



EIM Enhancements 2018

CSSA Training

August 16, 2018

Stakeholder Learning Objectives

- Review the new display screens in BAAOP and OASIS
- Explain the updates to flex ramp calculations for EIM BAAs undergoing contingencies.

Terminology & Acronyms

- RTSI Real-Time Schedule Interchange
- ETSR Energy Transfer System Resource
- ITC Inter-tie Transmission Constraint
- PTST Pseudo-Tie Share Transfer
- VER Variable Energy Resource

BAAOP Enhancements:

Pre-Hour Interchange Schedules

- EIM > Transmission > RTSI Schedules

EIM > Transmission > RTSI Schedules

BAA [ALL]

▼ RTSI Schedules

BAA	Intertie	Resource	Start Time	End Time	Scheduled	Override Scheduled
					MW	MW
CISO	PVWEST	APS4-PALOVRDE_ASR-APND-PVWEST-E-P-F-APS01				
		E_F_001	07/27/2018 03:40	07/27/2018 03:45	0.00	102.00
		I_F_001	07/27/2018 03:40	07/27/2018 03:45	360.00	360.00
		E_F_001	07/27/2018 03:45	07/27/2018 03:50	0.00	0.00
		I_F_001	07/27/2018 03:45	07/27/2018 03:50	360.00	360.00
		E_F_001	07/27/2018 03:50	07/27/2018 03:55	0.00	0.00
		I_F_001	07/27/2018 03:50	07/27/2018 03:55	360.00	360.00
		E_F_001	07/27/2018 03:55	07/27/2018 04:00	0.00	0.00

BAAOP Enhancements:

Inter-tie Transmission Constraint

- EIM > Transmission > ITC Limits

EIM > Transmission > ITC Limits

BAA [ALL]

▼ ITC Limits

BAA	ITC Name	Start Time	Import	Export	Override	
					Import	Export
			[MW]	[MW]	[MW]	[MW]
CISO	ELDORADO_ITC					
	_NET_ITC	07/26/2018 21:00	9,999.00	9,999.00	9,999.00	19,999.00
	_NET_ITC	07/26/2018 22:00	9,999.00	9,999.00	9,999.00	9,999.00
	_NET_ITC	07/26/2018 23:00	9,999.00	9,999.00	9,999.00	9,999.00
	_NET_ITC	07/27/2018 00:00	9,999.00	9,999.00	9,999.00	9,999.00
	_NET_ITC	07/27/2018 01:00	9,999.00	9,999.00	9,999.00	9,999.00
	_NET_ITC	07/27/2018 02:00	9,999.00	9,999.00	9,999.00	9,999.00

BAAOP Enhancements:

Flowgate Limits

- EIM > Transmission > TCOR Limits

EIM > Transmission > TCOR Limits

BAA [ALL]

▼ TCOR Limits

BAA	Name	Start Time	End Time	From OTC	To OTC	Override	
						From OTC	To OTC
				[MW]	[MW]	[MW]	[MW]
PSEI	POR_ARN_2						
		07/26/2018 21:00	07/26/2018 22:00	2,325.00	9,999.00	2,325.00	19,999.00
		07/26/2018 22:00	07/26/2018 23:00	2,325.00	9,999.00	2,325.00	9,999.00
		07/26/2018 23:00	07/27/2018 00:00	2,325.00	9,999.00	2,325.00	9,999.00
		07/27/2018 00:00	07/27/2018 01:00	2,325.00	9,999.00	2,325.00	9,999.00
		07/27/2018 01:00	07/27/2018 02:00	2,325.00	9,999.00	2,325.00	9,999.00
		07/27/2018 02:00	07/27/2018 03:00	2,325.00	9,999.00	2,325.00	9,999.00
		07/27/2018 03:00	07/27/2018 04:00	2,325.00	9,999.00	2,325.00	9,999.00
		07/27/2018 04:00	07/27/2018 05:00	2,325.00	9,999.00	2,325.00	9,999.00

BAAOP Enhancements:

Variable Energy Resource Forecasts

- EIM > Transmission > VER Forecast

EIM > Transmission > VER Forecast

BAA [ALL] Region [ALL]

Add Forecast Records

▼ VER Forecast

		07/27 03:45		07/27 03:50		07/27 03:55		07/27 04:00		07/27 04:05	
BAA	Resource Name	Forecast	Override Forecast	Forecast	Override Forecast	Forecast	Override Forecast	Forecast	Override Forecast	Forecast	Override Forecast
		0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="1.00"/>	0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="0.00"/>
		0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="0.00"/>
		0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="0.00"/>	0.00	<input type="text" value="0.00"/>

▼ VER Forecast - Region



Columns List View Time stamps/Data points Data points/Time stamps

		07/27 03:45		07/27 03:50		07/27 03:55		07/27 04:00		07/27 04:05		07/27 04:10	
BAA	Region Name	Forecast	Override Forecast	Forecast	Override Forecast	Forecast	Override Forecast	Forecast	Override Forecast	Forecast	Override Forecast	Forecast	Override Forecast
	No Zone	31.00	31.00	30.00	31.00	31.00	31.00	32.00	32.00	31.00	31.00	32.00	32.00
	No Zone	44.74	44.74	42.58	42.58	41.00	41.00	36.81	36.81	35.18	35.18	33.37	33.37
		237.55	237.55	235.30	235.30	234.80	234.80	235.26	235.26	237.88	237.88	234.13	234.13


BAAOP Enhancements:

Variable Energy Resource Forecasts


- EIM > Transmission > RTSC

EIM > Transmission > RTSC

▼ VER Forecast

Cancel New Row Update 

BAA	Resource Name	End Time	Forecast
			[MW]
AESO ▼	29EDD18_GGEN ▼	<input type="text" value="31"/>	<input type="text"/>

 No Data found

MM/dd/yyyy HH:mm

BAAOP Enhancements:

Flex Ramp Sufficiency

- EIM > Transmission > Flex Ramp Sufficiency - Schedules

EIM > Transmission > Flex Ramp Sufficiency – Schedules

Export BAA [ALL] Import BAA [ALL] Apply Reset

Flex Ramp Sufficiency – Schedules

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Trade Date	Start Time	End Time	BAA	Resource	Export		BAA	Resource	Import	
					Scheduled MW	Override MW			Scheduled MW	Override MW
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	AZPS_CRYSTAL500_NEVP_E_EIMBASE	0.00	0.00	NEVP	NEVP_CRYSTAL500_AZPS_I_EIMBASE	0.00	0.00
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	AZPS_CRYSTAL500_NEVP_E_EIMBASE	0.00	0.00	NEVP	NEVP_CRYSTAL500_AZPS_I_EIMBASE	0.00	0.00
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	AZPS_CRYSTAL500_NEVP_E_EIMDYN	0.00	0.00	NEVP	NEVP_CRYSTAL500_AZPS_I_EIMDYN	0.00	0.00
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	AZPS_CRYSTAL500_NEVP_E_EIMDYN	0.00	0.00	NEVP	NEVP_CRYSTAL500_AZPS_I_EIMDYN	0.00	0.00
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	AZPS_MEAD5MSCHD_NEVP_E_EIMDYN	0.00	0.00	NEVP	NEVP_MEAD5MSCHD_AZPS_I_EIMDYN	0.00	0.00
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	AZPS_MEAD5MSCHD_NEVP_E_EIMDYN	0.00	0.00	NEVP	NEVP_MEAD5MSCHD_AZPS_I_EIMDYN	0.00	0.00
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	AZPS_PINT_PACE_E_EIMDYN	0.00	0.00	PACE	PACE_PINT_AZPS_I_EIMDYN	0.00	0.00
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	AZPS_PINT_PACE_E_EIMDYN	0.00	0.00	PACE	PACE_PINT_AZPS_I_EIMDYN	0.00	0.00
07/27/2018	07/27/2018 04:20	07/27/2018 04:25	AZPS	AZPS_CRYSTAL500_NEVP_E_EIMBASE	0.00	0.00	NEVP	NEVP_CRYSTAL500_AZPS_I_EIMBASE	0.00	0.00
07/27/2018	07/27/2018 04:20	07/27/2018 04:25	AZPS	AZPS_CRYSTAL500_NEVP_E_EIMBASE	0.00	0.00	NEVP	NEVP_CRYSTAL500_AZPS_I_EIMBASE	0.00	0.00
07/27/2018	07/27/2018 04:20	07/27/2018 04:25	AZPS	AZPS_CRYSTAL500_NEVP_E_EIMDYN	0.00	0.00	NEVP	NEVP_CRYSTAL500_AZPS_I_EIMDYN	0.00	0.00
07/27/2018	07/27/2018 04:20	07/27/2018 04:25	AZPS	AZPS_CRYSTAL500_NEVP_E_EIMDYN	0.00	0.00	NEVP	NEVP_CRYSTAL500_AZPS_I_EIMDYN	0.00	0.00
07/27/2018	07/27/2018 04:20	07/27/2018 04:25	AZPS	AZPS_MEAD5MSCHD_NEVP_E_EIMDYN	0.00	0.00	NEVP	NEVP_MEAD5MSCHD_AZPS_I_EIMDYN	0.00	0.00
07/27/2018	07/27/2018 04:20	07/27/2018 04:25	AZPS	AZPS_MEAD5MSCHD_NEVP_E_EIMDYN	0.00	0.00	NEVP	NEVP_MEAD5MSCHD_AZPS_I_EIMDYN	0.00	0.00
07/27/2018	07/27/2018 04:20	07/27/2018 04:25	AZPS	AZPS_PINT_PACE_E_EIMDYN	0.00	0.00	PACE	PACE_PINT_AZPS_I_EIMDYN	0.00	0.00

BAAOP Enhancements:

Flex Ramp Sufficiency

- EIM > Transmission > Flex Ramp Sufficiency - Schedules

Flex Ramp Sufficiency - Export

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Trade Date	Start Time	End Time	From BAA	To BAA	Resource	Scheduled MW	Override Scheduled MW
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_GRMA-APND-GILARIVER500-E-P-F-AZPS	0.00	0.00
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	IID	AZPE-DGAP_IID-APND-YUCCA69-E-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_LDWP-APND-NAVAJO500-E-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	PNM	AZPE-DGAP_PNM-APND-FOURCORNE230-E-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	PNM	AZPE-DGAP_PNM-APND-FOURCORNE345_PNM-E-P-D-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	PNM	AZPE-DGAP_PNM-APND-FOURCORNE345_PNM-E-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	PNM	AZPE-DGAP_PNM-APND-FOURCORNE345_PNM-E-P-F-PACE		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	PNM	AZPE-DGAP_PNM-APND-FOURCORNE345_PNM-E-P-F-PNM		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	PNM	AZPE-DGAP_PNM-APND-FOURCORNE500-E-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_PNM-APND-SHOWLOW69-E-P-D-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_PNM-APND-SHOWLOW69-E-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_SRP-APND-CHOLLA500_SRP-E-P-D-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_SRP-APND-CHOLLA500_SRP-E-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_SRP-APND-DESERTBASIN-E-P-D-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_SRP-APND-JOJOBA500-E-P-D-AZPS		

BAAOP Enhancements:

Flex Ramp Sufficiency

- EIM > Transmission > Flex Ramp Sufficiency - Schedules

Flex Ramp Sufficiency - Import

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Trade Date	Start Time	End Time	From BAA	To BAA	Resource	Scheduled MW	Override Scheduled MW
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_GRMA-APND-GILARIVER500-I-P-D-AZPS	0.00	0.00
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_GRMA-APND-GILARIVER500-I-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	IID	AZPE-DGAP_IID-APND-YUCCA69-I-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_LDWP-APND-NAVAJO500-I-P-D-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_LDWP-APND-NAVAJO500-I-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	PNM	AZPE-DGAP_PNM-APND-FOURCORNE345_PNM-I-P-D-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	PNM	AZPE-DGAP_PNM-APND-FOURCORNE345_PNM-I-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	PNM	AZPE-DGAP_PNM-APND-FOURCORNE345_PNM-I-P-F-PACE		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	PNM	AZPE-DGAP_PNM-APND-FOURCORNE345_PNM-I-P-F-PNM		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_SRP-APND-CHOLLA500_SRP-I-P-D-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_SRP-APND-CHOLLA500_SRP-I-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_SRP-APND-DRYLAKKEEAST-I-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_SRP-APND-DRYLAKKEWEST-I-P-F-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_SRP-APND-GILARIVER500-I-P-D-AZPS		
07/27/2018	07/27/2018 04:15	07/27/2018 04:20	AZPS	SRP	AZPE-DGAP_SRP-APND-GILARIVER500-I-P-F-AZPS		

BAAOP Enhancements:

Pseudo-Tie Share Transfer

- EIM > Transmission > PTST Limits > RTPD

EIM > Transmission > PTST Limits > RTPD

Trade Date [ALL]

PTST Limits

1 - 25 of 1477

BAA	Group	Enabled	Start Hour	End Hour	Override Limits			
					Lower	Upper	Lower	Upper
	PTST	✓	04/30/2018 15:00	04/30/2018 16:00	0.01	0.01	0.01	0.01
	PTST	✓	04/30/2018 16:00	04/30/2018 17:00	0.01	0.01	0.01	0.01
	PTST	✓	04/30/2018 17:00	04/30/2018 18:00	0.01	0.01	0.01	0.01
	PTST	✓	04/30/2018 18:00	04/30/2018 19:00	0.01	0.01	0.01	0.01
	PTST	✓	04/30/2018 19:00	04/30/2018 20:00	0.01	0.01	0.01	0.01
	PTST	✓	04/30/2018 20:00	04/30/2018 21:00	0.01	0.01	0.01	0.01
	PTST	✓	04/30/2018 21:00	04/30/2018 22:00	0.01	0.01	0.01	0.01
	PTST	✓	04/30/2018 22:00	04/30/2018 23:00	0.01	0.01	0.01	0.01
	PTST	✓	04/30/2018 23:00	05/01/2018 00:00	0.01	0.01	0.01	0.01

BAAOP Enhancements:

ETSR Limits

- EIM > EIM > ETSR Detail (RTPD)

▼ BAA Limits (15 MIN)

Columns | 1 - 12 of 20 | | | List View | Time stamps/Data points

	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00
Limit Type	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit
15 min		248	248	248	241	241	241	241	241	241	241	241
Trans Limit		248	248	248	241	241	241	241	241	241	241	241
Trans Prof	236	236	236	236								

▼ Override Limits (15 MIN)

Columns | 1 - 12 of 18 | | | List View | Time stamps/Data points

	16:15	16:30	16:45	17:00	17:15	17:30	17:45	18:00	18:15	18:30	18:45	19:00
Limit Type	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit
15 min												
Trans Limit												

Current View

BAAOP Enhancements:

ETSR Limits

- EIM > EIM > ETSR Detail (RTPD)

_CISO_I_EIMDYN

▼ BAA Limits (5 MIN)

Columns 1-12 of 25

List View Time stamps/Data points

	15:35	15:40	15:45	15:50	15:55	16:00	16:05	16:10	16:15	16:20	16:25	16:30
Limit Type	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit	Limit
Trans Limit	248	248	248	248	248	248	248	248	248	248	248	248
5 min	248	248	248	248	248	248	248	248	248	248	248	248
15 min	248	248	248	248	248	248	248	248	248	248	248	248
Trans (INP)	248	248	248	248	248	248	248	248	248	248	248	248
5 min (INP)	248	248	248	248	248	248	248	248	248	248	248	248
15 min (INP)	248	248	248	248	248	248	248	248	248	248	248	248

New View

New OASIS Report



California ISO

OASIS



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Welcome to the California ISO Open Access Same-time Information System (OASIS) site. On OASIS you will find real-time data related to the ISO transmission system and its Market, such as system demand forecasts, transmission outage and capacity status, market prices and market result data.

Standards Information

[North American Energy Standards Board \(NAESB\)](#)

[ISO Business Practice Manuals](#)

[Available Transfer Capability Information](#)


System Help

For interface technical specifications, product release plans and other supporting documents go to:

[System Technical Information](#)



New OASIS Report – *mockup view*



OASIS

← → STOP ↺ ↻ 🔍 🔗 →

OASISUI Prod

ATLAS REFERENCE
REPORT DEFINITION
PRICES
TRANSMISSION
SYSTEM DEMAND
ENERGY
ANCILLARY SERVICES
CONGESTION REVENUE RIGHTS
PUBLIC BIDS

Start Date
5/11/2018
End Date
6/10/2018
BAA
[ALL]V
Market Event
[ALL]V
Apply

BAA Market Events


Refresh Sort
Export
First Page
Prev Page
1 - 20 of N
Next Page
Last Page
Go to
GO

Sort 1
Sort 2
Sort 3
Sort 4

Group 1
Group 2
Group 3

Opr Date	Hour Ending	Interval	BAA	Market Event
5/11/2018	16	16	1 AZPS	Contingency
5/11/2018	16	16	12 AZPS	Contingency
5/13/2018	9	9	9 NEVP	Contingency
5/13/2018	11	11	3 NEVP	Contingency
5/13/2018	11	11	4 NEVP	Contingency-Corrected to No
5/13/2018	11	11	5 NEVP	Contingency-Corrected to No
6/7/2018	3	3	11 PGE	Contingency-Corrected to Yes
6/9/2018	24	24	12 PSEI	Contingency

Report Generated: 6/25/2018 16:26:06


CONNECTED

'15=\$23.04746
ZP26=\$21.96336
| SMEC=\$23.06591

For RT Interval
17:20 - LMP for

QUICK LINKS

SYSTEM HELP

OASIS Home
System Operating Messages
LMP Price Contour Maps
Trading Hub Real-Time Prices
Historical ACE
WWW.CAISO.COM
Support
System Technical Information
06/26/2018 17:16 PDT

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Additional topics: MasterFile (2018EIM-BRQ0019).

- Upon EIM Enhancements 2018 implementation, MasterFile will have the maximum ramping limits for any non-resource specific system (NRSS) resource set, and future additions will default, to a value of 9,999 MW/min.
- This allows for RA availability settlement improvements as these values were previously defaulting to zero.
- No other max ramping limit value will be accepted besides 9,999 MW/min for this resource type.

MasterFile (2018EIM-BRQ0019).

(cont.)

- Updates will be made automatically by the ISO for existing NRSS resource sets upon Go Live (no need for participant submission), and will be automatically defaulted for future NRSS resources.

RTM Market Application

Two enhancements were pre-delivered as part of the 2017 Winter release to meet the requirements for Flex Ramp Product (FRP) exclusion for EIM BAAs during contingency events. These enhancements are listed here for reference:

- Enhancement CQ CAISO00007206 (HPQC 53926) – Exclude EIM BAAs under contingency from FRP.
- Enhancement CQ CAISO00007464 (HPQC 54975) – Adjust EIM Area flex requirements when one or more EIM BAAs are under contingency.

Questions?