

Scheduling Infrastructure & Business Rules (SIBR) Advanced Bid Submission & Validation – Part 3

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This is step 3 in a 3-part SIBR training series



Introduction to SIBR –
Basic Concepts



SIBR Fundamentals –
General Bidding



Advanced SIBR Bidding
Concepts for EDAM –
Transfer System
Resources

What you will learn

By completing this training, you will gain essential skills and knowledge to prepare for EDAM participation. You will be able to:

- Explain how to submit Transfer System Resource Bids, including Transient TSRs.
- Explain the Contract Reference Number (CRN).
- Review the results of an energy bid.



Housekeeping



REMAIN MUTED

Keep yourself muted to minimize background noise



ASKING QUESTIONS

Unmute to ask verbal questions or write in the chat pod



RAISING HAND

Raise your hand using WebEx interactivity tools

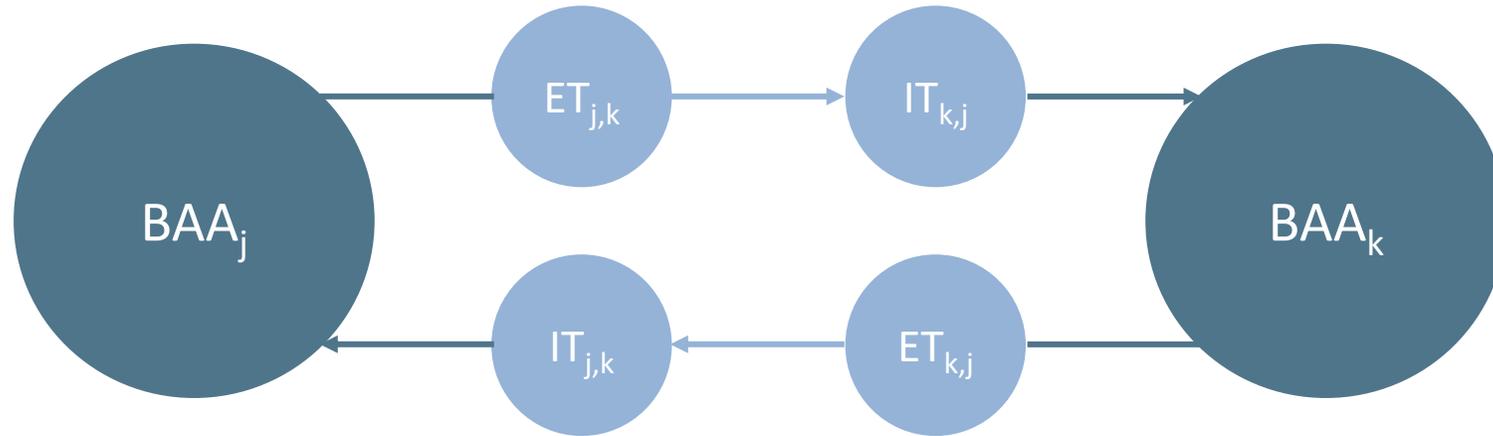
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Bilateral Energy Transactions

TRANSFER SYSTEM RESOURCE (TSR) BASICS



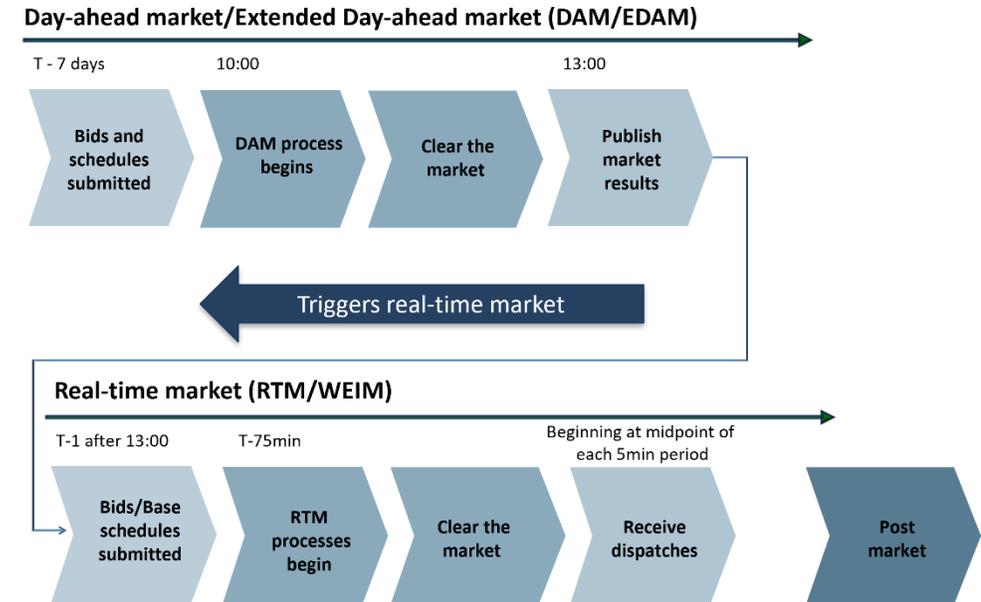
What is a Transfer System Resource (TSR)?



Logical resources used to model the energy and capacity export from one Balancing Authority Area (BAA) to the other BAA, constrained by the power balance constraint of that BAA.

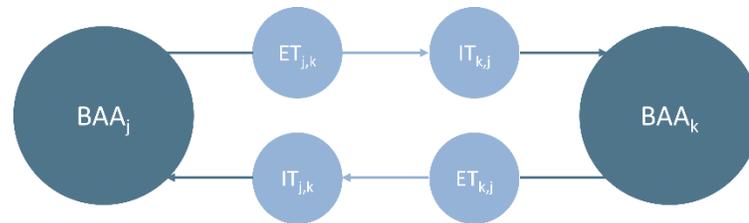
Transfer System Resource (TSR)

- Bid into the DAM
- All DAM schedules and awards roll over to RTM
- Four types of TSRs, but only TSR Type 1 (Bilaterals) are rebid in RTM
- DA TSR schedules and awards are not optimized in the RTM
 - May be reduced for derates



The EDAM entity is responsible for registering all the TSRs in their BAA

- Paired TSRs must have the same TSR type on each side of transfer

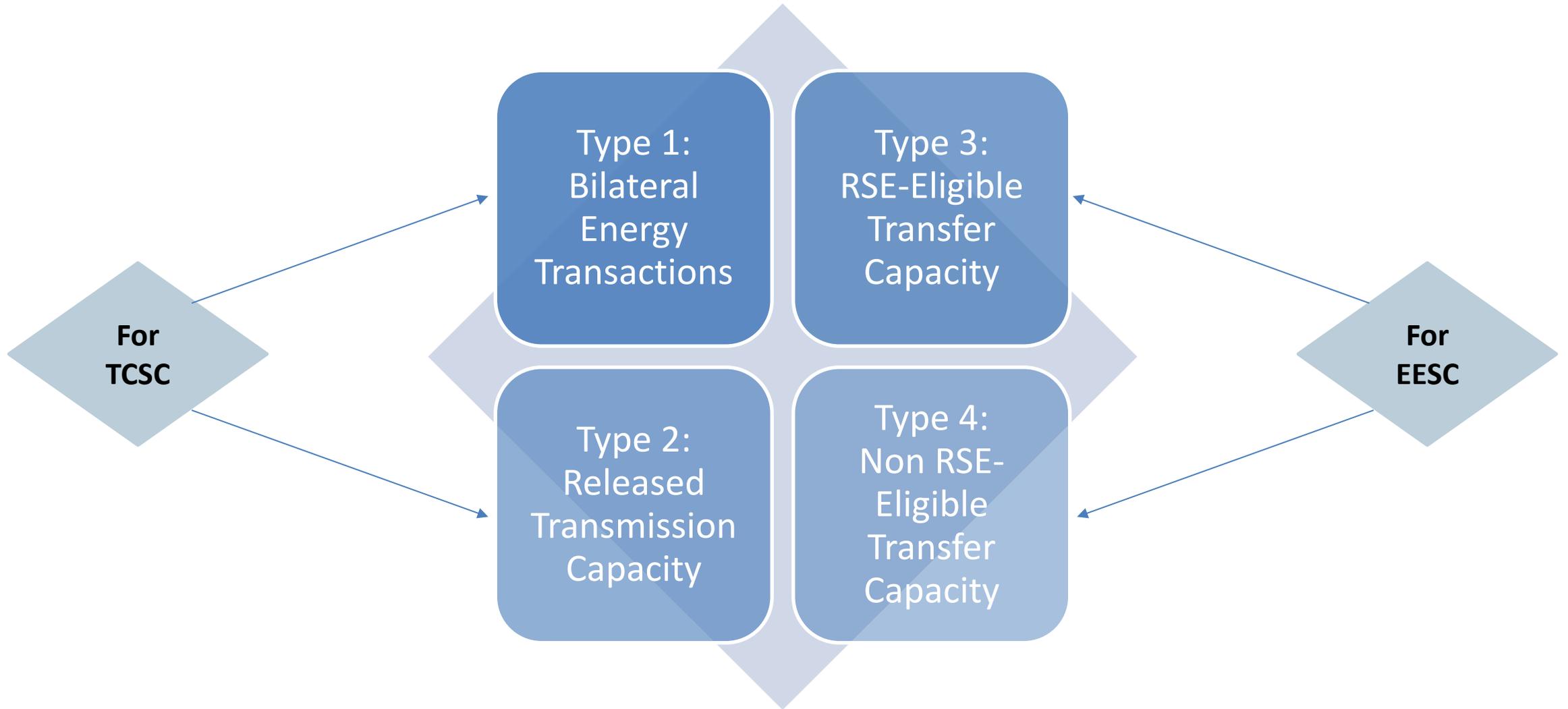


- Each TSR can be associated with either customer type:

Transmission Customer
Scheduling Coordinator
TCSC

EDAM Entity
Scheduling Coordinator
EESC

Types of Transfer System Resources (TSRs)



TSR TYPE 1

TSR Type 1: Bilateral Energy Transactions

Type 1 TSRs are for EDAM SCs (transmission customers) exercising physical and financial transmission rights on each side of a transfer.

Registration

- ✓ EDAM Entity on each side must register TSR for relevant EDAM SC in Master File.
- ✓ Or, EDAM SC may define TSR in SIBR for the trading day.

Self-Scheduling Rights

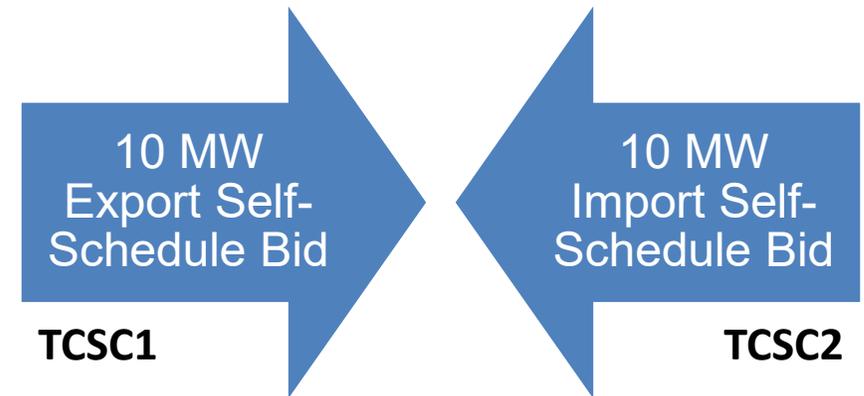
- EDAM SC may submit self-schedule bid under a unique Contract Reference Number (CRN) on respective TSR.
- All CRNs must be registered in Master File by relevant EDAM Entity.
- Self-schedule bids must be balanced and within CRN entitlement.
- Retains financial rights even if physical rights are lost.
- Self-schedule bids are RSE-eligible.

Using TSR Type 1: Bilateral Energy Transactions

Requirements

- TSR Type 1 is for self-schedule bids (not economic bids).
- Transfer revenue goes to EDAM Entity.
- Self-schedule bids must be balanced.
- EDAM SCs on both sides of the transaction have submitted matching self-schedule bids.

Example



SIBR Validation:

- ✓ Matching Intertie point, trade date/ trade hour
- ✓ Correct CRNs used
- ✓ MWs within CRN entitlement

TSR Definition and Validation

Definition and Matching

- Once an EDAM Entity submits a list of EDAM SCs and associated transmission right capacities by Contract Reference Number (CRN) at a transfer location, those EDAM SCs may define Type 1 Transfer System Resources (TSRs) for the Trading Day.
- When the corresponding EDAM SC submits a matching TSR, SIBR cross-validates the TSR pair and finalizes the TSR definition.

Bidding Requirements and Adjustments

- A Type 1 TSR bid must include an energy self-schedule that does not exceed the TSR's Maximum Capacity.
- If the EDAM Entity derates the CRN capacity before 9:00 am, SIBR will automatically reduce the TSR self-schedule bid to reflect the updated capacity.
- SIBR may also adjust the TSR self-schedule bid to match a lower value submitted for the matching TSR.

Rebidding of Type 1 TSRs in the Real-Time Market

EDAM SC Activity

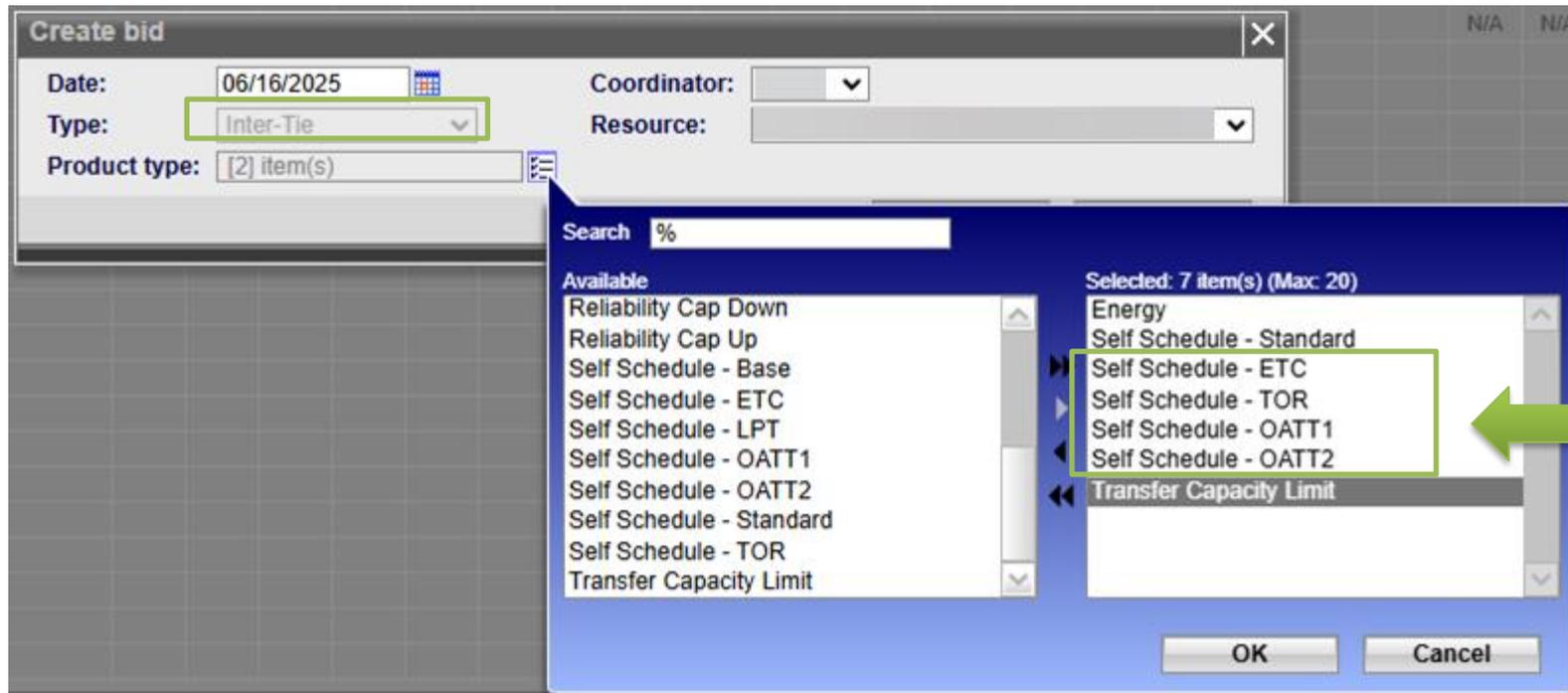
- EDAM SC must rebid Type 1 TSRs in real-time to self-schedule under the CRN, unless the CRN has expired after day-ahead.
- If the CRN has expired or is “NONE,” a price-taker self-schedule bid is required.
- EDAM SCs may adjust real-time self-schedules from the day-ahead version.
- They may increase bids to use reserved (but unused) rights from day-ahead, up to the Maximum Capacity.



SIBR Validation

- CRNs are validated for entitlement (not balancing) in real-time; SIBR sets the Priority Indicator accordingly.
- SIBR ensures that the total of all Type 1 TSR self-schedule bids plus any released capacity does not exceed the CRN capacity set by the EDAM Entity for that SC and transfer location.

SIBR: Create Bid – TSR Type 1



- These bid types are for use with CRN (TSR Type 1)
- ETC/TOR are existing types
 - OATT1/OATT2 are new

SIBR: Create Bid – TSR Type 1

Actions:

- Select New row
- Use Drop down
- Available CRN List
- Self-Schedule MW
- 1 or more hours

California ISO

Market: Day Ahead Date: 06/23/2025 Coordinator: Apply Reset

Bid summary

Status	Resource type	Resource ID	State	Daily	Hourly	Energy	Energy Adj	STD	ETC	ETP	TOR	TOP	RMT	BAS	LOF	LPT	LSG	OATT1	OATT2
	Inter-Tie						N/A			N/A		N/A	N/A		N/A		N/A		

Energy Adj Daily Hourly SS-STD SS-ETC **SS-ETP** SS-TOR SS-TOP SS-RMT SS-BAS SS-LOF SS-LPT SS-LSG SS-OATT1 SS-OATT2

Hour	Resource Name	Self schedule contract(s)	Block bid hours
01h			
02h			
03h			
04h			
05h			
06h			

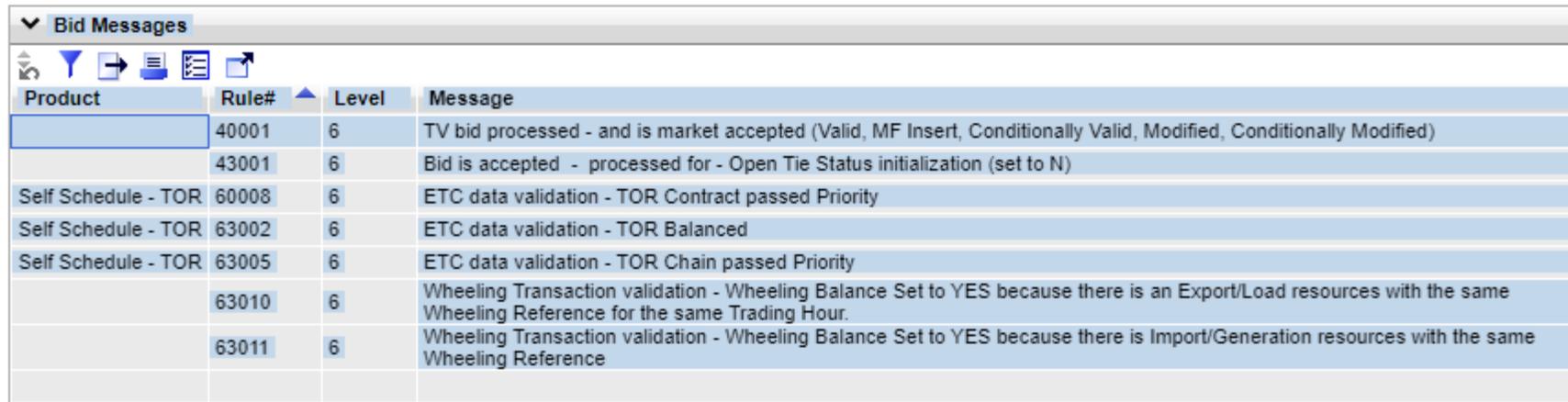
Obligation(s)

New row Update Cancel

Self schedule quantity	Contract
	[None]
	[None]

Sample Bid Messages based on SIBR Rules

- This screenshot shows an example of the types of messages you will see based on SIBR rules. There will be new rules for TSR CRNs (TSR Type 1) that are like the ones shown below.
- Once updated, the new rules will be added to the SIBR rules document posted on caiso.com.



The screenshot displays a table titled "Bid Messages" with a dropdown arrow on the left. Below the title are several icons: a funnel, a right-pointing arrow, a document with a list, a document with a checkmark, and a document with a right-pointing arrow. The table has four columns: "Product", "Rule#", "Level", and "Message". The "Product" column contains "Self Schedule - TOR" for several rows, while others are blank. The "Rule#" column contains numbers like 40001, 43001, 60008, 63002, 63005, 63010, and 63011. The "Level" column consistently shows the number 6. The "Message" column contains detailed text for each rule, such as "TV bid processed - and is market accepted (Valid, MF Insert, Conditionally Valid, Modified, Conditionally Modified)" and "ETC data validation - TOR Contract passed Priority".

Product	Rule#	Level	Message
	40001	6	TV bid processed - and is market accepted (Valid, MF Insert, Conditionally Valid, Modified, Conditionally Modified)
	43001	6	Bid is accepted - processed for - Open Tie Status initialization (set to N)
Self Schedule - TOR	60008	6	ETC data validation - TOR Contract passed Priority
Self Schedule - TOR	63002	6	ETC data validation - TOR Balanced
Self Schedule - TOR	63005	6	ETC data validation - TOR Chain passed Priority
	63010	6	Wheeling Transaction validation - Wheeling Balance Set to YES because there is an Export/Load resources with the same Wheeling Reference for the same Trading Hour.
	63011	6	Wheeling Transaction validation - Wheeling Balance Set to YES because there is Import/Generation resources with the same Wheeling Reference

TSR TYPE 2

TSR Type 2: Released Transmission Capacity

Type 2 TSRs are for capacity from EDAM SCs (transmission customers) that release their transmission rights on each side of a transfer.

Registration

- ✓ EDAM Entity on each side of transfer has registered TSR in Master File for relevant EDAM SC.

SIBR-Defined

- ✓ Automatically generated by SIBR based on released capacity.

Notes regarding usage

- EDAM SC releases rights on the TSR.
 - EDAM SC may be same or different for both TSRs but released transfer capacities must be equal.
 - EDAM SCs eligible to receive 50% of transfer revenue.

Using TSR Type 2: Released Transmission Capacity

- TSR Type 2 offers transfer capacity intended to maximize the system's economic potential.
- Transfer revenue goes to EDAM SC.
- **Bid Requirements:**
 - Only accepted for TSRs registered in the Master File.
 - Must specify a Capacity Limit not exceeding the TSR's Maximum Capacity.
 - Capacity is released to EDAM for optimal scheduling.

SIBR-Defined Type 2 TSRs must be submitted by 9:00 am

EDAM SCs submit the MW amount of released capacity they want to make available for Type 2 before 9:00 am.

API submission details include:

- SC_ID: Registered EDAM SC
- TRANSFER_LOCATION: Registered transfer location
- TRADING_DAY: Up to 7 days in advance
- TRADING_HOUR: May vary by hour
- CRN_ID: Registered Contract Reference Number
- CRN_CAPACITY: Total transmission right for the CRN, usable for Type 1 or releasable for Type 2



SIBR Matching and TSR Generation

- **At 9:00 am, SIBR:**
 - Matches released capacity across the intertie.
 - Defines Type 2 TSR pairs for each Trading Hour.
 - Notifies the relevant EDAM SCs and EDAM Entities—no further action is required from EDAM SCs.
 - Matched pairs will display in SIBR.
- **Revenue Eligibility:**
 - EDAM SCs are eligible to receive 50% of the transfer revenue (unless otherwise specified in the Master File).

SIBR: Create Bid – TSR Type 2, TSR Type 3, TSR Type 4

Create bid

Date: 06/16/2025
Type: Inter-Tie
Product type: [2] item(s)
Coordinator: [v]
Resource: 4_000000

Search: %

Available:

- Reliability Cap Down
- Reliability Cap Up
- Self Schedule - Base
- Self Schedule - ETC
- Self Schedule - LPT
- Self Schedule - OATT1
- Self Schedule - OATT2
- Self Schedule - Standard
- Self Schedule - TOR
- Transfer Capacity Limit

Selected: 7 item(s) (Max: 20)

- Energy
- Self Schedule - Standard
- Self Schedule - ETC
- Self Schedule - TOR
- Self Schedule - OATT1
- Self Schedule - OATT2
- Transfer Capacity Limit

OK Cancel

Release transfer capacity
(TSR Type 2/ TSR Type 3/TSR Type 4)

TRANSIENT TSR

Transient TSRs

- Type 1 and Type 2 TSRs that are not registered in the Master File, rather they are defined in SIBR for a specific trade date.
- TSR definition in SIBR only persists for the Trading Day, and must be redefined for every day.

Transient TSRs Submission Process

1

An SC may submit in SIBR a TSR definition for a TSR registered in Master File to indicate a derate on the registered maximum capacity

2

An EESC may further restrict release capacity by submitting a TCSC list that defines transfer location, CRN being used, the SC and new max capacity. Derates are only accepted before 9:00am, and cross checked to ensure max capacity is not exceeded.

3

Important note: you cannot submit Transient Type 2 bids.
Transient Type 2 bids are generated based on released capacity submission and process to auto-match those pairs from the Transient Type 1 submission.

Transient Transfer System Resource (TSR) Example

- From the Bids tab, click the Create Bid icon.

The screenshot displays the 'Bids' tab interface. At the top, there are navigation tabs: 'Bids', 'Trades', 'Convergence Bids', 'Energy Forecast', 'Export Priority Report', 'Ind Viewer', and 'OTC Viewer'. Below these tabs, there are input fields for 'Market: Day Ahead', 'Date: 01/31/2026', and 'Coordinator: OPGE', along with 'Apply' and 'Reset' buttons. A 'Bid summary' section is highlighted with a green box, containing a toolbar with various icons. The 'Create bid' icon, which is a starburst, is being clicked by a mouse cursor. Below the toolbar, a table header is visible with columns: 'Status', 'Resource type', 'Resource ID', 'State', 'Daily', 'Hourly', 'Energy', 'Energy Adj', 'STD', 'ETC', 'ETP', 'TOR', and 'TOP'.

Transient Transfer System Resource (TSR) Example

- Set a date for a future trade date.

Create bid

Date: 01/31/2026

Coordinator: 0PGE ▾

Type: Inter-Tie Transaction ▾

Transaction id: [None] ▾

Product type: [2] item(s)

Transaction

Scheduling point: ▾

Primary tie: ▾

Alternate tie: [None] ▾

PSE identifier:

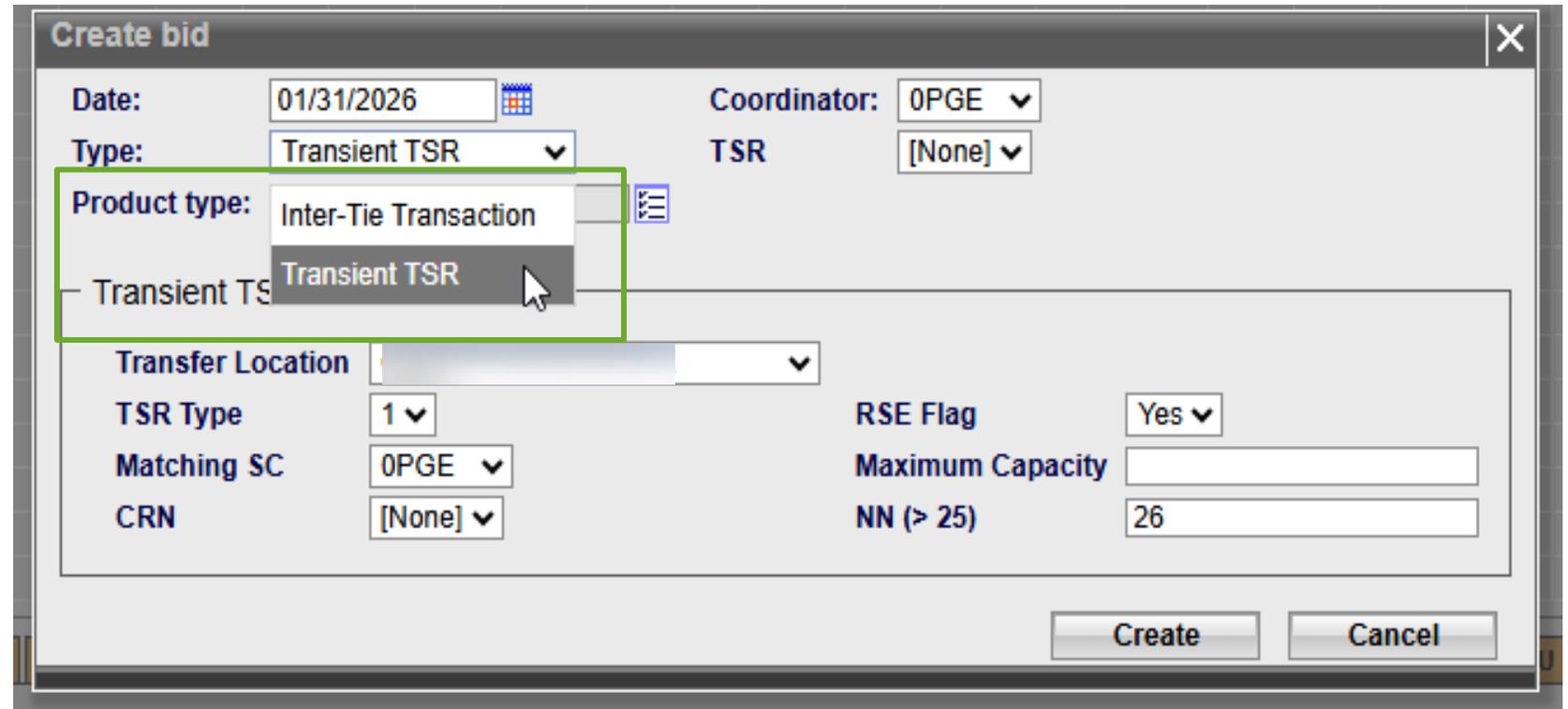
Direction: Import ▾

Energy type: Firm ▾

Create **Cancel**

Transient Transfer System Resource (TSR) Example

- Select your Type as Transient TSR from the drop down.



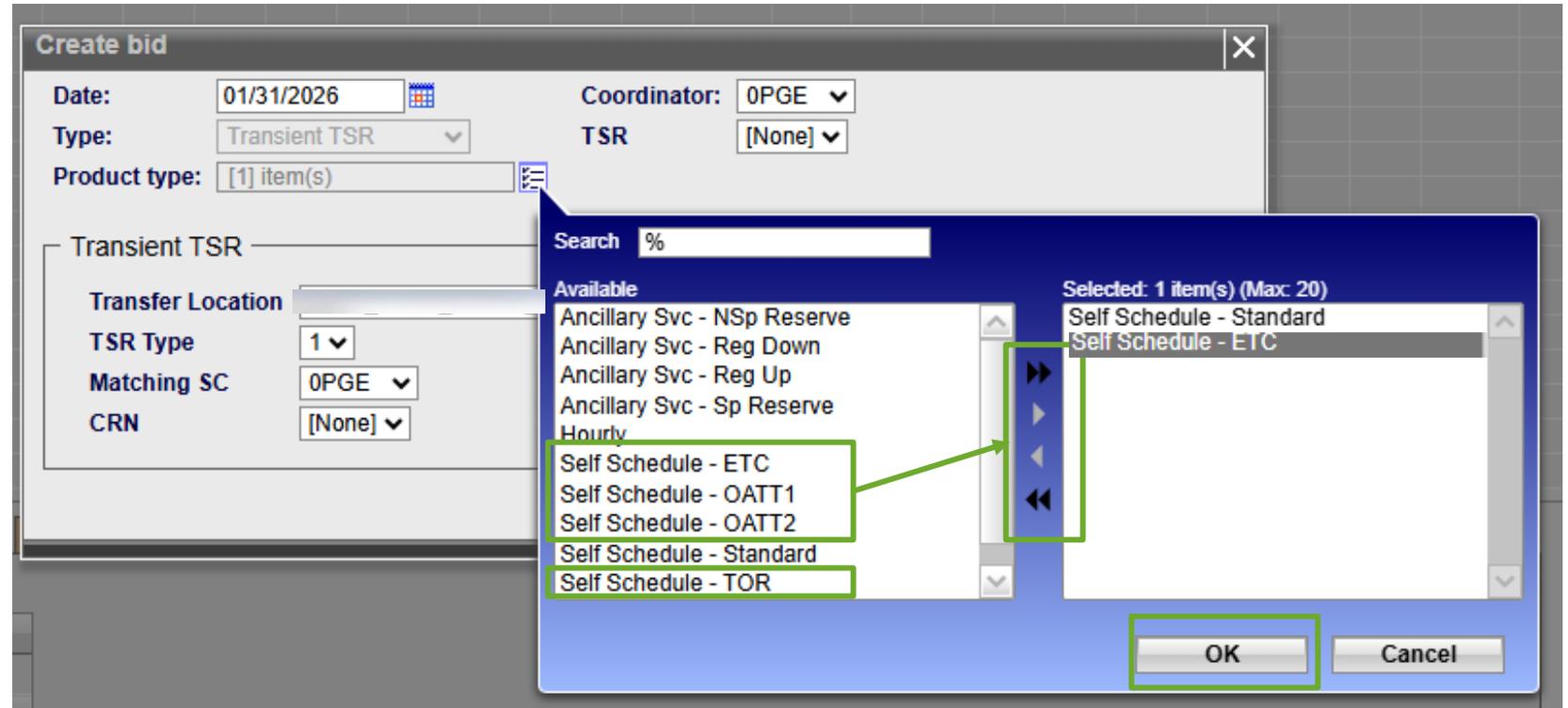
The screenshot shows a 'Create bid' dialog box with the following fields and values:

Field	Value
Date	01/31/2026
Coordinator	0PGE
Type	Transient TSR
TSR	[None]
Product type	Inter-Tie Transaction (highlighted), Transient TSR (selected)
Transfer Location	[Empty]
TSR Type	1
Matching SC	0PGE
CRN	[None]
RSE Flag	Yes
Maximum Capacity	[Empty]
NN (> 25)	26

Buttons: Create, Cancel

Transient Transfer System Resource (TSR) Example

- After selecting Transient TSR as your Type, select your Product type:
 - for Transient TSR, selection will be OATT1, OATT 2, ETC or TOR.



Transient Transfer System Resource (TSR) Example

- Select the Matching SC
 - This is the Scheduling Coordinator ID that the contract is associated with.

The screenshot shows the 'Create bid' dialog box with the following fields and values:

Field	Value
Date	01/31/2
Type	Transie
Product type	[1] item
Coordinator	0PGE
TSR	[None]
Transfer Location	E
RSE Flag	Yes
Maximum Capacity	
NN (> 25)	26
Matching SC	0PGE
CRN	[None]

The dropdown menu for 'Matching SC' lists the following options: 0PGE, 0TBC, AATC, ABEX, ABLK, ABLP, ABR2, ABRP, ACES, ACHW, ACOS, ACPL, ACR2, ACRM, ADG2, ADG3, AEC3, AEID, AESM, AET1, and [None].

Transient Transfer System Resource (TSR) Example

- Select the applicable CRN that Transfer Location is associated with
 - In order for the CRN field to provide a dropdown, Contract Reference Numbers must be associated with the Transfer Location must be associated.
 - Before entering these bids in SIBR, it is important to know what contracts exist for matching purposes.

Create bid

Date: 01/31/2026

Type: Transient TSR

Product type: [2] item(s)

Transient TSR

Transfer Location

TSR Type: 1

Matching SC: 0PGE

CRN: [None]

[None]
PACE_BEPM_OATT2_LT-FIRM_BEPM
PACE_BEPM_OATT2_NONFIRM_BEPM
PACE_BEPM_OATT2_ST-FIRM_BEPM
PACE_BPAC_OATT2_LT-FIRM_BPAP
PACE_BPAC_OATT2_NONFIRM_BPAP
PACE_BPAC_OATT2_ST-FIRM_BPAP
PACE_COMB_OATT2_LT-FIRM_CLAR
PACE_COMB_OATT2_NONFIRM_CLAR
PACE_COMB_OATT2_ST-FIRM_CLAR
PACE_FPLP_OATT2_LT-FIRM_FPLP
PACE_FPLP_OATT2_NONFIRM_FPLP
PACE_FPLP_OATT2_ST-FIRM_FPLP
PACE_MSG2_OATT2_LT-FIRM_DGTM
PACE_MSG2_OATT2_NONFIRM_DGTM
PACE_MSG2_OATT2_ST-FIRM_DGTM
PACE_PAC1_OATT2_LT-FIRM_PAC
PACE_PAC1_OATT2_NONFIRM_PAC
PACE_PAC1_OATT2_ST-FIRM_PAC
PACE_PCPM_OATT2_LT-FIRM_PPMI
PACE_PAC1_OATT2_LT-FIRM_PAC

Yes

26

Create Cancel

Transient Transfer System Resource (TSR) Example

- Set your Maximum Capacity.
 - The maximum capacity helps determine how much of the resource can be applied to that contract when bid is submitted.

The screenshot shows a 'Create bid' dialog box with the following fields and values:

- Date: 01/31/2026
- Coordinator: 0PGE
- Type: Transient TSR
- TSR: [None]
- Product type: [2] item(s)
- Transfer Location: []_E
- TSR Type: 1
- Matching SC: 0PGE
- CRN: PACE_PAC1_OATT2_LT-FIRM_PAC
- RSE Flag: Yes
- Maximum Capacity: 10 (highlighted in green)
- NN (> 25): 26HQ

Buttons: Create, Cancel

Transient Transfer System Resource (TSR) Example

- Set the NN (>25)
 - This field accepts alpha numeric characters allowing indication of bid submitter (i.e. initials)
 - Number cannot be lower than 25.

The screenshot shows a 'Create bid' dialog box with the following fields and values:

Date:	01/31/2026	Coordinator:	0PGE
Type:	Transient TSR	TSR:	[None]
Product type:	[2] item(s)		
Transient TSR			
Transfer Location:	F..._E	RSE Flag:	Yes
TSR Type:	1	Maximum Capacity:	10
Matching SC:	0PGE	NN (> 25):	26HQ
CRN:	PACE_PAC1_OATT2_LT-FIRM_PAC		

Buttons: Create, Cancel

Transient Transfer System Resource (TSR) Example

- Select Create.
 - The bid has now been created but not yet submitted.

The screenshot shows a 'Create bid' dialog box with the following fields and values:

Date:	01/31/2026	Coordinator:	0PGE
Type:	Transient TSR	TSR	[None]
Product type:	[2] item(s)		
Transient TSR			
Transfer Location	F...E	RSE Flag	Yes
TSR Type	1	Maximum Capacity	10
Matching SC	0PGE	NN (> 25)	26HC
CRN	PACE_PAC1_OATT2_LT-FIRM_PAC		

The 'Create' button is highlighted with a green box.

Transient Transfer System Resource (TSR) Example

- Back on the Bids page, click on the details tab of the Product Type you selected.
 - In this example it is ETC so select the SS-ETC tab.

The screenshot displays the California ISO Bids interface. At the top, the navigation bar includes 'Bids', 'Trades', 'Convergence Bids', 'Energy Forecast', 'Export Priority Report', 'Ind Viewer', 'OTC Viewer', 'Messages', 'Dynamic Limit', 'Ancillary Service Requirement', and 'Admin'. The 'Market' is set to 'Day Ahead' and the 'Date' is '01/31/2026'. The 'Coordinator' is 'OPGE'. Below this, the 'Bid summary' section shows a table with columns for 'Status', 'Resource type', 'Resource ID', 'State', 'Daily', 'Hourly', 'Energy', 'Energy Adj', 'STD', 'ETC', 'ETP', 'TOR', 'TOP', 'RMT', 'BAS', 'LOF', 'LPT', 'LSG', 'OATT1', 'OATT2', 'Gen', 'Load', 'RU', 'RD', 'SR', 'NR', 'LFD', 'LFU', 'IRU', 'IRD', 'RCU', 'RCD', 'Down', 'Up', 'TCL', 'Submitted', and 'Market status'. The 'Resource ID' is 'PGE-26HC' and the 'Market status' is 'Open'. At the bottom, the 'Energy' tab is selected, and the 'SS-ETC' sub-tab is highlighted with a green box. Below the main table, there are two smaller tables: 'Hour Resource Name Self schedule contract(s) Block bid hours' and 'Obligation(s) Self schedule quantity Contract'.

Transient Transfer System Resource (TSR) Example

- Click the pencil under obligations.
 - Enter self schedule quantity to set your self-schedule value.
 - Click Update.

The screenshot displays the California ISO web application interface. At the top, the navigation menu includes options like Bids, Trades, Convergence Bids, Energy Forecast, Export Priority Report, Ind Viewer, OTC Viewer, Messages, Dynamic Limit, Ancillary Service Requirement, and Admin. The main content area shows a 'Bid summary' for a 'Transient TSR' resource. A table lists various parameters such as Status, Resource type, Resource ID, State, Daily, Hourly, Energy, Energy Adj, STD, ETC, ETP, TOR, TOP, RMT, BAS, LOF, LPT, LSG, OATT1, OATT2, Gen, Load, RU, RD, SR, NR, LFD, LFU, IRU, IRD, RCU, RCD, Down, Up, TCL, Submitted, and Market status. A modal dialog titled 'Obligation(s)' is open, showing a table with columns for 'Self schedule quantity' and 'Contract'. The 'Self schedule quantity' field is set to '10' and the 'Contract' dropdown is set to 'PACE_PPWE_ETC_RS'. The 'Update' button is highlighted with a green box, and a green arrow points to the pencil icon in the modal's header.

Transient Transfer System Resource (TSR) Example

- Click on the pencil in the resource name section and set your self-schedule values per hour.
 - Right click in the top field and select Set All values in column to copy this value down through all hours.
 - You can make edits to individual hours under the Obligations pane.
 - Click Update.

The screenshot shows the California ISO web application interface. At the top, there is a navigation bar with the California ISO logo and various menu items like Bids, Trades, Convergence Bids, etc. Below this, there is a 'Bid summary' section for a resource named 'Transient TS'. The main table has columns for 'Hour', 'Resource Name', and 'Self schedule contract(s)'. The 'Self schedule contract(s)' column contains the value '723552' for the first row. A context menu is open over this cell, with the option 'Set all values in column to this value' highlighted. To the right, there is an 'Obligation(s)' pane showing a 'Self schedule quantity' of 10.00. At the bottom left, a green box highlights the pencil icon in the resource name section.

Transient Transfer System Resource (TSR) Example

- Bid is now ready to be submitted.
 - Click the submit icon.
 - Click Apply.

The screenshot displays the California ISO web application interface. At the top, the navigation menu includes options like Bids, Trades, Convergence Bids, Energy Forecast, Export Priority Report, and Ind Viewer. The main content area shows a 'Bid summary' for a 'Transient TSR' with resource ID '0PGE-PACE_PACW_HMWYP_E-1-0PGE-26HC'. A green box highlights the 'Apply' button. Below the bid summary, there are two detailed views: 'Self schedule contract(s)' and 'Obligation(s)'. The 'Self schedule contract(s)' view shows a table with columns for Hour, Resource Name, Self schedule contract(s), and Block bid hours. The 'Obligation(s)' view shows a table with columns for Self schedule quantity and Contract. The bottom of the interface shows a status bar with 'CONNECTED', 'HARDER | Read/Write', and the date '01/29/2026 08:12 PST'.

Transient Transfer System Resource (TSR) Example

- Results of bid submission will populate Bid Summary fields.
 - Click on the bid to see the popup Bid Messages that will identify the applicable business rules.
 - Follow processes to make edits to bids based on the business rules generated.



The screenshot displays the California ISO web application interface. At the top, there are navigation tabs for Bids, Trades, Convergence Bids, Energy Forecast, Export Priority Report, Ind Viewer, OTC Viewer, Messages, Dynamic Limit, Ancillary Service Requirement, and Admin. Below these, the market is set to 'Day Ahead' and the date is '01/31/2026'. The 'Bid summary' section shows a table with columns for Status, Resource type, and Resource ID. A bid with Resource ID '26HC' has a warning icon in the Status column. A popup window titled 'Bid Messages for market plan: 26013100 and resource: 26HC' is open, showing a table of messages:

Product	Rule#	Level	Message
	30001	5	Bid did not pass validation rules, please check rule messages for details
Self Schedule - ETC	33204	0	Bid is Invalid - The ETC Contract is NOT registered
Self Schedule - ETC	33206	0	Bid is Invalid - The ETC Self-Schedule Quantity is greater than the registered Maximum allowed under this contract

Below the bid messages, a 'SIBR Business Rules' spreadsheet is shown, which provides detailed information for each rule. The spreadsheet includes columns for Market, Bid Rule Number, Business Rule Number, and Description. The rules listed include:

- 10001: General
- 10002: The configurable Time Precision must be initialized to one minute.
- 10003: The configurable Quantity Precision must be initialized to 0.01 MWh, kWh, or MWh/min.
- 10004: The configurable Price Precision must be initialized to one cent of a US Dollar.
- 10005: The configurable Distribution Factor Precision must be initialized to 0.0001.
- 10006: The configurable Balancing Tolerance must be initialized to 1 MW.
- 10007: 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, 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.
- 10008: The configurable Maximum Start-Up Time/Cost Curve Segment Number for Submitted Bids must be initialized to 3.
- 10009: The configurable Maximum Energy Curve Segment Number for Submitted Bids must be initialized to 10.
- 10010: The configurable Maximum Ramp Rate Curve Segment Number for Submitted Bids must be initialized to 4.
- 10011: The configurable NGR Maximum Ramp Rate Curve Segment Number for Submitted Bids must be initialized to 2.
- 10012: The configurable Energy Bid Floor must be initialized to -\$150/MWh.
- 10013: The configurable Energy Bid Ceiling must be initialized to \$2000/MWh.
- 10014: The configurable Energy Bid Soft Cap must be initialized to \$1000/MWh.
- 10015: The configurable Day-Ahead Intra-Day Virtual and Non-Participating Load Energy Bid Ceiling must be initialized to the Energy Bid Ceiling for each Trading Hour.
- 10016: The configurable Real-Time Intra-Day 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 Messages to which the Bid Ceiling Must Be Enforced Bid Ceiling is applicable to the Energy Bid Ceiling.

Data from SIBR Business Rules spreadsheet populates these fields to provide status information.

TSR TYPE 3

TSR Type 3: RSE-Eligible Transfer Capacity

TSR Type 3 represents resource-specific capacity used to support BA load, eligible for Resource Sufficiency Evaluation(RSE). [Source = Resource, Sink = Load]

Registration

- ✓ EDAM Entity on each side of transfer has registered TSR for itself in Master File.

Usage

- Transfer revenue goes to EDAM Entity.
 - Entity may sub-allocate revenue based on its Open Access Transmission Tariff (OATT).

Notes regarding usage

- EDAM Entity may self-provide ancillary services (AS) which transfers AS obligation from one BA to another.
- EDAM Entity may release transfer capacity on the TSR.
- Self-provided ancillary services and released transfer capacities must be equal across the transfer.

Using TSR Type 3: RSE-Eligible Transfer Capacity

Bid Requirements:

- Each Type 3 TSR bid must specify a Capacity Limit that does not exceed the TSR's Maximum Capacity.

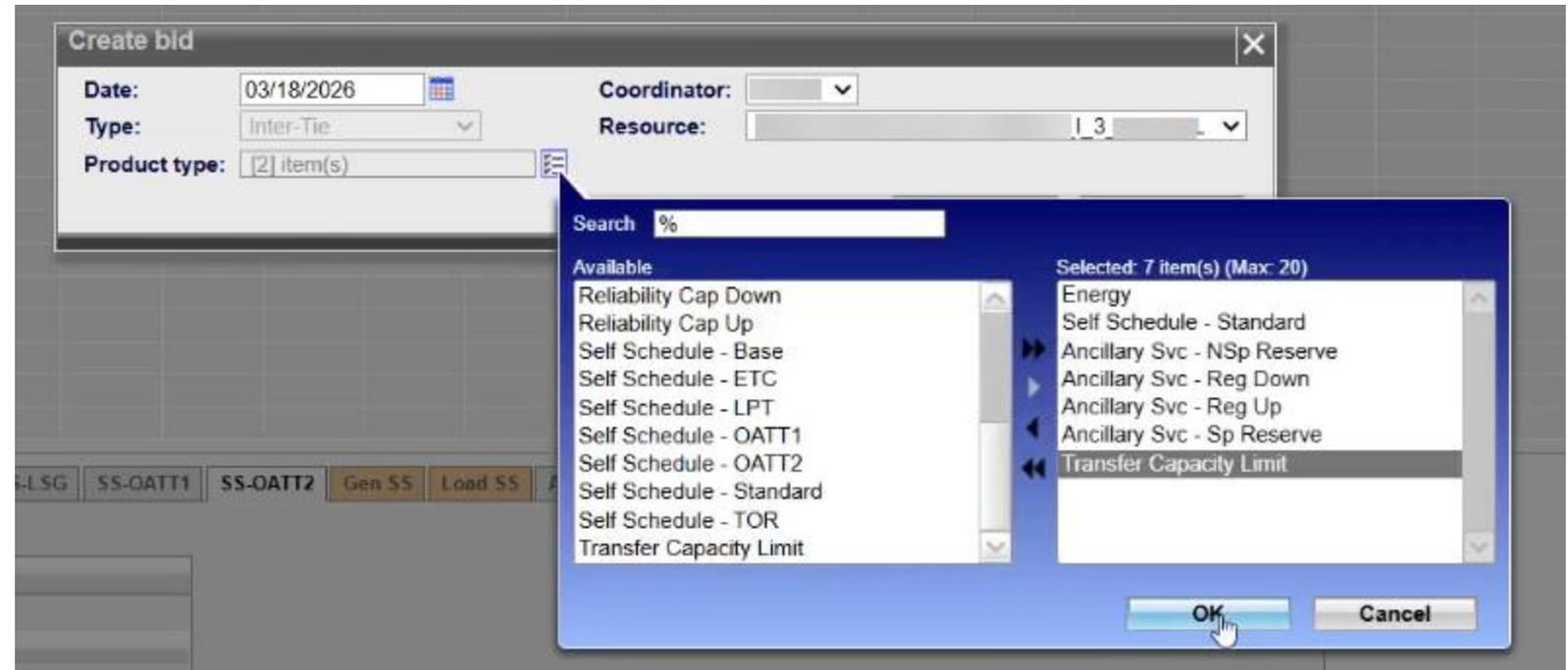
Bids may also include ancillary services self-provision for:

- Regulation Up (RU)
- Regulation Down (RD)
- Spinning Reserve (SR)
- Non-Spinning Reserve (NR)

Total ancillary services capacity must not exceed the specified Capacity Limit.

TSR Type 3

- Ability to select multiple product types in SIBR
- For Type 3, this includes Ancillary Service bids
- Transfer Capacity Limit can be included for Type 3



Non RSE-Eligible Transfer Capacity

TRANSFER SYSTEM RESOURCES: TYPE 4

TSR Type 4: Non RSE-Eligible Transfer Capacity

Type 4 TSRs are released by EDAM Entities, and this capacity is not RSE-eligible.

Registration

- ✓ EDAM Entity on each side of transfer has registered TSR for itself in Master File.

Usage

- TSR Type 4 capacity is released to EDAM for optimal scheduling.
- Transfer revenue goes to EDAM Entity.
 - Entity may sub-allocate revenue based on its Open Access Transmission Tariff (OATT).

Notes regarding usage

- The EDAM Entity may release transfer capacity on the respective TSR.
- The released transfer capacities must be equal across the transfer.

Type 4 TSR Non RSE-Eligible Transfer Capacity Bids and Validation

Capacity Limit Rules

Type 4 TSR bids must include a Capacity Limit that does not exceed the TSR's Maximum Capacity.

SIBR Adjustments

- If the EDAM Entity derates the TSR Maximum Capacity before 9:00 am, SIBR will automatically adjust the Capacity Limit accordingly.
- SIBR may also reduce the Capacity Limit to align with a lower Capacity Limit submitted for the matching TSR.



Scheduling and Optimization

- The transfer capacity under the adjusted Capacity Limit is released to EDAM.
- EDAM uses this capacity for optimal scheduling in the Integrated Forward Market (IFM) and Residual Unit Commitment (RUC).

BID SUBMISSIONS TYPE 2, 3, 4

Submissions of TSR Type 2-4 Bids

- Start by selecting a current bid using the copy function to create a new bid

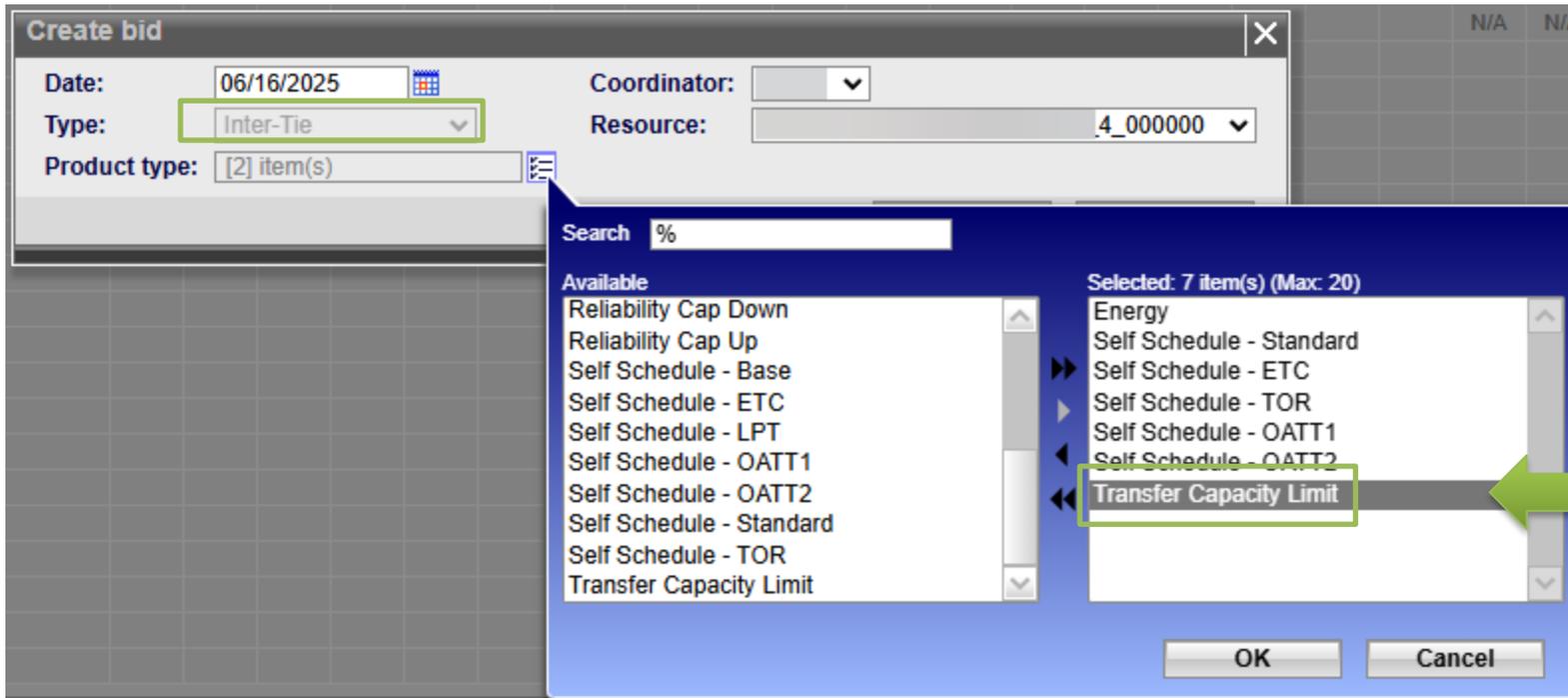
The screenshot displays the California ISO web interface. At the top, there is a navigation bar with the California ISO logo and various menu items like 'Bids', 'Trades', 'Convergence Bids', etc. Below this is a 'Bid summary' table with columns for Status, Resource type, Resource ID, State, and various bid parameters. A dialog box titled 'Copy bid(s)' is open in the center, showing a dropdown menu set to 'Current sheet' and buttons for 'Copy and submit', 'Copy', and 'Cancel'. At the bottom of the interface, there are two smaller tables: 'Hour' and 'Obligation(s)'. The 'Hour' table shows bid hours from 01h to 06h with resource names and contract quantities. The 'Obligation(s)' table shows a self-schedule quantity of 0.00 and a contract name 'ABCD_ABCE_OATT2_RTONLY'.

Status	Resource type	Resource ID	State	Daily	Hourly	Energy	Energy Adj	STD	ETC	TOR	RMT	LPT	OATT1	OATT2	Gen	Load	RU	RD	SR	NR	IRU	IRD	RCU	RCD	TCL	Submitted	Market status
[ALL]	Inter-Tie	[ALL]	[ALL]	[ALL]	[AI]	[ALL]	[ALL]	[ALL]	[ALL]	[A]	[ALL]	[ALL]	[ALL]	[AI]	[ALL]		[ALL]										
✓	Inter-Tie	ABCD_XYZ_RSRCE5_E_C1234			✓		N/A			✓	N/A				N/A	N/A										03/13/2026 10:44	Open
✓	Inter-Tie	ABCD_ABCE_CISO_RSRCE1_E_1_RT			✓		N/A				N/A				✓	N/A	N/A									03/13/2026 04:06	Open
✓	Inter-Tie	ABCD_ABCE_CISO_RSRCE1_L_1_RT			✓		N/A				N/A				✓	N/A	N/A									03/13/2026 04:06	Open
✓	Inter-Tie	ABCD_ABCE_CISO_RSRCE2_E_1_RT			✓		N/A				N/A				✓	N/A	N/A									03/13/2026 04:06	Open
✓	Inter-Tie	ABCD_ABCE_CISO_RSRCE2_L_1_RT			✓		N/A				N/A				✓	N/A	N/A									03/13/2026 04:06	Open
✓	Inter-Tie	ABCD_ABCE_ABCE_RSRCE3_L_1_RT			✓		N/A				N/A				✓	N/A	N/A									03/13/2026 04:06	Open

Hour	Resource Name	Self schedule contract(s)	Block bid hours
01h	ABCD_ABCE_ABCE_RSRCE3_L_1_RT	246799	1
02h	ABCD_ABCE_ABCE_RSRCE3_L_1_RT	246799	1
03h	ABCD_ABCE_ABCE_RSRCE3_L_1_RT	246799	1
04h	ABCD_ABCE_ABCE_RSRCE3_L_1_RT	246799	1
05h	ABCD_ABCE_ABCE_RSRCE3_L_1_RT	246799	1
06h	ABCD_ABCE_ABCE_RSRCE3_L_1_RT	246799	1

Self schedule quantity	Contract
0.00	ABCD_ABCE_OATT2_RTONLY

Submissions of TSR Type 2-4 Bids



Actions:

- Select the Bid Type
- Select the Product Type
 - You can select up to 20 for one bid submission
- Release transfer capacity is an options for TSRs Type 2-4

TSR Type 2-4, Transfer Capacity Limit (TCL)

The screenshot shows the 'Bid summary' screen in the California ISO system. At the top, there are navigation tabs: Bids, Trades, Convergence Bids, Energy forecast, Export Priority Report, Bid Viewer, OTC Viewer, Messages, Dynamic limit, Ancillary Service Requirement, Admin, and WebSDK Engineering. Below these, there are filters for Market (Day Ahead), Date (03/18/2026), and Coordinator (PPWE). The main table lists resources with columns for Status, Resource type, Resource ID, State, Daily, Hourly, Energy, Energy Adj, STD, ETC, TOR, RMT, LPT, OATT1, OATT2, Gen, Load, RU, RD, SR, NR, and IRU. A green box highlights the 'TCL' tab at the bottom right of the table. A modal window is open, showing a table for 'Update' with columns for Hour, Resource Name, Self schedule contract(s), and Block bid hours. The table contains data for hours 01h through 07h, with resource names like J_1_RT and contract numbers like 261414 and 244577. A context menu is visible over the table, and a 'Set all values in column to this value' option is selected. To the right of the modal, an 'Obligation(s)' section shows a self-schedule quantity of 10.00 and a contract labeled '_OATT2_RTONLY'.

Actions:

- Click on the TSR shown on the **Bid summary** screen (not visible in this image)
- Scroll down to the **TCL** tab along bottom of screen which shows the **Transfer Capacity Limit**
- indicate the amount of capacity being released on this TSR for each hour
 - (TSR Type 2/TSR Type 3/TSR Type 4)

Submissions of TSR Type 2-4 Bids

The screenshot displays the California ISO web interface. At the top, there are navigation tabs for Bids, Trades, Convergence Bids, Energy forecast, Export Priority Report, Bid Viewer, OTC Viewer, Messages, Dynamic limit, Ancillary Service Requirement, Admin, and WebSDK Engineering. The main area shows a 'Bid summary' table with columns for Status, Resource type, Resource ID, State, and various bid parameters like Daily, Hourly, Energy, Energy Adj, STD, ETC, TOR, RMT, LPT, OATT1, OATT2, Gen, Load, RU, RD, Ancillary svc, Imbalance Reserve, Reliability Capacity, Submitted, and Market status. A context menu is open over the table, showing options like Copy, Paste, Set all values in column to this value, Update, and Cancel. The 'Set all values in column to this value' option is highlighted, and a tooltip shows 'Ctrl+C' and 'Ctrl+V'.

Status	Resource type	Resource ID	State	Daily	Hourly	Energy	Energy Adj	STD	ETC	TOR	RMT	LPT	OATT1	OATT2	Gen	Load	RU	RD	Ancillary svc	Imbalance Reserve	Reliability Capacity	Submitted	Market status	
[ALL]	Inter-Tie	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	[ALL]	
✓	Inter-Tie	ABCD_XYZ_RSRCE5_E_C1234			✓		N/A								N/A	N/A							03/13/2026 10:44	Open
✓	Inter-Tie	ABCD_ABCE_CISO_RSRCE1_E_1_RT			✓		N/A								N/A	N/A							03/13/2026 04:06	Open
✓	Inter-Tie	ABCD_ABCE_CISO_RSRCE1_L_1_RT			✓		N/A								N/A	N/A							03/13/2026 04:06	Open
✓	Inter-Tie	ABCD_ABCE_CISO_RSRCE2_E_1_RT			✓		N/A								N/A	N/A							03/13/2026 04:06	Open
✓	Inter-Tie	ABCD_ABCE_CISO_RSRCE2_L_1_RT			✓		N/A								N/A	N/A							03/13/2026 04:06	Open
✓	Inter-Tie	ABCD_ABCE_ABCE_RSRCE3_L_1_RT			✓		N/A								N/A	N/A							03/13/2026 04:06	Open
✓	Inter-Tie	ABCD_ABCE_ABCE_RSRCE3_L_1_RT			✓		N/A								N/A	N/A							03/13/2026 04:06	Open

Actions:

- Click on the new bid to edit
- Go to the applicable display tab to view and edit data
- Under Obligations click the pencil, enter new value and click update
- Set the new Self-Schedule values for the remaining hours by right clicking in the data field and clicking **Set all values in column to this value**

Submissions of TSR Type 2-4 Bids

The screenshot displays the California ISO bidding interface. At the top, there are navigation tabs: Bids, Trades, Convergence Bids, Energy forecast, Export Priority Report, Ind Viewer, OTC Viewer, Messages, Dynamic limit, Ancillary Service Requirement, Admin, and WebSDK Engineering. Below these, a 'Market' dropdown is set to 'Day Ahead', the 'Date' is '03/18/2026', and the 'Coordinator' is 'PPWE'. There are 'Apply' and 'Reset' buttons.

The main area is a 'Bid summary' table with columns for Status, Resource type, Resource ID, State, Daily, Hourly, Energy, Energy Adj, STD, ETC, TOR, RMT, LPT, OATT1, OATT2, Gen, Load, RU, RD, SR, NR, and IRL. The table contains several rows of 'Inter-Tie' resources with various IDs like '_E_RS591', '_E_1_RT', '_I_1_RT', etc. The 'AS-RU' column is highlighted with a green box.

At the bottom, a popup window titled 'AS-RU' is open, showing a table with columns: Hour, Resource Name, Capacity [MW], Capacity price [\$], Opportunity cost [\$/MW], Self-provision [MW], and Contingency indicator. The table has rows for hours 01h through 08h, all with the resource name '_I_3_PACOV'. A context menu is open over the 'Self-provision [MW]' column, with options: Copy (Ctrl+C), Paste (Ctrl+V), Set all values in column to this value, Update, and Cancel.

Actions:

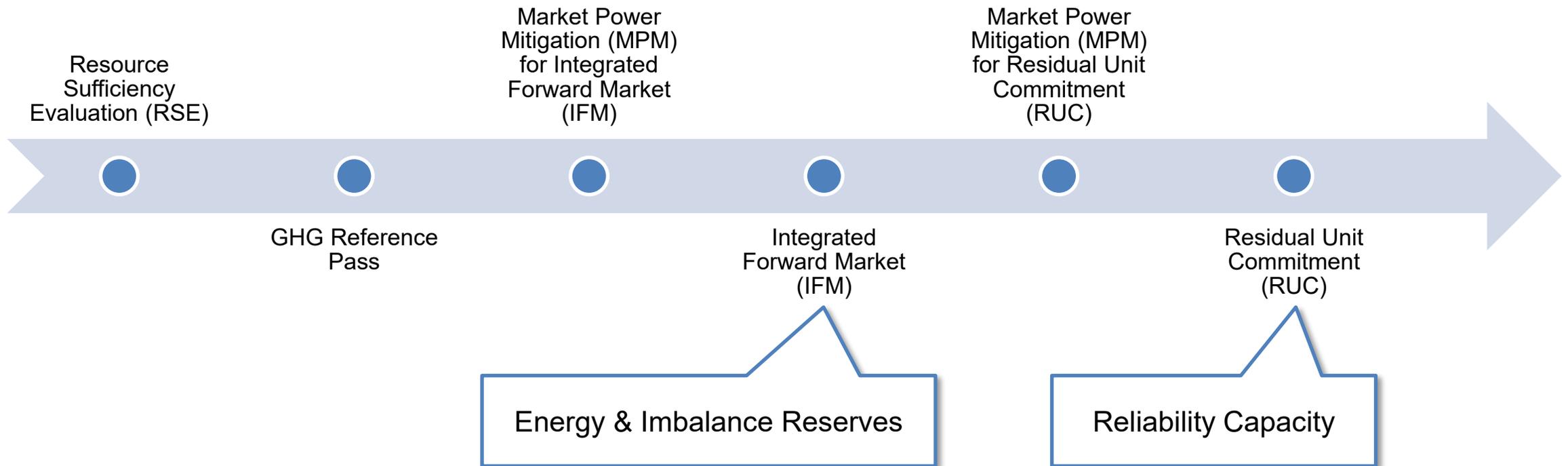
- If the bid is a TSR Type 3 and has Ancillary Services to be included, go to the applicable AS displays and update the self provisioned MW value for each type

Submissions of TSR Type 2-4 Bids

- Once the bid has been entered in a certain direction (Import or Export), follow the same steps to submit the other side of the bid for the same Resource ID in the opposite direction.
- If values match, they balance!
- What happens if they do not match?
 - The system is going to honor the most restrictive value.
 - Agree to which bid needs to be deleted and resubmitted with the proper value.

Review of Extended Day-Ahead Market Processes

SIBR publishes valid TSR bids in the Clean Bids at 10:00 am. These bids will be used to schedule TSRs in the **Integrated Forward Market** and **Residual Unit Commitment**.





WHAT'S NEXT?



This is the final session in a 3-part SIBR training series

1

Introduction to SIBR –
Basic Concepts 

2

SIBR Fundamentals –
General Bidding 

3

Advance SIBR Bidding
Concepts for EDAM –
Transfer System 
Resources

Find helpful training resources on the ISO Training Center

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Stakeholder center / Training center

Training center

The California ISO is committed to providing our customers with a broad menu of high-quality training courses on the ISO market functionality, as well as individual market applications. These self-paced courses are organized into training topics that are designed to be an industry resource for market participants and the general public to learn about electric grids and markets, and the ISO's role in the electricity system.

Upcoming meetings

ONLINE

Session 2 - New CAISO Website Overview Webinar Training

05/29/2024 10:00 AM - 11:00 AM

Training topics

Click on a training topic to view the available courses. Our courses are intended for market participants and the general public. Please note, course content is subject to change based on the implementation of new market functionality, rules, or processes.

- Releases, initiatives and readiness notes
- Markets and operations
- Settlements and metering
- Computer-based training library
- Scheduling coordinator
- Western Energy Imbalance Market
- Congestion revenue rights
- Reference

Recent materials

TITLE	TYPE	POSTED	
Presentation - Resource Operations Readiness Training Batteries May 13, 2024	Presentation	05/16/2024, 2:09 PM	Back to top
Presentation - Resource Operations - Readiness Training	Presentation	05/07/2024, 3:37 PM	On this page

Computer-Based Training Courses:

- EDAM Overview Video
- EDAM Processes & Timelines
- EDAM Pricing Model
- EDAM GHG Regulation Obligations
- EDAM Bidding: Basic Concepts
- EDAM Integration with WEIM

Stay informed. Stay connected.

Practice

Use the SIBR application to practice various bid submissions and validate results – be mindful of the environment you are in!



Participate

Join and actively participate in meetings as applicable:

- Market Simulation
- User Groups
- Parallel Operations

Communicate

Be sure to communicate to ensure understanding:

- Ask questions in meetings
- Submit CIDI tickets
- Coordinate TSR bid submissions

Submitting Questions in Customer Inquiry, Dispute and Information (CIDI) system

CONTACT CUSTOMER SUPPORT
TELL US HOW WE CAN HELP

*SCID

*Functional Environment

Review for Price Correction Metering Inquiry

Manual Reference Level Change Request Assistance Energy Designation Request

*Subject

*Description

Trade Date

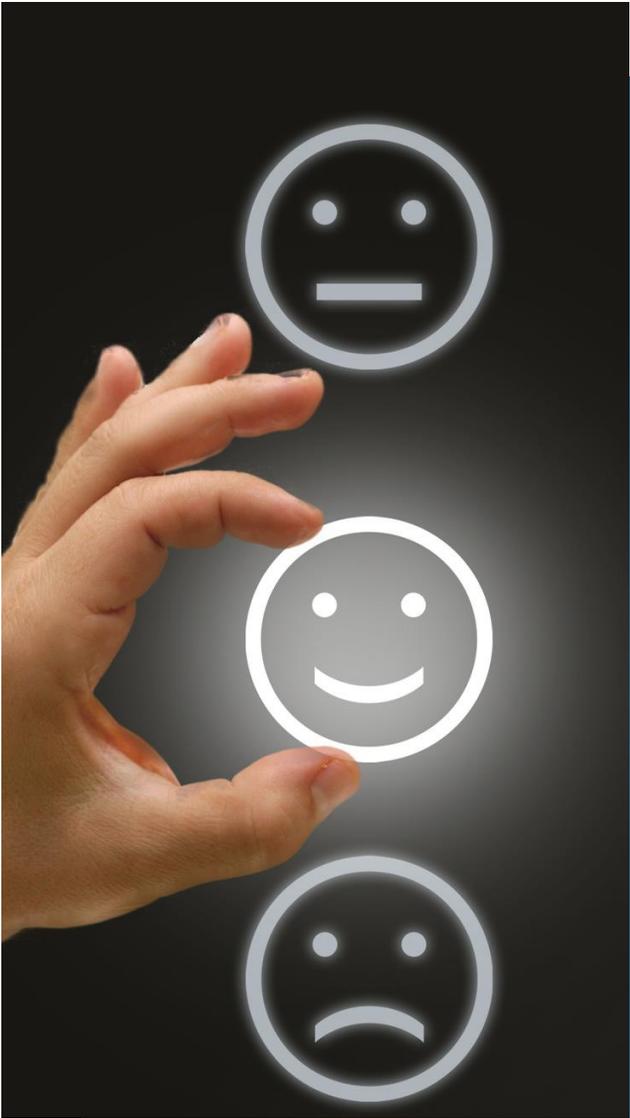
Trade Hours
01
02
03
04
05
06

Resource ID

Market

Email Recipients - Add up to 5 comma-separated addresses

- CIDI is the ISO's central platform for submitting questions, issues, and requests
- Ticket submissions should clearly state the environment (e.g., Prod, Market Simulation)
- Include screenshots, timestamps, and steps taken
- You must be a Scheduling Coordinator to enter information into CIDI
 - If you are not the SC contact your SC to request to submit on your behalf



Tell us how we're doing

Takes 3-5 minutes to complete

Helps us improve future training

Link: <https://www.surveymonkey.com/r/caisocoursesurvey>

Thank you for your participation!



For clarification on anything presented in this training, send an email to: CustomerReadiness@caiso.com

For other questions or stakeholder specific questions or concerns use one of these methods:

- Submit a [CIDI ticket](#)
- Contact your Scheduling Coordinator
- Use the [“Contact us”](#) page on caiso.com to submit questions

REFERENCE MATERIALS



SIBR documentation is posted to caiso.com

- Existing business rules are posted, along with upcoming changes based on EDAM implementation.
- Release notes capture changes made to business rules.
- Additional technical information is posted to the ISO's Developer Portal (account required).

Scheduling Infrastructure Business Rules (SIBR) - Bidding

The Scheduling Infrastructure Business Rules (SIBR) – Bidding application provides market participants with the ability to submit bids for energy and energy-related commodities and services.

[Access the application through the MPP* !\[\]\(aee8ded4689d816f96ee455e8726dd95_img.jpg\)](#)

*Certificate required

Technical documentation, including technical specifications and artifacts (WSDL, XSD), are available on the Developer Portal (developer account required).

[View all previous release notes and business rules for SIBR.](#)

Production

- [SIBR Scheduling Coordinator User Guide](#)  08/23/2023, 9:44 AM
- [SIBR Business Rules for Bidding v1 1.7.4](#)  08/02/2023, 11:51 AM
- [SIBR Reports Self Schedule Contracts Report](#)  07/16/2009, 12:59 PM

Upcoming

- [SIBR Business Rules for DAME and EDAM](#)  05/28/2025, 10:28 AM
- [SIBR Release Notes for Extended Day-Ahead Market and Enhancements \(EDAM/DAME\)](#)  05/28/2025, 10:28 AM
- [SIBR Release Notes Rules for Price Formation Enhancement \(PFE\)](#)  06/28/2024, 10:22 AM
- [SIBR Business Rules for Bidding v 1 1.8.3](#)  06/28/2024, 10:22 AM
Scheduling Infrastructure Business Rules for Price Formation Enhancement
- [SIBR Scheduling Coordinator User Guide for DAME](#)  03/05/2024, 11:06 AM
- [SIBR Business Rules for Bidding v1 1.8](#)  12/01/2023, 10:09 AM

Developer Portal



Developer resources

Welcome to the ISO's site for developers to interface with our technical systems and services. This site provides detailed descriptions of current and emerging Application Programming Interfaces (APIs), acceptable use, connectivity, sample code, and frequently asked questions.

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- Services
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 - User Guides
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This is the main source for technical programming information for California ISO. Find services, sites, and documentation for each ISO app.

Don't know where to start?

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Have questions?

[View our Developer Forum](#)

News

CAISO will be retiring
<https://wsstas.caiso.com:4445 6/23>

CAISO Python B2B SOAP Utility Available for Download

Accessing applications and services



Sites
ISO URLs and end point information



Release planning
Technical specifications and project information



Frequently asked questions
Answers to common questions



Rate Limit and Acceptable Use Policy
Regulates web service consumption by users



Access and Identity Management (AIM)
Request, obtain, update and maintain user access to ISO applications



B2B Security Specification
Provides definition of the syntax and semantics of security tokens that California ISO exchanges with external entities



API Terms of Use
License and restriction information for use of California ISO APIs



Supported browsers
List of applications and sites with supported browsers



Truststore Root Certificate Integration
Truststore Root Certificate Integration FAQ

Apps

ADS Automated Dispatch System	ALFS Advanced Load Forecasting System	BAAOP Balancing Area Authority Operator Portal	BSAP Base Schedule Aggregation Portal
CIRA Customer Interface for Resource Adequacy	CMRI Customer Market Results Interface	CRR Congestion Revenue Rights	DRRS Demand Response Registration System
ETCC Existing Transmission Contracts Calculator	FDR Forecast Data Repository	HANA Hosted Advanced Network Applications	MFRD MasterFile
MNS Market Notification Service	MRI-S Market Results Interface - Settlements	OASIS Open Access Same-time Information System	OMS Outage Management System
RCBSAP Reliability Coordinator Base Schedule Aggregation Portal Interface	RCEIDE RC Electric Industry Data Exchange	RTSI Real Time Scheduling Interface	SIBR Scheduling Infrastructure Business Rules
webLineR Transmission Line Ratings Management System			

Developer Portal – SIBR Page

SIBR Scheduling Infrastructure Business Rules

HOME / APPS / SIBR

Overview

- The SIBR application:
- Accepts bids and trades for energy and energy-related commodities from SCs that are certified to interact with ISO
 - Ensures that those bids and trades are valid and modifies bids for correctness when necessary;
 - Enters those bids and trades into a database for processing by other components of the ISO's management systems;
 - Provides required feedback to SCs concerning bids and trades that have been submitted.

Resources

- [SIBR Bidding](#)
- [SIBR Inter-SC Trades](#)
- [SIBR UI screenshot](#)
- [HTTP Error Codes](#)
- [Connectivity Test](#)
- [SIBR FAQ](#)
- [.NET Sample](#)

Web Services Environments

MAP Stage
<https://mapstage-ws.caiso.com/sst/sibr>
IP addresses to whitelist:
45.42.16.0/21
Ports 80 & 443

Production
<https://ws.prod.caiso.com/sst/sibr>
IP addresses to whitelist:
45.42.16.0/21 network on ports 80 & 443

View UI Environments

Tech Specs

About status

NAME	STATUS	RELEASE	LAST UPDATED
SIBR Interface Spec for Inter SC Trade Services_v2.2 REDLINE.pdf	LEGACY	NA	3/21/2024

Library

Scheduling Infrastructure Business Rules (SIBR) - Bidding

Technical documentation, including technical specifications and artifacts (WSDL, XSD), are available on the ISO Developer site at <https://developer.caiso.com>.

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2 topics

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21 documents

Business user documentation
6 documents

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Business user documentation

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2 topics

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Production
1 documents

Upcoming future
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5 documents

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TITLE	TYPE	POSTED
SIBR Business Rules for DAME and EDAM Update v 12.3.4 6.32 MB		01/12/2026, 5:16 PM
SIBR Release Notes for Extended Day-Ahead Market and Enhancements (EDAM/DAME) 2.44 MB	Release Notes	01/12/2026, 5:16 PM
Updated with 12.3.1 changes		
SIBR Release Notes Rules for Price Formation Enhancement (PFE) 757.95 KB		06/28/2024, 10:22 AM
SIBR Scheduling Coordinator User Guide for DAME 8.45 MB	Guide	03/05/2024, 11:06 AM
SIBR Release Notes Rules for Post Fall 2023 v1.1.8 (PWT Base) 833.78 KB	Release Notes	12/01/2023, 10:09 AM

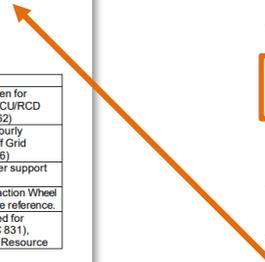


California ISO SIBR - Scheduling Coordinator Users Guide January 26, 2024

Revision History

Date	Version	By	Description
1/26/2024	8.0	WT	Added Mock screen for DAME IRUIRD/RCD/RCD products (pg 61-62)
8/21/2023	7.3	WT	Update for new Hourly component for Off Grid Charge. (pg 55-56)
2/23/2023	7.2	WT	Update for browser support Edge Chrome
12/20/2022	7.1	WT	Update UI Transaction Wheel Counter Resource reference.
6/8/2022	7.0	WT	New UI tabs added for Messages (FERC 831), Ancillary Service Resource

Version: 8.0
Release Date: 1/26/2024



Scheduling Infrastructure Business Rules (SIBR)

SIBR Business Rules for Spring 2026 DAME EDAM Version 12.3.4 1/9/2026 CAISO Public						
Market	Business Rule ID	Business Rule Numbering	Description	Comments		
		1	General	Constants, configurable parameters and general system		
ALL	10001	1 0 0 1	The configurable Time Precision must be initialized to one minute.			
ALL	10002	1 0 0 2	The configurable Quantity Precision must be initialized to 0.01 MW, MWh, or MW/min.			
ALL	10003	1 0 0 3	The configurable Price Precision must be initialized to one cent of a US Dollar.			
ALL	10020	1 0 0 4	The configurable Distribution Factor Precision must be initialized to 0.0001.			
ALL	10029	1 0 0 5	The configurable Balancing Tolerance must be initialized to 0.1 MW.			
ALL	10004	1 0 0 6	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, 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.			
ALL	10005	1 0 0 7	The configurable Maximum Start-Up Time/Cost Curve Segment Number for Submitted Bids must be initialized to 3.			
ALL	10006	1 0 0 8	The configurable Maximum Energy Curve Segment Number for Submitted Bids must be initialized to 10.			
ALL	10007	1 0 0 9	The configurable Maximum Ramp Rate Curve Segment Number for Submitted Bids must be initialized to 4.			
ALL	10048	1 0 0 10	The configurable NGR Maximum Ramp Rate Curve Segment Number for Submitted Bids must be initialized to 2.			
ALL	10021	1 0 0 11	The configurable Energy Bid Floor must be initialized to -\$150/MWh.			
ALL	10022	1 0 0 12	The configurable Energy Bid Ceiling must be initialized to \$2000/MWh.			
ALL	10074	1 0 0 13	The configurable Energy Bid Soft Cap must be initialized to \$1000/MWh.			
DAM	10076	1 0 0 14	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	1 0 0 15	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.			

Business Rules

Bidding rules for bid submission

Figures

Business Rules

Terms

Definitions of the business rules

SIBR Business Rules for DAME and EDAM Update v12.3.4

Process for Submitting Bids / Schedules in SIBR

To find basic information on bids and base schedules, view the following resources:

- Computer-based training courses:
 - [Economic Bids and Self Schedules](#)
 - [EDAM Bidding Basic Concepts](#)
- Instructor led training presentations and recordings:
 - [EDAM Scheduling Infrastructure Business Rules \(SIBR\) Training presentation](#)
 - [EDAM Scheduling Infrastructure Business Rules \(SIBR\) Training video](#)
 - [Transient Transfer System Resource Bid Submission in Scheduling Infrastructure Business Rules \(SIBR\) Presentation](#)
 - [EDAM Bidding Intermediate – presentation](#)
 - [EDAM Scheduling Coordinator Training Day 2, September 11th, 2025 – recording](#)
- CAISO public [SIBR Bidding](#) webpage
 - [SIBR User Guide](#)

These resources provide more information about bidding and validation

Title	Link
Business Practice Manual (BPM) for Market Instruments	https://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Market%20Instruments
Business Practice Manual (BPM) for Market Operations section 2.5.2 Bids	https://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Market%20Operations
Knowledge Article: Reasons Day-Ahead Market Results May Not Seem Economic	https://caiso.my.site.com/custsvccomm/s/article/Reasons-Day-Ahead-Market-Results-May-Not-Seem-Economic
Resource Performance Expectations of Dispatch and Operating Instructions (CBT)	https://www.caiso.com/content/cbt/resource-performance-expectations-dispatch-operating-instructions/story.html
SIBR Business Rules for Bidding webpage	https://www.caiso.com/systems-applications/portals-applications/scheduling-infrastructure-business-rules-sibr-bidding
Tariff: Section 30 – Bid and Self-Schedule Submission for all CAISO Markets	https://www.caiso.com/legal-regulatory/tariff

Reference Material (cont.)

Title	Link
Market Participant Portal	https://portal.caiso.com/
Developer Portal	https://developer.caiso.com/
SIBR – Scheduling Coordinator Users Guide for DAME	https://www.caiso.com/documents/sibr_scuserguide_80.pdf
SIBR Business Rules for DAME and EDAM Update v12.3.4	https://www.caiso.com/documents/sibr-business-rules-for-dame-and-edam-update.xlsx

To find basic training information on bids and base schedules, and gaining access to applications view the following resources:

- Computer-based training courses:
 - [Economic Bids and Self Schedules](#)
 - [EDAM Bidding Basic Concepts](#)
 - [How to Gain Access to the ISO Applications](#)
- Instructor led training presentations and recordings:
 - [EDAM Bidding Intermediate – presentation](#)
 - [EDAM Scheduling Coordinator Training Day 2, September 11th, 2025 – recording](#)

ENVIRONMENTS & SUPPORT



Environments

CAISO uses multiple application environments so teams can develop, test, and validate changes without disrupting real-time grid operations.

Color coded bands at the top of ISO UIs let you know the which environment you are working in:



Each environment has a distinct purpose

PROD

- Live environment running the actual CAISO grid and markets
- Handles all real submissions, settlements, and telemetry
- Updated only after thorough testing to protect reliability

STAGE

- Full-scale test environment mirroring Production
- Used to validate releases, rule changes, and integrations
- Ensures participant systems work with upcoming updates

MAPSTAGE

- Environment dedicated to Market Participant testing
- Supports connectivity checks and early API/interface validation
- Less strict than Stage but designed to catch issues early

Questions & Answers Addressed During Class

Question

We are waiting for SIBR enhancement to allow for Transient TSRs to be submitted without a Contract Reference Number (CRN). Is there an update when that is available?

On the matching pair of TSRs in SIBR, what will that look like?

It would be helpful to see both sides. What I am running into is there is no clear way to tell if you have matched up. The only time to confirm is looking at market results. It is not clear to me, what requirements need to be met to be considered matched up.

Another question, there are a few transfer locations for Transient TSRs; are there specific locations where you can't use for TSRs type 1?

Answer

That functionality is available in parallel ops now. Through coordination with PAC, they will provide one of the transfer locations that will have the CRN (depending on the direction). And then the CAISO could be a NONE. Then you'd structure your pair.

Auto matching will happen and reduce to the lower value. If you get into a situation where someone submits 50 and you put 5, you will need to remove that bid, if it is Transient, you'd need to come back in and redefine it with the correct 50.

You'll see the matching pairs you submit. There is still the enhancement coming in the Indicator Viewer (will help provide more visibility). If there are different SCs, you'd have to coordinate to make sure it went in before 9am.

Example:

SCE1 and the matching SC is PPWE; You'll see your value; You'll see the match status flag got set (No/Yes). If your value didn't change, they matched your value.

Note: An enhancement is being worked on for this UI display to maybe show both values or matching.

We could better clarify and work with Siemens, on how the rule fires.

That list could be very large. The limitation is, the transfer location that should show up and will be locations associated with a specific CRN. Since we can't lock it into a specific CRN (could have more than 1 CRN). There is really no way to narrow it down; if you know the contract, that could potentially reduce the filter.

Example:

I am PAC and going between PAC_E and PAC_W. I could be using the same SC, but it really comes down to who has access to both the export and import under the same contract.

Questions & Answers Addressed During Class

Question

I thought you said transient could only be created for type 1 TSRs. The Business Requirement Specification (BRS) says Transient TSRs Type 2 and then it also applies different costs to transient TSRs type one through four. Is the BRS wrong?

When I saw you input the bid, it seemed like there was an additional field for non-transients wasn't there (slide 34)?

The field "Matching SC" that is populated with the counter party, that is a required field and necessary condition?

For the API for submit bids, we noticed that you released API on January 12, 2026. Do you expect another version based on patches being released next week or so?

Answer

It could be how you interpret the work transient; during the released capacity process, we create a Transient Type 2, meaning it's a resource that doesn't exist. That's what a transient means. And through that process we create a Transient Type 2.

Transient Type 2 is not submitted rather they are generated by the Released Capacity.

If there is a registered TSR in Master File, it will already have a matching TSR. For transient, to register the matching, the matching SC is what we need (along with the identifier), so we generate matching TSR ID associated with the newly defined TSR. We still expect the other party to come in and submit their Transient TSR (their identifiers need to match up).

Correct.

There was some changes to preserve backwards capability. From Siemens, there is a way to get around that so it's not impacting. There should be no issues; if you notice anything, please bring that up to us.