

DSW EIM Implementation Update #2

May 24, 2022



Webex Participation

- Webex is being recorded
- All participants are muted
- For questions, please choose one of the following options:
 - Send questions to all panelists via Webex chat
 - Use the “Raise Hand” icon next to your name in participant list. A panelist will respond and enable you to unmute yourself. Please lower your hand afterwards.
 - Text your question to 480-225-9135.



Today's Agenda

- Current EIM Implementation Activities
- OATT Preparation Timeline
- EIM Business Practice Update
- Upcoming Rate Adjustment
- Metering & Settlements Update
- Hoover Update
- AEPCO Update
- Questions



Current EIM Implementation Activities

Generation

- Generation Resource Data Template
- Outreach to BA generators / EIM Configuration
- Hydro operations (Hoover / PDP)

Balancing Authority Area

- Full Network Model
- Energy Transfer System Resources (ETSRs)
- Pseudo-Ties
- Metering
- Settlements
- IT Tools

WAPA Business

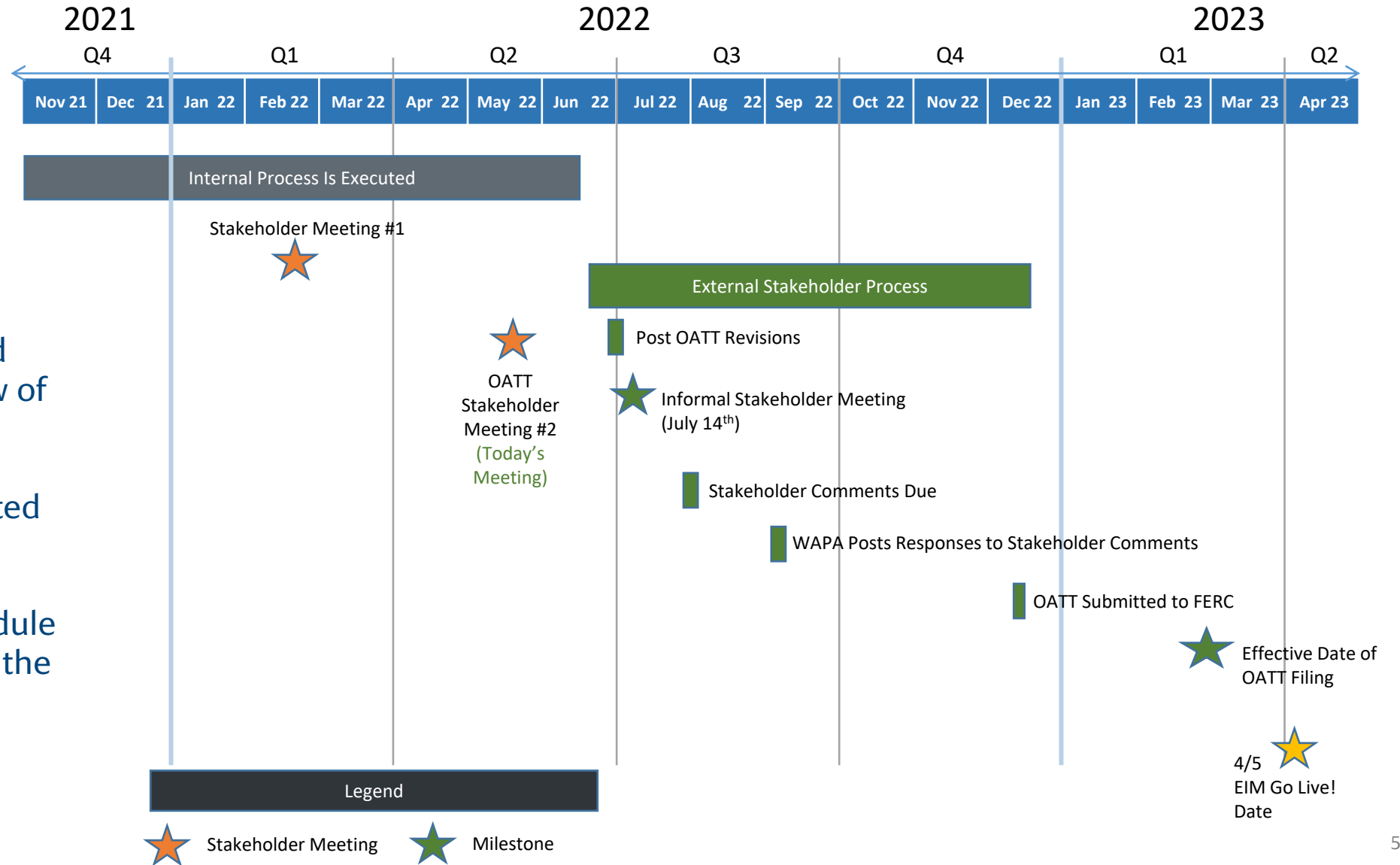
- Agreements
- OATT
- Business Practice Manual
- Rates
- Training / SOPs
- Change Management (OCM)



OATT Preparation Timeline

Status:

- OATT internal drafting process is underway.
- OATT is being prepared after a thorough review of industry norms from current EIM Balancing Authorities (BAs) adapted for WAPA DSW.
- WAPA DSW is on-schedule for early July to kickoff the External Stakeholder Process.



EIM Business Practice Update

- WAPA DSW, consistent with peer EIM BAs, will be preparing an EIM Business Practice.
- The Business Practice will cover EIM operations in-line with established precedent including:
 - Resource registration
 - Outage management
 - Forecasting
 - Settlements & Billing
 - ... and more
- The EIM Business Practice will be issued consistent with the WAPA's Business Practice on the Creation & Modifications to Business Practices, <https://www.oasis.oati.com/woa/docs/WAPA/WAPAdocs/Western-OATT-BP-Update-Process-Version-2009-1002.pdf>



Rate Adjustment Process

Tentative Timeline	Activity
August 2022	Proposal published in <i>Federal Register</i> ; Public comment and consultation period begins
October/November 2022	Public comment and consultation period concludes
January/February 2023	Rate Order with schedules approved and published in <i>Federal Register</i>
April 2023	New rate schedules effective



Rate Adjustment Preview

New DSW Rate Schedules	General Description
EIM Administrative Service (Schedule 1T to Tariff)	Transmission customers will be charged for administrative costs allocated to WAPA DSW for EIM participation
EIM Energy Imbalance Service (Schedule 4T to Tariff)	Transmission customers will be charged for EIS costs allocated to WAPA DSW for EIM participation
EIM Generator Imbalance Service (Schedule 9T to Tariff)	Transmission customers will be charged for GIS costs allocated to WAPA DSW for EIM participation

Note: These new schedules will be designed to ensure that WAPA DSW remains revenue neutral for its participation in the EIM.



Metering & Settlements Update –

Slide 1 of 3

- WAPA DSW is in the drafting process and has reviewed peer utilities and Federal entities.
- Concepts shared today are directionally correct, but WAPA DSW will be refining these in concert with our required review processes.
- Going forward, changes in the way settlements are performed will result in new charges/credits and transmission losses will be settled financially.
- In the following slides, WAPA DSW will cover initial thoughts on the 4 categories for EIM Entity Settlement Charge Codes:
 1. Measured Demand
 2. Metered Demand
 3. Directly Suballocated
 4. Allocation TBD



Metering & Settlements Update –

Slide 2 of 3

Two important concepts regarding the allocations:

- **Metered Demand:** Sum of the individual entity's metered load
- **Measured Demand:** Includes (1) metered demand, plus (2) tagged exports

- EIM Entity Settlement Charge Codes subAllocated to **Measured Demand**
 - Offsets
 - 6478 Real Time Imbalance Energy Offset – System
 - 64740 Real Time Unaccounted for Energy EIM Settlement
 - 64770 Real Time Imbalance Energy Offset EIM
 - 67740 Real Time Congestion Offset EIM
 - 69850 Real Time Marginal Losses Offset EIM
 - Flex Ramp
 - 7070 Flexible Ramp Forecast Movement Settlement
 - 7071 Daily Flexible Ramp Uncertainty Capacity Settlement.
 - 7076 Flexible Ramp Forecast Movement Allocation
 - 7077 Daily Flexible Ramp Up Uncertainty Award Allocation
 - 7078 Monthly Flexible Ramp Up Uncertainty Award Allocation
 - 7087 Daily Flexible Ramp Down Uncertainty Award Allocation
 - 7088 Monthly Flexible Ramp Down Uncertainty Award Allocation
 - Revenue Neutrality
 - 8989 Daily Neutrality Adjustment
 - 8999 Monthly Neutrality Adjustment
 - Bid Cost Recovery
 - 66200 Bid Cost Recovery EIM Settlement
 - 66780 Real Time Bid Cost Recovery Allocation EIM
 - Administrative Fees
 - 4564 GMC-EIM Transaction Charge
 - 4575 SMCR -Settlements, Metering, and Client Relations
 - N/A EESC Allocation Neutrality Allocation

Working Draft Language – Under Review



Metering & Settlements Update –

Slide 3 of 3

- EIM Entity Settlement Charge Codes subAllocated to **Metered Demand**
 - 6046 Under Scheduling and Over Scheduling Allocation
- EIM Entity Settlement Charge Codes **Directly subAllocated**
 - 64600 FMM Instructed Imbalance Energy EIM Settlement
 - 64700 Real Time Instructed Imbalance Energy EIM Settlement
 - 64750 Real Time Uninstructed Imbalance Energy EIM Settlement
 - 6045 Overscheduling and UnderScheduling Charge
 - 701 Forecasting Service Fee
 - 1591 EP Penalty Charge due CAISO Trustee
 - N/A Mkt Operator Tax Liabilities

Working Draft Language – Under Review

- Infrequent, Small Volume, & Small Dollar Amount EIM Entity Settlement Charge Codes
– **Allocation TBD:**
 - 1592 EP Penalty Allocation Payment
 - 7989 Invoice Deviation Interest Distribution
 - 7999 Invoice Deviation Interest Allocation
 - 5900 Shortfall Receipt Distribution
 - 5901 Shortfall Allocation Reversal
 - 5910 Shortfall Allocation
 - 5912 Default Loss Allocation
 - 2999 Default Invoice Interest Payment
 - 3999 Default Invoice Interest Charge
 - 5024 Invoice Late Payment Penalty
 - 5025 Financial Security Posting (Collateral) Late Payment Penalty
 - 8526 Generator Interconnection Process GIP Forfeited Deposit Allocation
 - 6194 Spinning Reserve Obligation Settlement
 - 6196 Spinning Reserve Neutrality Allocation
 - 6294 Non-Spinning Reserve Obligation Settlement
 - 6296 Non-Spinning Reserve Neutrality Allocation
 - 8526 Generator Interconnection Process Forfeited Deposit Allocation

Working Draft Language – Under Review



Hoover Update

- Agreements
 - Hoover Electric Service Contract and Metering & Scheduling Instructions (MSI) Attachment drafting has commenced; initial comments received look promising
- Technical Track Discussions:
 - New Resource Implementation (NRI) process underway with CAISO Sink BAs
 - BA-to-BA customer check-in discussions will model the CAISO process
 - Internal WAPA DSW team beginning work on Settlement Quality Meter Data (SQMD) plan formation w/ support from Utilicast
- Technical Track Meeting #3 scheduled for Thursday, June 2nd

#	Schedule Type	Scheduling Entity	Sink BA	MWs (Pmax Values for Registration)	Requirement Set
1	Dynamic VEA	AEPCO/ACES VEA	CISO	17.673	CAISO Requirements
2	Dynamic MWD	AEPCO/ACES MWD	CISO	249.948	
3	Dynamic	Anaheim	CISO	40.396	
4	Dynamic	SCE	CISO	287.129	
5	Dynamic	LADWP	LADWP	536.255	BA to BA Requirements
6	Dynamic	NV Energy	NEVP	237.558	
7	Dynamic	SRP	SRP	147.790	



Arizona Electric Power Co-operative Update

- AEPCO will be joining EIM as a Participating Resource Scheduling Coordinator (PRSC)
 - Maintains control over their outages, load forecasts, and settlement processes
- AEPCO is in the process of re-configuring meters to 5-min intervals to meet CAISO requirements and analyzing their settlement processes
- AEPCO is continuing to coordinate with WAPA and CAISO through the implementation process



Questions?



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Further Information on EIM Implementation

<https://www.wapa.gov/regions/DSW/Pages/DSW-EIM.aspx>

<https://www.westerneim.com/Pages/JoinEIM.aspx>



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