BANC EDAM Implementation

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WEIM RIF MEETING - BOISE, IDAHO

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BANC EDAM Topography

EDAM BAA – BANC

- Split into sub-BAAs Each sub-BAA manages its ACE
- RT Logical Interface calculates market transfer MWs between the sub-BAAs
- BAA Services Contract with SMUD Operations

5 x EDAM Merchant SC's, each with:

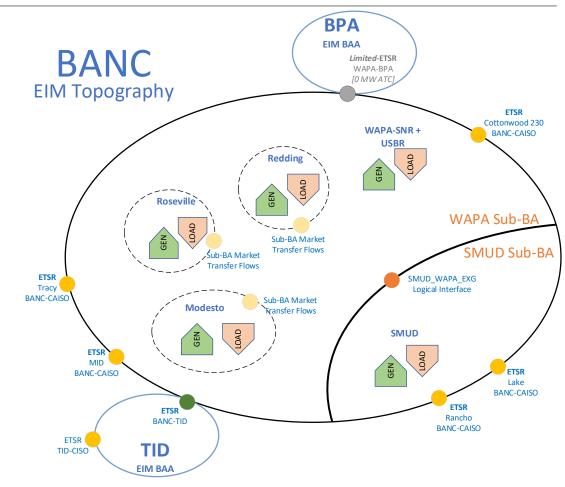
- Metered boundary
- Participating Generation
- Load (individual ISO Forecasts)

2 x ETSR's/Mirror Resources

- BPA (very limited ATC)
- TID

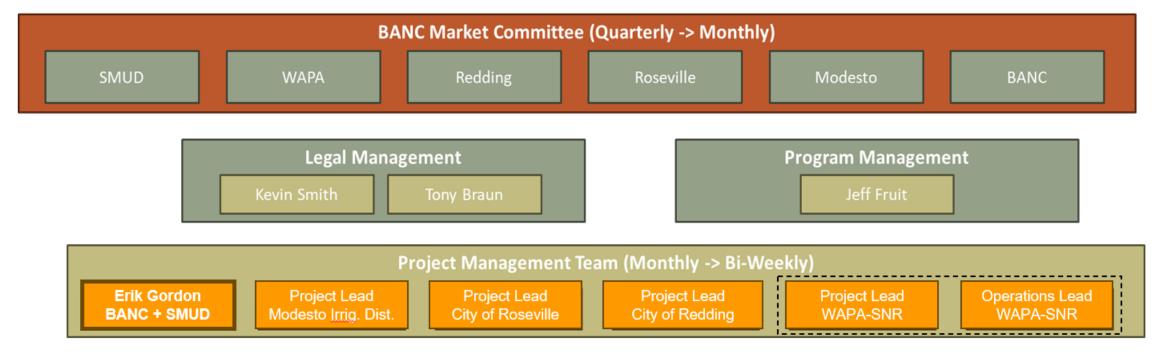
5 x Transfer Points/Resources with CISO BAA

COTP Transmission Line purposely excluded from EDAM (and EIM) at this time.

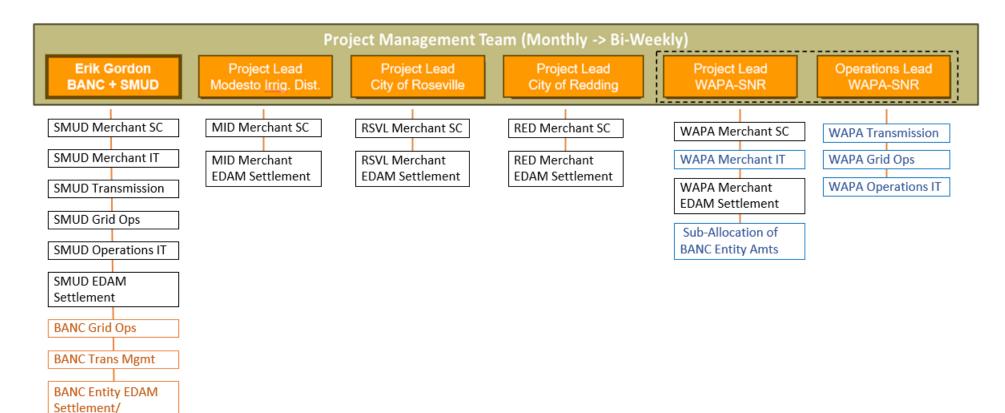


BANC EDAM Program Org Structure





EDAM Implementation Organization



Allocation

BANC EDAM - Workstream + Participant Index

EDAM Workstreams	BANC	SMUD	WAPA-SNR	MODESTO, REDDING, ROSEVILLE
BANC EDAM - Known Gaps/Issues	Lead BANC-wide EDAM discussion/decisions: BANC Trinity carve-out BANC RSE - allocation to PRSCs Other topics tbd	Support BANC-wide EDAM discussions / decisions	Support BANC-wide EDAM discussions / decisions	Support BANC-wide EDAM discussions / decisions
Scheduling / Transmission	Lead design of BANC EDAM scheduling/transmission software (OATI vendor management) Lead design of BANC EDAM scheduling/transmission business processes Integrate all BANC Member's OASIS, schedules, transmission to CAISO EDAM systems	Integrate SMUD OASIS to BANC solution. Integrate schedules, transmission to BANC EDAM solution.	Integrate WAPA OASIS to BANC solution. Integrate schedules, transmission to BANC EDAM solution.	Integrate schedules, transmission to BANC EDAM solution.
Merchant	Support definition of EDAM Day Ahead process discussions with PRSCs Support definiition of EDAM PRSC strategies	PRSC EDAM Business Processes PRSC EDAM software enhancements/additions PRSC EDAM Reporting/Analysis enhancements PRSC Strategy - Define PRSC Day Ahead Strategies, including RSE	PRSC EDAM Business Processes PRSC EDAM software enhancements/additions PRSC Reporting/Analysis enhancements PRSC Strategy - Define PRSC Day Ahead Strategies, including RSE	PRSC EDAM Business Processes PRSC EDAM software enhancements/additions PRSC Reporting/Analysis enhancements PRSC Strategy - Define PRSC Day Ahead Strategies, including RSE
Legal	Ensure common language and congruence across the BANC Participant OATTs and BPs Coordinate across BANC Participants, schedule for OATT updates Update BANC Business Practices for EDAM EDAM Legal advisory for BANC Participants	SMUD OATT and Business Practices updates for EDAM. Participate/Support BANC Business Practices update process.	WAPA OATT, Contracts, and Business Practices updates for EDAM. Participate/Support BANC Business Practices update process.	Participate/Support BANC Business Practices update process. No OATT or BP
Settlements	Lead BANC-wide Settlement discussion/decisoins: Define new BANC EDAM charge allocations Update existing BANC EIM charge allocations for EDAM concepts (where applicable) BANC Transmission revenue allocation + supporting reports (if necessary) BANC – EDAM Credit Policy – define requirements, deliver process. Deliver BANC's EDAM settlement solution, support testing, vendor management of BANC settlement solution.	Support BANC-wide Settlement discussions / decisions Define/deliver EDAM PRSC Settlement solutions, testing, vendor management of SMUD settlement solution	Support BANC-wide Settlement discussions / decisions Define/deliver EDAM PRSC Settlement solutions, testing Define/deliver WAPA EDAM PRSC allocation of charges, testing Define/deliver WAPA EDAM re-allocation of BANC Entity charges, testing (including integrations to BANC EDAM allocation data) Vendor management across all WAPA software items above.	Support BANC-wide Settlement discussions / decisions Define/deliver EDAM PRSC Settlement solutions, testing, vendor management.

BANC's EDAM Software Vendors

	BANC Entity	SMUD	WAPA	Modesto	Redding	Roseville (via ACES Power)
Merchant	na	PCI	ΟΑΤΙ	ΟΑΤΙ	Power	Hartigen
Market					Settlements	PowerOptix
Merchant		Power		Power	Power	Hartigen
Settlement	na	Settlements	OATI	Settlements	Settlements	PowerOptix
Entity ISO	- OATI	na	ΟΑΤΙ	na	na	na
Interfaces						

EDAM Settlement Charges

- 53 New/Updated Settlement Charges requiring Review/Analysis
 - EDAM Entity = 43
 - EDAM Merchant SC = 31
 - Many overlap; some dependent on modeling/business decisions.
- Existing EIM Charges require analysis/review, but may not need new allocation methodology.
- Challenging new charges for BANC Entity:
 - Transfer Revenue allocations across multiple Transmission Owners; and including some ETC rights.
 - Resource Sufficiency penalties across the BANC Merchant SCs.
 - Congestion Offset dollars across the BANC Merchant SCs.
- BANC has identified need for Inter-SC Trade (IST) instrument in EDAM to support bilateral trades between counterparty SCs within EDAM BAAs + CISO BAA.

EDAM Entity	Merchant SC	Chg Code #	Chg Code Name
	Х	491	Greenhouse Gas Emission Cost Revenue
	Х	4515	GMC Bid Transaction Fee
Х	Х	4560	GMC Market Services Charge
Х	Х	4561	GMC System Operations Charge
	Х	4563	GMC Transmission Ownership Rights Charge
Х	Х	6011	Day Ahead Energy, Congestion, Loss Settlement
?		6476	Real Time Assistance Energy Transfer Surcharge
Х		6478	Real Time Imbalance Energy Offset - System
Х		6479	Real Time Assistance Energy Transfer Allocation
Х	Х	6483	Hour-Ahead Scheduling Process Uplift Settlement
	Х	6630	IFM Bid Cost Recovery Settlement
Х	Х	6636	IFM Bid Cost Recovery Tier 1 Allocation
Х	Х	6637	IFM Bid Cost Recovery Tier 2 Allocation
	?	6788	Real Time Market Congestion Credit Settlement
Х	Х	6806	Day Ahead Residual Unit Commitment (RUC) Tier 1 Allocation
Х	Х	6807	Day Ahead Residual Unit Commitment (RUC) Tier 2 Allocation
Х		6947	IFM Marginal Losses Surplus Credit Allocation
	Х	6984	RTM Net Marginal Loss Assessment per CAISO Agreement
Х	Х	7070	Flexible Ramp Forecast Movement Settlement
Х	Х	7071	Daily Flexible Ramp Up Uncertainty Capacity Settlement
Х		7076	Flexible Ramp Forecast Movement Allocation
Х	Х	7077	Daily Flexible Ramp Up Uncertainty Award Allocation
Х	Х	7078	Monthly Flexible Ramp Up Uncertainty Award Allocation
Х	Х	7081	Daily Flexible Ramp Down Uncertainty Capacity Settlement
Х	Х	7087	Daily Flexible Ramp Down Uncertainty Award Allocation
Х	Х	7088	Monthly Flexible Ramp Down Uncertainty Award Allocation
	Х	8071	Day Ahead Imbalance Reserve Up Settlement
Х		8076	Day Ahead Imbalance Reserve Up Tier 1 Allocation
Х		8077	Day Ahead Imbalance Reserve Up Tier 2 Allocation
Х		8080	Resource Sufficiency Surcharge
	Х	8081	Day Ahead Imbalance Reserve Down Settlement
Х		8086	Day Ahead Imbalance Reserve Down Tier 1 Allocation
Х		8087	Day Ahead Imbalance Reserve Down Tier 2 Allocation
X		8088	Resource Sufficiency Surcharge Revenue Allocation
	Х	8310	Day Ahead GHG Settlement
Х		8315	Day Ahead GHG Offset
X		8404	Day Ahead Energy Offset - System
X		8704	Day Ahead Congestion Offset
X		8800	Day Ahead RUC Reliability Capacity Up Settlement
X	?	8806	Day Ahead Reliability Capacity Up Tier 1 Allocation
X	?	8807	Day Ahead Reliability Capacity Up Tier 2 Allocation
X		8810	Day Ahead RUC Reliability Capacity Down Settlement
X	?	8816	Day Ahead Reliability Capacity Down Tier 1 Allocation
X	?	8817	Day Ahead Reliability Capacity Down Tier 2 Allocation
X	X	64600	FMM Instructed Imbalance Energy EIM Settlement
X	X	64700	Real Time Instructed Imbalance Energy EIM Settlement
X		64770	Real Time Imbalance Energy Offset EIM
~	Х	66200	Bid Cost Recovery EIM Settlement
Х	~	#NEW#	Real Time Market GHG Offset
?		#NEW#	TRR Recovery Payment
?		#NEW#	TRR Recovery Charge
X		#NEW#	Day Ahead Transfer Revenue Settlement
X		#NEW#	RTM Transfer Revnue settlement
43	31	53	Count of Charges

BANC Settlement Workstream Notes

BANC sees need to begin the Entity Allocation definition process very early in the Project Schedule:

- The Allocation methodologies are required inputs to BANC Settlement vendor software cost and delivery estimates.
- The BANC Allocation methodologies are required input to WAPA-SNR's Sub-Allocation of the Entity amounts...to the WAPA Customers.

BANC Allocation approach progress has been better than planned to date:

- Defined draft allocation methodology for 16 of the 26 charges codes that are currently documented.
- Expect to complete remaining 10 by August, when ISO will release remaining ~16 charge configuration guides.

Need For Timely Settlement Test Data

Vendor has stated (*and previously demonstrated*) that there is a software delivery lag of 30-60 days from ISO publication of 'complete' set of Settlement data.

- BANC seeking to work with CAISO and PowerSettlements to define the scope/requirements for a 'complete' Settlement data set (one Trade Date).
- Would like to ensure 'complete' data set can be delivered in early Summer 2025 testing phase.

ISO EDAM 'complete' data publication:

- **June 2025:** *Settlement testing begins in July/August 2025...Good!!*
- **October 2025:** ...testing begins in November/December 2025...too late.

Let's analyze this now while there is time to ensure soonest delivery.

