

Convergence bidding on the interties

Note: On 4/29/2015 this project was placed on hold. The delay will be in effect pending further FERC Commission order.

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Agenda

- Review of business requirements
 - Why convergence bidding (CB) on the interties was delayed
 - Precautions that have been put in place
 - Staging of position limits
 - How it settles
- Application changes
 - SIBR
 - CMRI
 - OASIS



Agenda (continued)

- Transaction IDs
 - Why they're necessary
 - What they look like
- Important milestones
 - Market simulation
 - Go live
- Open forum



Business requirements – Why CB on the interties was delayed

- CB on the interties initially went live on 2/1/2011 and was suspended on 11/28/2011. Reasons why it was suspended:
 - Market inefficiencies
 - Excessive real-time imbalance energy offset uplift charges

Business requirements – Precautions that have been put in place

- Day-ahead dual constraint
 - With FERC Order 764, "physical only" E-tagging constraint has been removed
 - Physical only constraint will be maintained in RUC
 - Mechanism has been put in place to ensure that artificial constraints will not create reliability concerns
 - IFM schedules not allowed to tag in the day-ahead due to RUC will not be subject to existing HASP reversal rule

Business requirements - Staging of position limits

- Intertie limits for CB awards will be set at:
 - 0% 15-minute market implementation to 12 months (completed)
 - 5% for 12-20 months
 - 25% for 20-24 months
 - 50% for 24-28 months
 - No limit after 28 months

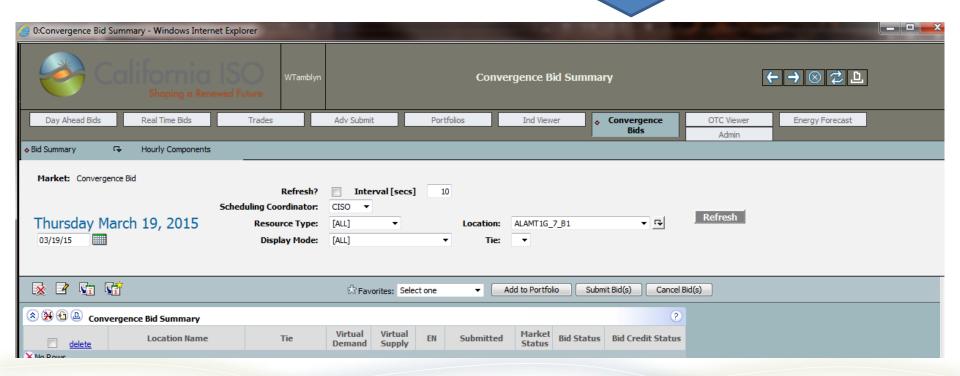
Business requirements – How it settles

- Virtual supply awards
 - Receive day-ahead locational marginal price (LMP) and pay the 15-minute LMP
- Virtual demand awards
 - Pay the day-ahead LMP and receive the 15-minute LMP

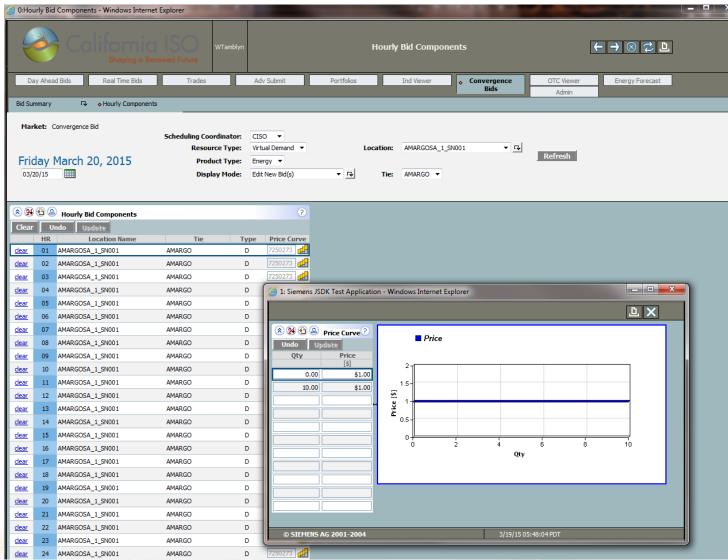


Application changes - SIBR

Within the Convergence Bids section, Bid Summary and Hourly Components have "Tie" indications where appropriate now.

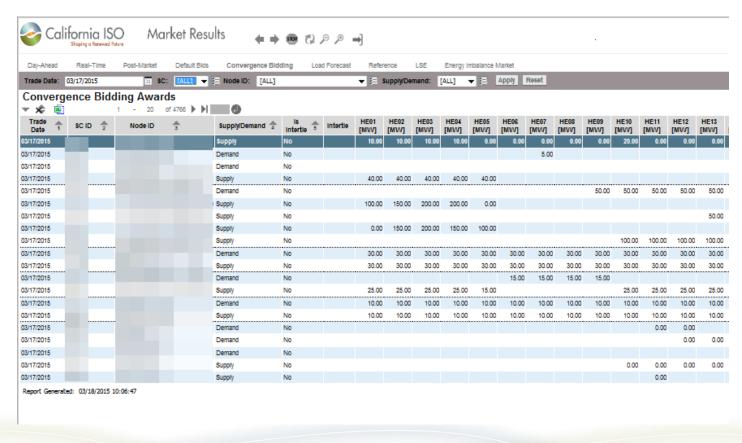


Application changes - SIBR



Application changes - CMRI

No changes (was already part of fall 2014 release)!





Application changes - OASIS

A new "CB Node Listing" report will show eligible nodes and tie/combinations for Convergence Bidding.

Note - "Convergence Bidding Public Bids" download report will include a new "Tie" column. (Sample not available) Convergence Bidding Node Listing

w					
Node ID 1	Tie	2	CB Start Effective Date	3	CB End Effective Date
0096WD_7_N002			01/15/2015		12/31/2030 23:59:59
3EMIDIO_6_N001			01/26/2011		12/31/2030 23:59:59
3EMIDIO_6_N002			01/26/2011		12/31/2030 23:59:59
4C744C12_7_N002			01/15/2015		12/31/2030 23:59:59
4C744C32_7_N002			01/15/2015		12/31/2030 23:59:59
A100US_1_B1			02/28/2013		12/31/2030 23:59:59
ACTONSC_6_N001			10/13/2011		12/31/2030 23:59:59
ADCC_2_N001			01/26/2011		12/31/2030 23:59:59
AEC300_1_N001			01/26/2011		12/31/2030 23:59:59
AGNEW_1_N003			01/26/2011		12/31/2030 23:59:59
AGRILINK_6_N001			01/26/2011		12/31/2030 23:59:59
AGUCALG1_7_B1			06/25/2012		12/31/2030 23:59:59
AIRPROD_1_N001			01/26/2011		12/31/2030 23:59:59
AIRWAYS_1_N001			01/26/2011		12/31/2030 23:59:59
AIRWAYS_1_N004			01/26/2011		12/31/2030 23:59:59
ALAMITOS_2_N001			01/26/2011		12/31/2030 23:59:59
ALAMITOS_2_N040			01/26/2011		12/31/2030 23:59:59
ALAMOSC_7_N001			11/27/2013		12/31/2030 23:59:59
ALAMT1G_7_B1			01/26/2011		12/31/2030 23:59:59
ALAMT2G_7_B1			01/26/2011		12/31/2030 23:59:59
Depart Conserted 02/1	2/2015 00.00	15			

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Application changes - OASIS

"Reference Price" report will include a new "Tie" column.

Reference Prices

Effective Start 1	Effective End Date 2	Node ID 3	Tie	4	Supply Reference Price	Demand Reference Price
01/01/2015	03/31/2015	BLUESKY_7_N001			19.37	28.72
01/01/2015	03/31/2015	BLYTHESC_1_GN001			18.86	36.61
01/01/2015	03/31/2015	BLYTHESC_1_N005			18.86	36.61
01/01/2015	03/31/2015	BNAVSTA_6_N001			18.65	27.21
01/01/2015	03/31/2015	BNAVSTA_6_N002			18.65	27.21
01/01/2015	03/31/2015	BNAVSTA_6_N003			18.65	27.21
01/01/2015	03/31/2015	BNTACRB_6_N001			20.34	27.68
01/01/2015	03/31/2015	BOGUE_1_N001			19.12	27.89
01/01/2015	03/31/2015	BOGUE_1_N201			19.12	27.89
01/01/2015	03/31/2015	BOLINAS_6_N001			18.90	27.50
01/01/2015	03/31/2015	BOLLMAN_1_N003			18.37	27.33
01/01/2015	03/31/2015	BOLTHSE_1_N009			17.84	29.23
01/01/2015	03/31/2015	BONITA_6_N001			19.37	28.24
01/01/2015	03/31/2015	BONNIEN_7_N001			19.64	26.90
01/01/2015	03/31/2015	BONNIEN_7_N002			19.64	26.90
01/01/2015	03/31/2015	BORDEN_2_N007			18.97	28.00
01/01/2015	03/31/2015	BORDEN_2_N008			18.97	28.00
01/01/2015	03/31/2015	BORDER_6_N001			20.29	34.07
01/01/2015	03/31/2015	BORDER_6_N008			20.29	34.07
01/01/2015	03/31/2015	BORONDA_6_N001			18.58	27.04

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Why do we need to use transaction IDs?

- The network model has expanded and now provides multiple possibilities for scheduling with the ISO.
 - Using the master file for each resource's physical registration is becoming increasingly impractical.
- Uniquely identifies static system resource bids and schedules
- Certain types of system resources will still be registered in the master file

Registered Intertie Resources

- Resources with resource adequacy obligations
- ETC/TOR contracts
- Certified to provide ancillary services
- IBAA agreements for transmission loss adjustment
- Trans Bay Cable resource ID
- Resource recirculating resource ID
- Losses, Inadvertent payback, emergency assistance
- MSS load following
- EIM transfer schedule defined by intertie and transmission service provider



Intertie transaction inputs

Field	Description
Scheduling Coordinator	Scheduling Coordinator identifier (required)
Scheduling Point	Intertie Scheduling Point identifier (required)
Primary Tie	Primary Intertie identifier (required)
Direction	Direction (required): I for import, E for export
Bid Type	Bid Type (inserted): P for physical, V tor Virtual
Alternate Tie	Alternate Intertie identifier (optional)
Energy Type	Energy Type (required for physical transactions): F – Firm N – Non-Firm U – Unit Contingent D – Dynamic Interchange W – Wheeling
Purchase- Selling Entity Identifier	A registered Purchase-Selling Entity identifier (required for physical transactions); allow PSE, PSE.1, PSE.2 PSE.9



Intertie Transaction - fictitious examples

Non-resource specific physical import bid :

SC05-AMARGOSA_1_SN001 AMARGO-I-P-F-DECM01.1
SC05-AMARGOSA_1_SN001-AMARGO-I-P-F-DECM01.1
SC05-AMARGOSA_1_SN001-AMARGO-I-P-F-DECM01.2
SC05-AMARGOSA_1_SN001-AMARGO-I-P-F-DECM01.9

Non-resource specific physical export bid:

SC05-AMARGOSA_1_SN001-AMARGO-E-P-F-DECM01 SC05-AMARGOSA 1 SN001-AMARGO-E-P-F-DECM01.1 Scheduling Coordinator

Intertie Scheduling Point

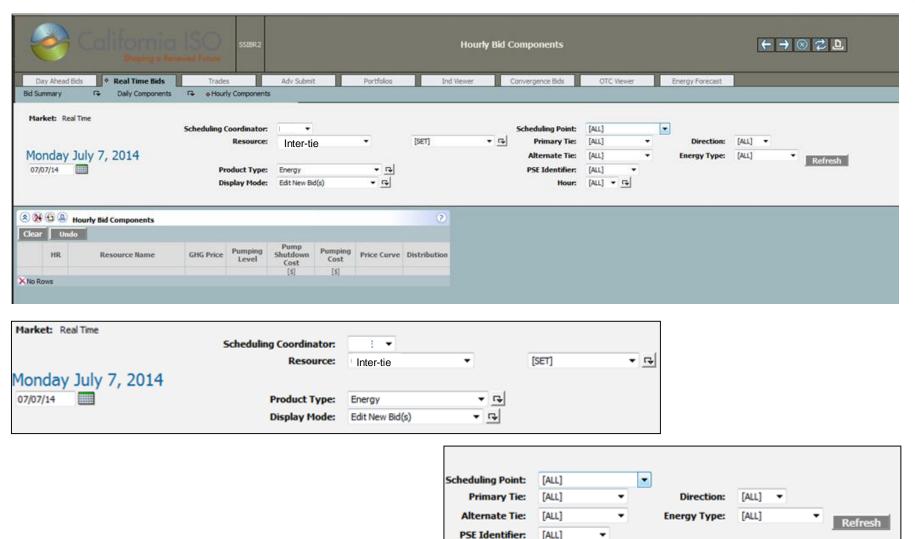
Primary Intertie Identifier

Direction Bid Type Energy Type

Purchase-Selling Entity Identifier



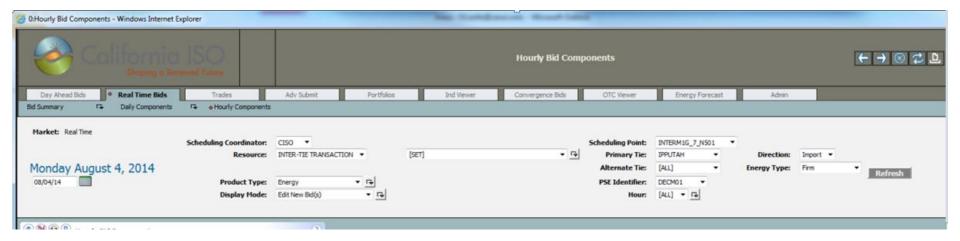
SIBR UI

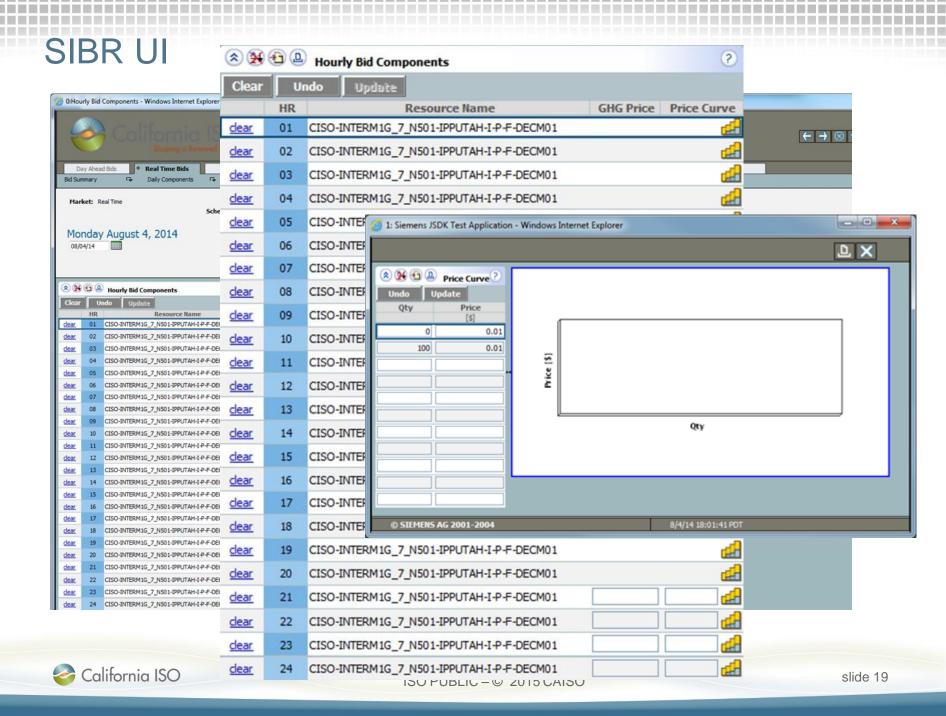


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SIBR UI





Go to "Transaction ID Illustration" document

Transaction ID Illustration

The intent of document is to give examples of both API/XML and UI to illustrate how to use the transaction IDs. In the following examples, CISO is used as the SC ID instead of the individual market participant's SC ID.

1. SIBR Bid Submission

How to Submit a Bid by specifying the individual components of a transaction ID,

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Transaction ID





Day-Ahead	Real-Time	Post-Market	Default Bids	Convergence Bidding	Load Forecast Tra	nsmission Constraints	Reference	
SC: ABCD ▼ 🖺 Transaction ID: [ALL] ▼ 🖺 Apply Reset								
Intertie Resource Transaction ID ▼ 🕸 🚳 🐞								
Transac	ction ID	1	SC ID	Aggregated Pnode	Individual Pnode	Direction	Primary Flowgate ID	Secondary Flowgate ID
ABCD BLYTHE_	1_N101-BLYTHE	E161-E-P-N-DECMO	1 ABCD	BLYTHE_1_N101		E	BLYTHE161	
ABCD CAPTJAC	K_5_N504-WEST	TLYTSLA-I-P-F-DEC	M01 ABCD	CAPTJACK_5_N504		I	WESTLYTSLA	
ARCDCAPTIAC	K 5 N509-11111	15-LP-F-DECM01	ABCD	CAPTIACK 5 N509		1	111.115	

Energy Type	Purchase Service Entity	Wheeling Resource ID	Wheeling Resource Registered Flag
NFRM	DECM01		
FIRM	DECM01		
FIRM	DECM01		

Important milestones

- Market simulation starts 3/31/2015
- "Go live" starts 5/1/2015 (remember the staging)
 - 5% for 12-20 months
 - 25% for 20-24 months
 - 50% for 24-28 months
 - No limit after 28 months

Open forum



Note: Please contact your client representative if you have additional questions.

