL.	TNGR only. Open Tie enforcement.
DBS	68001	If a Base Schedule is submitted after the Day-Ahead Demand Forecast Cutoff Time for a Resource and a Base Schedule Period in the Active Day, and the ISO Demand Forecast Indicator is set for the EIM Entity of the EIM BAA of that Resource, the EIM Entity BSC for that EIM Entity must be notified for that Base Schedule Period of the algebraic difference between a) the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Generating Resources in that EIM BAA, plus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Import Resources, Inter-Tie Generating Resources, and Inter-Tie Non-Generator Resources at Inter-Ties with that EIM BAA, minus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Export Resources at Inter-Ties with that EIM BAA, and b) the latest Demand Forecast for that EIM BAA obtained by the Day-Ahead Demand Forecast Cutoff Time.	
RBS	68002	If a Base Schedule is submitted after the Real-Time Demand Forecast First Cutoff Time and before the Real-Time Base Schedule First Cutoff Time for a Resource and a Base Schedule Period in the Active Hour, and the ISO Demand Forecast Indicator is set for the EIM Entity of the EIM BAA of that Resource, the EIM Entity BSC for that EIM Entity must be notified for that Base Schedule Period of the algebraic difference between a) the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Generating Resources in that EIM BAA, plus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Import Resources, Inter-Tie Generating Resources, and Inter-Tie Non-Generator Resources at Inter-Ties with that EIM BAA, minus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Export Resources at Inter-Ties with that EIM BAA, and b) the latest Demand Forecast for that EIM BAA obtained by the Real-Time Demand Forecast First Cutoff Time.	
RBS	68003	If a Base Schedule is submitted after the Real-Time Demand Forecast Second Cutoff Time and before the Real-Time Base Schedule Second Cutoff Time for a Resource and a Base Schedule Period in the Active Hour, and the ISO Demand Forecast Indicator is set for the EIM Entity of the EIM BAA of that Resource, the EIM Entity BSC for that EIM Entity must be notified for that Base Schedule Period of the algebraic difference between a) the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Generating Resources in that EIM BAA, plus the sum of the Base Energy Schedules from all Base	

		Schedules for that Base Schedule Period from all Import Resources, Inter-Tie Generating Resources, and Inter-Tie Non-Generator Resources at Inter-Ties with that EIM BAA, minus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Export Resources at Inter-Ties with that EIM BAA, and b) the latest Demand Forecast for that EIM BAA obtained by the Real-Time Demand Forecast Second Cutoff Time.	
RBS	68004	If a Base Schedule is submitted after the Real-Time Demand Forecast Third Cutoff Time for a Resource and a Base Schedule Period in the Active Hour, and the ISO Demand Forecast Indicator is set for the EIM Entity of the EIM BAA of that Resource, the EIM Entity BSC for that EIM Entity must be notified for that Base Schedule Period of the algebraic difference between a) the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Generating Resources in that EIM BAA, plus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Import Resources, Inter-Tie Generating Resources, and Inter-Tie Non-Generator Resources at Inter-Ties with that EIM BAA, minus the sum of the Base Energy Schedules from all Base Schedules for that Base Schedule Period from all Export Resources at Inter-Ties with that EIM BAA, and b) the latest Demand Forecast for that EIM BAA obtained by the Real-Time Demand Forecast Third Cutoff Time.	
DAM	72017	If there is a RUC Price specified in the RUC Bid Component in a Multi-Period Bid for a Non-Generator Resource and a Trading Hour in a Trading Day after the Active Day in the Day-Ahead Market Horizon, the Source Bid for that Multi-Period Bid, if any, is a Market Accepted Bid, and the Market Fill Option is "No" or that Non-Generator Resource is included in the Multi-Day Bid Resource Exception List, the RUC Price specified in that RUC Bid Component must be replaced with the Default RUC Bid Price.	RUC Bid Price replacement with Market Fill Option "No" or Resource included in the Multi-Day Bid Resource Exception List.

New and revised rules 9.9.2 are as follows:

Market	Business Rule ID	Description	Comments
RTM	10066	The configurable Ramp Rate Bid Option must be initialized to "ON".	
ALL	RAMP	ALL RAMP RULE re-implemented.	
RTM	41501	If there is an Energy Bid Component or a Self-Schedule Bid Component, and no Regulation Down Bid Component for an Online Generating Resource State in a Generating Resource Bid, but there is a Day-Ahead Regulation Award for the Generating Resource and Trading Hour specified in that Bid, that Generating Resource is certified for Regulation Down for that Online Generating Resource State, and is not registered as a TG for that Trading Hour, and is not registered as both a LFR and a ULR for that Trading Hour, and the RA Flag for that Generating Resource and Trading Hour is "No" if that Generating Resource is registered as a ULR for that Trading Hour, a Regulation Down Bid Component must be generated, if necessary, for that Online Generating Resource State in that Bid with a Regulation Down Capacity equal to the certified Regulation Down Capacity for that Online Generating Resource State for that Generating Resource and Trading Hour, minus any Day-Ahead Regulation Down Award for that Generating Resource and Trading Hour, minus the Regulation Down Self-Provision Capacity specified in the Regulation Down Self-Provision Bid Component, if any, for that Online Generating Resource State in that Bid, and with a Regulation Down Price equal to the Regulation Down Price specified in a Regulation Down Bid Component, if any, for another Online Generating Resource State in that Bid, or the Default Ancillary Service Bid Price otherwise.	MFR: ULR registry for Generating Resources. Must-Offer RD without RD Bid not limited to RA Resources. RA ULR and LFR ULR are exempted.
RTM	41502	If there is a Regulation Down Bid Component for an Online Generating Resource State in a Generating Resource Bid, the Generating Resource specified in that Bid is not registered as a TG for that Trading Hour, and is not registered as both a LFR and a ULR for the Trading Hour specified in that Bid, and the RA Flag for that Generating Resource and Trading Hour is set to "No" if that Generating Resource is registered as a ULR for that Trading Hour, the Regulation Down Capacity specified in that Regulation Down Bid Component must be increased, if necessary, to the certified Regulation Down Capacity for that Online Generating Resource State of that Generating Resource and Trading Hour, minus the Day-Ahead Regulation Down Award, if any, for that Generating Resource and Trading Hour, minus the Regulation Down Self-Provision Capacity specified in the Regulation Down Self-Provision Bid Component, if any, for that Online Generating Resource State in that Bid.	Must-Offer RD with RD Bid not limited to RA Resources. RA ULR and LFR ULR are exempted.
RTM	41503	If there is an Energy Bid Component or a Self-Schedule Bid Component, and no Regulation Up Bid Component for an Online Generating Resource State in a Generating Resource Bid, but there is a Day-Ahead Regulation Award for the Generating Resource and Trading Hour	Must-Offer RU without RU Bid not limited to RA Resources. RA ULR and LFR ULR are

		specified in that Bid, that Generating Resource is certified for Regulation Up for that Online Generating Resource State and is not registered as a TG for that Trading Hour, and is not registered as both a LFR and a ULR for that Trading Hour, and the RA Flag for that Generating Resource and Trading Hour is "No" if that Generating Resource is registered as a ULR for that Trading Hour, a Regulation Up Bid Component must be generated, if necessary, for that Online Generating Resource State in that Bid with a Regulation Up Capacity equal to the certified Regulation Up Capacity for that Online Generating Resource State for that Generating Resource and Trading Hour, minus any Day-Ahead Regulation Up Award for that Generating Resource and Trading Hour, minus the Regulation Up Self-Provision Capacity specified in the Regulation Up Self-Provision Bid Component, if any, for that Online Generating Resource State in that Bid, and with a Regulation Up Price equal to the Regulation Up Price specified in a Regulation Up Bid Component, if any, for another Online Generating Resource State in that Bid, or the Default Ancillary Service Bid Price otherwise.	exempted.
RTM	41504	If there is a Regulation Up Bid Component for an Online Generating Resource State in a Generating Resource Bid, the Generating Resource specified in that Bid is not registered as a TG for that Trading Hour, and is not registered as both a LFR and a ULR for the Trading Hour specified in that Bid, and the RA Flag for that Generating Resource and Trading Hour is set to "No" if that Generating Resource is registered as a ULR for that Trading Hour, the Regulation Up Capacity specified in that Regulation Up Bid Component must be increased, if necessary, to the certified Regulation Up Capacity for that Online Generating Resource State of that Generating Resource and Trading Hour, minus the Day-Ahead Regulation Up Award, if any, for that Generating Resource and Trading Hour, minus the Regulation Up Self-Provision Capacity specified in the Regulation Up Self-Provision Bid Component, if any, for that Online Generating Resource State in that Bid.	Must-Offer RU with RU Bid not limited to RA Resources. RA ULR and LFR ULR are exempted.
RTM	41505	If there is an Energy Bid Component but no Spinning Reserve Bid Component for an Online Generating Resource State in a Generating Resource Bid, and the Generating Resource specified in that Bid is certified for Spinning Reserve for that Online Generating Resource State and the Trading Hour specified in that Bid, and is not registered as a TG for that Trading Hour, a Spinning Reserve Bid Component must be generated, if necessary, for that Online Generating Resource State in that Bid with a Spinning Reserve Capacity equal to the certified Spinning Reserve Capacity for that Online Generating Resource State of that Generating Resource and Trading Hour, minus the Day-Ahead Spinning Reserve Award, if any, for that Generating Resource and Trading Hour, minus the Spinning Reserve Self-Provision Capacity specified in the Spinning Reserve Self-Provision Bid Component, if any, for that Online Generating Resource State in that Bid, and with a Spinning Reserve Price equal to the Spinning Reserve Price specified in a Spinning Reserve Bid Component, if any, for another Online Generating Resource State in that Bid, or the Default Ancillary Service Bid Price otherwise.	Must-Offer SR without SR Bid not limited to RA Resources.

RTM	41506	The Spinning Reserve Capacity specified in the Spinning Reserve Bid Component for an Online Generating Resource State in a Generating Resource Bid must be increased, if necessary, to the certified Spinning Reserve Capacity for that Online Generating Resource State of the Generating Resource and Trading Hour specified in that Bid, minus the Day-Ahead Spinning Reserve Award, if any, for that Generating Resource and Trading Hour, minus the Spinning Reserve Self-Provision Capacity specified in the Spinning Reserve Self-Provision Bid Component, if any, for that Online Generating Resource State in that Bid, if the Generating Resource specified in that Bid is not registered as a TG for that Trading Hour.	Must-Offer SR with SR Bid not limited to RA Resources.
RTM	41507	If there is an Energy Bid Component but no Non-Spinning Reserve Bid Component for an Online Generating Resource State in a Generating Resource Bid, and the Generating Resource specified in that Bid is certified for Non-Spinning Reserve for that Online Generating Resource State in RTM and the Trading Hour specified in that Bid, and is not registered as a TG for that Trading Hour, a Non-Spinning Reserve Bid Component must be generated, if necessary, for that Online Generating Resource State in that Bid with a Non-Spinning Reserve Capacity equal to the certified Non-Spinning Reserve Capacity for that Online Generating Resource State of that Generating Resource and Trading Hour, minus the Day-Ahead Non-Spinning Reserve Award, if any, for that Generating Resource and Trading Hour, minus the Non-Spinning Reserve Self-Provision Capacity specified in the Non-Spinning Reserve Self-Provision Bid Component, if any, for that Online Generating Resource State in that Bid, and with a Non-Spinning Reserve Price equal to the Non-Spinning Reserve Price specified in a Non-Spinning Reserve Bid Component, if any, for another Online Generating Resource State in that Bid, or the Default Ancillary Service Bid Price otherwise.	Must-Offer NS without NS Bid not limited to RA Resources.
RTM	41508	The Non-Spinning Reserve Capacity specified in the Non-Spinning Reserve Bid Component for an Online Generating Resource State in a Generating Resource Bid must be increased, if necessary, to the certified Non-Spinning Reserve Capacity for that Online Generating Resource State of the Generating Resource and Trading Hour specified in that Bid, minus the Day-Ahead Non-Spinning Reserve Award, if any, for that Generating Resource and Trading Hour, minus the Non-Spinning Reserve Self-Provision Capacity specified in the Non-Spinning Reserve Self-Provision Bid Component, if any, for that Online Generating Resource State in that Bid, if the Generating Resource specified in that Bid is not registered as a TG for that Trading Hour.	Must-Offer NS with NS Bid not limited to RA Resources.
ALL	41608	If the Ramp Rate Bid Option is set to OFF, the Ramp Rate Bid Components for all Online Generating Resource States in all Generating Resource Bids must be erased. If the External Bid Status is not set to “M” (Modified) or “CM” (Conditionally Modified), set the External Bid Status to "MI" (Valid).	
ALL	42611	If the Ramp Rate Bid Option is set to OFF, the Ramp Rate Bid Components for all Non-Generator Resource Bids must be erased. If the External Bid Status is not set to “M” (Modified) or “CM” (Conditionally Modified), set the	

		External Bid Status to "MI" (Valid).	

The full set of the SIBR Rules can be seen under SIBR user documentation under the Release Planning for Winter 2017 release/ in SIBR user documentation
http://www.caiso.com/informed/Pages/ReleasePlanning/Default.aspx

END Document