



Inter-SC Trades in Regional Markets – Straw Proposal


Stakeholder Meeting

August 20, 2024

Housekeeping reminders

- This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO's permission.
- These collaborative working groups are intended to stimulate open dialogue and engage different perspectives.
- Please keep comments professional and respectful.

Instructions for raising your hand to ask a question

- If you are connected to audio through your computer or used the “call me” option, select the raise hand icon  located on the bottom of your screen.
 - **Note:** *3 only works if you dialed into the meeting.
 - Please remember to state your name and affiliation before making your comment.
- You may also send your question via chat to Christina Guimera or to all panelists.

CAISO Policy Initiative Stakeholder Process



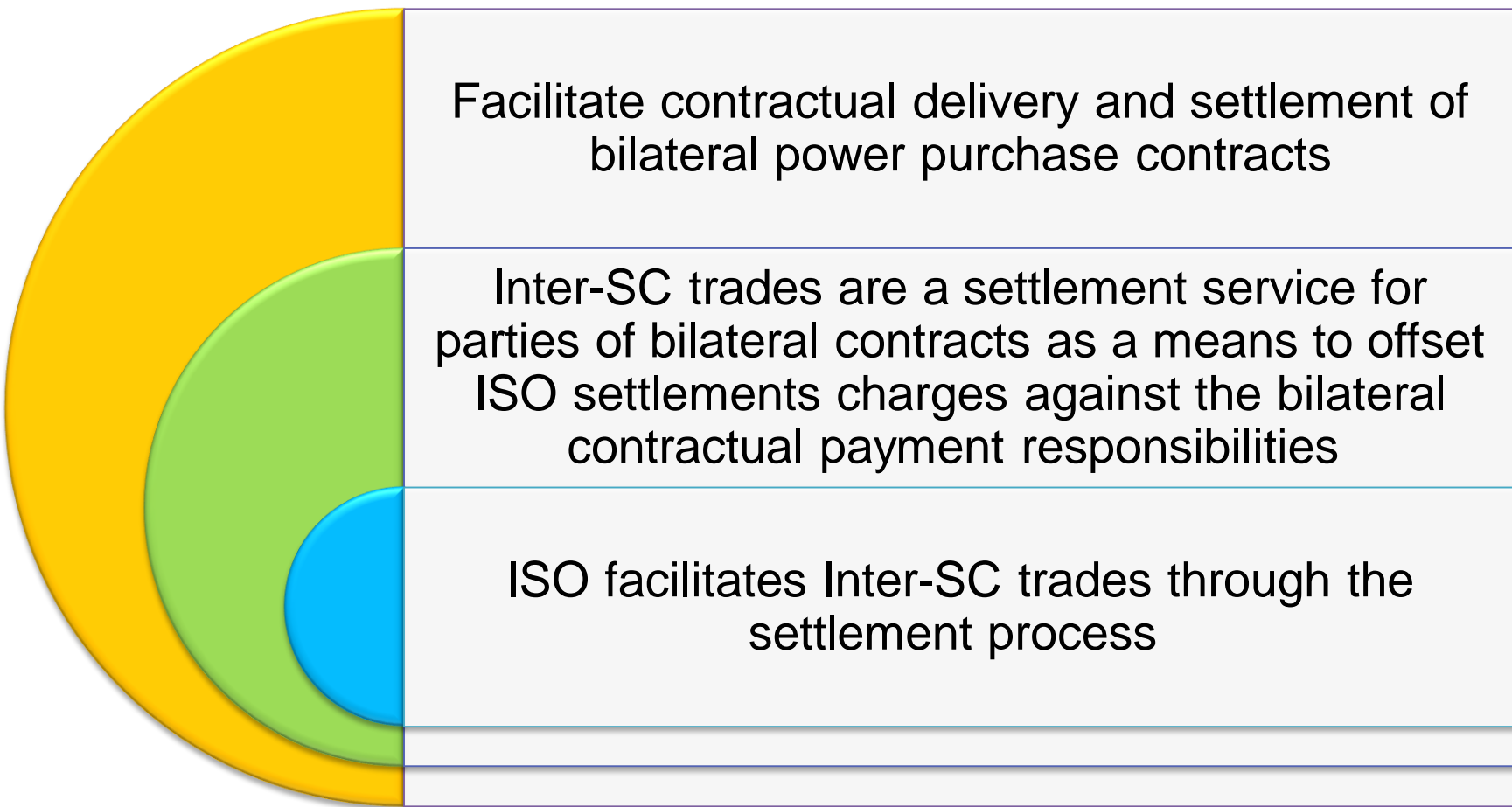
Today's Agenda

Time	Topic	Presenter
1:00 – 1:20	Welcome and today's agenda	Christina Guimera
1:20 – 2:15	Background on Inter-SC Trades	Milos Bosanac
2:15 – 3:00	Inter-SC trades of Energy - Example	Milos Bosanac
3:00 – 3:45	Validation of Inter-SC Trades of Energy	Milos Bosanac
3:45 – 4:00	Next steps	Christina Guimera

Inter-SC Trades – Proposal Overview

- Inter-SC trades are an optional market feature facilitating settlement of aspects of bilateral contracts between scheduling coordinators.
- Inter-SC trades have no effect on market optimization, schedules or dispatch.
- Inter-SC trades are supported today within the ISO balancing authority area, and not the wider WEIM or future EDAM footprints.
- **Proposal:** extend inter-SC trade functionality to WEIM and EDAM areas to support inter-SC trades of energy.

Background – Role of Inter-SC Trades



Background – Three Types of Inter-SC Trades

- **Inter-SC trades of Energy**
 - Can facilitate settlement of bilateral power purchases or trades of energy between scheduling coordinators in the day ahead or real time markets.
 - Can be effectuated at physical generator locations (PNode) or at Aggregate Pricing Nodes (APN).
- **Inter-SC trades of Ancillary Services**
 - Can facilitate bilateral arrangements of ancillary services obligations.
 - Four types of ancillary service inter-SC trades: (1) regulation up; (2) regulation down; (3) spinning reserve; (4) non-spinning reserve.
 - These are financial-only trades, not at defined locations, in real-time market.
 - In WEIM/EDAM, ancillary service not optimized or settled through market.
- **Inter-SC trades of IFM Load Uplift Obligation**
 - Can facilitate transfer of IFM load uplift obligations (bid cost recovery obligations) between parties based on bilateral contract arrangements.
 - These are financial-only trades, not at defined locations, in real-time market.

Proposal: Extend Inter-SC Trades of Energy to WEIM and EDAM areas

- WEIM and EDAM entities, scheduling coordinators representing participants in their areas, may find value in this optional settlement functionality.
- In EDAM, loads and resources will be submitting bids in the market and parties may find value in inter-SC trades of energy at physical generators or aggregation points.
- In WEIM, while there are participating and non-participating resources, parties may find value in inter-SC trades of energy associated with participating resources.

Inter-SC Trades of Energy at physical locations and aggregation points

- **Physical Trades**
 - Inter-SC trade at a specific physical generator location – at the Pricing Node (PNode).
 - Settlements occur based on the LMP at that PNode.
 - No defined limit to number of trades at physical location.
 - In WEIM, eligible only at participating resource locations
- **Trades at Aggregate Pricing Nodes (APN)**
 - Inter-SC trades not backed by specific physical resource, but occur at modeled trading hub or load aggregation points.
 - Limited to one APN inter-SC trade per scheduling coordinator for a trading hour.

Informational Requirements for Inter-SC Trades of Energy

- Submission timelines:
 - *Day Ahead Market*: starting 7-days prior to trading day and by 11:00am (HE11) day ahead.
 - *Real Time Market*: beginning 00:00 hours the day prior to trading day and up to 45-minutes prior to trading hour.
- Informational requirements include:
 - Scheduling Coordinator ID from which energy is traded and to which energy is traded.
 - Location of energy trade (physical location or aggregation point)
 - Market in which the trade is to be settled
 - Start and end date of the trade and quantity of energy traded (MWh)

Inter-SC Trades submitted via the Scheduling Infrastructure Business Rules (SIBR) Tool

The screenshot shows the California ISO SIBR tool interface. The 'Trade hourly' table is visible with the following data:

Hour	Status	Product type	Selling SC	Buying SC	Trading Location	Adjusted Qty.	Counter Qty.	Trade Name	Trade type	Depend on trade	Submitting SC	Submitted	Market stat
03h	✓	APN Energy	WDBS	NCPA	TH_NP15_GEN-APND	1.			Inter-SC Trades		NCPA	06/12/2018 12:54	Open
03h	✓	APN Energy	SNCL	NCPA	TH_NP15_GEN-APND	1.			Inter-SC Trades				
06h	✓	APN Energy	SNCL	NCPA	TH_NP15_GEN-APND	1.			Inter-SC Trades				
06h	✓	APN Energy	WDBS	NCPA	TH_NP15_GEN-APND	2.			Inter-SC Trades				

The 'Missing trades' section is currently empty.

SeleCSS
 Select Market.
 (Day Ahead or Real Time)
 Click on Create trade icon.

This close-up shows the 'Market' dropdown menu set to 'Day Ahead' and the 'Create trade' icon (a star) highlighted in the 'Trade hourly' toolbar.

Select the Date.
 Select Coordinator.
 Select the Product type.
 Trade type (is always Inter-SC Trades in DAM).
 Select a Location where the trade will take place.

The 'Create trade' dialog box is shown with the following fields:

- Date: 01/08/2018
- Coordinator: ANHM
- Product type: APN Energy
- Trade type: Inter-SC Trades
- Location: DLAP_PGAE-APND
- From: DPGE
- To: DPGE
- Trade name: (empty)
- Hours: All item(s)
- Trade qty: (empty)

Section 4 of SIBR User Guide: [Link](#)

INTER-SC TRADES OF ENERGY - EXAMPLE

Example – Inter-SC Trades (Physical)

- Generator A (Gen A) has a bilateral contract with Load B.
- Contract provides for Gen A supplying Load B with 20 MW per hour per day at a price of \$40/MW for one day.
- Load B paid Gen A \$19,200 for the supply serving Load B demand under the bilateral contract.
- Market payments/charges:
 - Gen A revenues: \$20,750
 - Load B charges: \$20,305
- Gen A and Load B have decided to use an inter-SC trade to transfer/swap moneys from the bilateral and market settlement.

Inter-SC Trades of Energy – Settlement

- Existing settlement charge codes: 6194, 6294, 6594, 6694

Before Inter-SC Trade

	Load B	Generator A
Bi-lateral contract	(\$19,200)	\$19,200
CAISO Market	(\$20,305)	\$20,750
IST	\$	\$
Net amount	(\$39,505)	\$39,950

After Inter-SC Trade

	Load B	Gen A
Bi-lateral contract	(\$19,200)	\$19,200
CAISO Market	(\$20,305)	\$20,750
IST	\$20,750	(\$20,750)
Net amount	(\$18,755)	\$19,200

VALIDATION OF INTER-SC TRADES OF ENERGY

Validation of Physical Inter-SC Trades of Energy

- General validations (Tariff 28.1.5)
 - Checks that both scheduling coordinators parties to the inter-SC trade submitted same consistent information on the trade.
- Submittal screening (Tariff 28.1.6.1)
 - Checks the submitted physical trade does not exceed the PMax of the identified generating unit.
- Pre-market validation (Tariff 28.1.6.2)
 - Compares the total MWh quantity of all submitted trades at the PNode of the generating unit to the resource energy bid MWh.
- Post-market validation (Tariff 28.1.6.3)
 - Checks that the generating unit's schedule can support the physical trades.

Validation of Inter-SC trades at Aggregated Pricing Nodes

- General validations (Tariff 28.1.5)
 - Checks that both scheduling coordinators parties to the inter-SC trade submitted the same consistent information on the trade.
- Not subject to other validations applicable to physical trades.

NEXT STEPS & REFERENCE DOCUMENTS

Next Steps

- Stakeholder comments on straw proposal due **August 30, 2024**.
- Draft final proposal targeted for publication in September 2024 informed by stakeholder comments.
- Presentation to ISO Board of Governors & Western Energy Markets Governing Body during November 6-7, 2024 meeting.
- If approved, functionality targeted for implementation commensurate with launch of EDAM in May 2026.

Reference Documents

- Initiative webpage: [Link](#)
- Tariff section 28 (Inter-SC Trades): [Link](#)
- BPM for Market Instruments (sections 3.5 and 9): [Link](#)
- Inter-SC Trade Settlements Configuration Guide (Day Ahead): [Link](#)
- Inter-SC Trade Settlements Configuration Guide (HASP): [Link](#)
- SIBR User Guide (section 4): [Link](#)

ENERGY matters

The California ISO's blog highlights its most recent news releases, and includes information about ISO issues, reports, and initiatives.



Energy Matters blog provides timely insights into ISO grid and market operations as well as other industry-related news.

<https://www.caiso.com/about/news/energy-matters-blog>



Story | Transmission

The ISO posts an updated 20-Year Transmission Outlook

By: Neil Millar

07/31/2024



ENERGY MATTERS CONVERSATIONS

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A new Energy Matters Conversations podcast spotlights changes to the ISO's interconnections process

07/29/2024



Story | Operations

RC West – Reliability Coordinator for much of the West

By: Tim Beach

07/25/2024

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New Policy Initiatives Timeline

The California ISO has launched the Policy Initiatives Timeline to offer stakeholders a concise overview of ongoing policy initiatives. At a glance, it offers a snapshot view of key details such as the status of each initiative, projected timelines, and the current phase of the stakeholder engagement process. Updates to this timeline will be made weekly and posted on the [policy initiatives landing page](#). For more information, stakeholders are encouraged to reach out to ISOStakeholderAffairs@caiso.com.





REGISTRATION IS OPEN

2024 STAKEHOLDER SYMPOSIUM

Welcome reception - Oct. 29
at Kimpton Sawyer Hotel, Sacramento, CA

Symposium program - Oct. 30
SAFE Credit Union Convention Center
Sacramento, CA

Visit the event website: www.reg.eventmobi.com/2024stakeholdersymposium

SPONSORSHIP OPPORTUNITIES AVAILABLE



Save the Date - Resource Interconnection Standards Fair on 9/17/24

The objective of this educational forum is to provide stakeholders with an opportunity to learn more about the ISO's [interconnection process](#) and recent changes affecting Cluster 15. If you plan to attend the meeting in person, please [register](#) by end of day Sept. 13, 2024.

The forum will include a series of presentations and discussions that outline the interconnection requirements for a new resource to connect to the ISO grid. Presentations will cover topics such as submitting an interconnection request application and declaration of commercial operation.

The following stakeholders are encouraged to participate:

- Submitted an interconnection request application for Cluster 15
- New and existing interconnection customers
- Regulatory agencies
- Consultants
- Trade associations
- Participating Transmission Owners

Stakeholders are invited to submit questions in advance to be addressed during the meeting. Please send questions to isostakeholderaffairs@caiso.com.

The final agenda and presentations will be posted prior on the [meetings webpage](#).