



SNR Extended Day Ahead Market Customer Meeting Thursday, June 20, 2024

Minutes and Q&A

Arun Sethi, WAPA:

- Purpose for this meeting is to discuss the status of WAPA's exploration of California Independent System Operator's (CAISO) Extended Day Ahead Market (EDAM) and WAPA's Sierra Nevada Region's (WAPA) potential participation in EDAM.
- Informal stakeholder processes started on 9/26/23, by introducing EDAM, transmission provisions, and potential WAPA issues, followed by the presentation by the Brattle Group of the results from a cost-benefit study for BANC on 12/5/23.
- WAPA's original plan was to present additional information in March 2024; however, there was not significant developments with CAISO by that time. WAPA sent an EDAM update email to all customers in March.
- WAPA is now restarting the informal stakeholder customer process.

Tong Wu, WAPA:

- All participating Balancing Authority Area's (BAA) including all transmission providers need to provide transmission to the CAISO to do their congestion management.
- California and Washington states have Green House Gas (GHG) emission regulations that other states don't have yet. Energy imports to California and Washington would incur additional costs, which will be represented as a bid adder. There will not be any bid adder for resources in California, so it does not affect WAPA.
- There are two new products in EDAM– Imbalance Reserve and Reliability Capacity. Reliability capacity replaces the current RUC (Residual Unit Capacity), which allows a unit to apply capacity either up or down but not at the same time.
- Transmission provisions – there are three ways for transmission to be provided:
 - Bucket 1 – LSE's can use bucket 1 to satisfy resource sufficiency requirements.
 - Bucket 2 – Can be released to allows others to use your transmission rights. But for legacy transmission contracts, the transmission rights holder has the option to keep it.
 - Bucket 3 – For transmission owners who have unsold transmission on OASIS, the transmission will be released to EDAM.
- These buckets are for transmission across BANC and CAISO. The CAISO considers that transmission within the BAA will be provided to EDAM.
- All transmission facilities in EDAM needs to show they have Resource Sufficiency (RS) and there is an RS Evaluation (RSE) tool. Any time there is a change to the resource schedule, the RSE can run on demand.

New Day-Ahead Market Products:

- WAPA has not determined yet how CVP Generation will participate and earn additional revenue in EDAM from in the Imbalance Reserve UP and Down and Residual Capacity up and down provisions of EDAM.



BANC Footprint EDAM Benefits:

- BANC's Brattle Study shows potential total annual BANC benefit of approximately \$9.5 million.

EDAM Implementation Implications:

Resource Adequacy:

- **Tong Wu, WAPA:** Today WAPA's customers cannot claim Base Resource (BR) as Resource Adequacy (RA) because there is no certainty a year out how much BR will be available.
- WAPA discussed with the CAISO to allow CVP to provide RA with some certainty. Currently, CAISO does not recognize CVP as a Use-Limited Resource (ULR) and Conditionally Available Resource (CAR). By joining the EDAM, CVP generation will be in the CAISO's EDAM footprint. WAPA discussed with the CAISO and the understanding is that CVP gen can be considered ULR and CAR.
- As ULR and CAR, if the actual BR delivery of CVP in the 2-day delivery process is different from month or one year forecast, CAISO will not insert a bid on WAPA's behalf; giving WAPA the flexibility to meet the RA obligations.
- CAISO has yet to formally approve that CVP can be recognized as ULR and CAR. Once the decision is made to join EDAM, WAPA will submit the application for the CVP to get ULR and CAR status.
- Not all Base Resource (BR) allocation in day ahead can be used as RA. A possibility is to set a percentage of BR forecast as RA and then adjust as more evaluation can be completed.

Benefits:

- For members in the CAISO BAA, if CAISO does not have enough RA capacity, they would then procure and pay the provider \$7/kw-month and that will be allocated to the party that is short.
- That dollar amount in kw-month is hard to relate to market prices. If it is converted to MWh, then it is \$10.19/MWh, we can relate this number to existing market prices.
- This would be a significant benefit to CVP customers in CAISO BAA if CVP generation can qualify as RA

Q&A:

- **Kyle Conroy, City of Redding:** This is all to pass the RSE test in EDAM, correct, to count CVP gen as a resource adequacy?
- **Tong Wu, WAPA:** RA and Resource Sufficiency (RS) are two different concepts. The RSE test does not rely on RA; the requirement for RA is determined by your local regulatory authority. WAPA is its own regulatory authority and has its own RA standards. For RS, the CAISO sets the standards and allocates the requirements to every EDAM BAA, and they follow a different process to show how you meet those requirements.
- **Mike Whitney, NCPA:** Important example of the RA potential benefit, would it be potentially degraded by the conditional use.



- **Tong Wu, WAPA:** The CVP resource can be designated as use limited and conditional; however, the customers are still responsible for their RA if CVP is not available to provide RA that was expected. The customer is responsible to replace that capacity. If WAPA is exempt from RA must offer in the day-ahead market, it does not exempt customers from its own RA requirement.

Power Marketing Plan Implementation:

- **Tong Wu, WAPA:** Today WAPA schedules the CVP- Gen into the CAISO using imports. Under EDAM, we will not be able to import BR into the CAISO, and CVP will bid into the market as a generator and WAPA will get paid in EDAM.
- CVP generation has 3 aggregated units: Shasta/Trinity, Folsom, and New Melones (even as a pseudo-tie). These 3 will bid in separately and each will get paid according to their respective LMP and not a single LMP.
- How does WAPA pass money to customers for CVP generation in EDAM? The CAISO will create a CVP trading hub. The price at the trading hub has to be the weighted average of the 3 aggregated generators' LMPs with the weights being the final awards of the generators. This ensures that money received by the CVP generators will be passed along to WAPA's customers.
- WAPA will transfer energy to preference customers at the Inter-SC trading hub. WAPA will work with customers to ensure there is a proper corresponding Inter-SC trade (IST) and there isn't a mismatch. To address mismatch of IST, WAPA will develop a business process and share with customers.
- Currently, the CAISO EDAM Tariff does not allow an IST outside its BAA; however, CAISO plans to modify their tariff to allow all EDAM entities to submit ISTs.

Q&A:

- **Mike Whitney, NCPA:** as far as a missed IST, there is another opportunity in real-time, but if missed that, will have to determine how to address that.
- **Tong Wu, WAPA:** the price will not be the day-ahead price unless the CAISO does something different. WAPA is still considering how to make that happen.
- **Kevin Howard, NCPA:** Would the additional revenue address the PRR and Reclamation funding gaps?
- **Autumn Wolfe, WAPA:** Yes, it would be additional revenue going to the revenue requirement and will drop the bottom line; however, WAPA is looking to address any funding gaps.

Transmission Loss Revenue Recovery:

- **Tong Wu, WAPA:** Currently, WAPA charges transmission customers for transmission loss. Under EDAM, CAISO has a transmission revenue recovery mechanism. So how would WAPA account for that and not double charge customers?
- Current transmission loss charge for CVP is 1.6%. WAPA currently charges the customer the higher of the CVP generation cost or LMP (currently the MEEA price).
- Under EDAM, WAPA will get paid by the market. If the market price is less than the CVP generation cost, WAPA will collect the difference from transmission customers. Preference power customers will continue to pay transmission losses through the Power Revenue Requirements. If they have third-party contracts delivering power over WAPA transmission, then they will be treated as a transmission customer.



Q&A:

- **Kevin Howard, NCPA:** On Slide 14, wondering whether the way that the cash flows here will impact the cash flow for advanced customer funding and ability to credit, which is an issue we've been kind of working through?
- **Autumn Wolfe, WAPA:** Yes, it will. It will be additional revenue going to the power revenue requirement and it will drop the bottom line of the power revenue requirement. However, we are still brainstorming, working with customers and Reclamation to address any funding gaps Reclamation has. Stay tuned for that separate process as we continue to work through it.

Transmission Revenue Recovery:

- **Tong Wu, WAPA:** How would WAPA recover potential loss in short-term transmission revenue since EDAM might have customers wait for transmission to be available in the EDAM?
- On June 11, 2024, FERC approved the CAISO's Tariff filed on April 12, 2024, regarding EDAM transmission access charge.
- Through the EDAM transmission access charge provision, WAPA expects to recover loss of short-term transmission revenue in EDAM.

Other EDAM topics:

WAPA is still evaluating these topics and will cover in future meetings.

- Displacement Program. Will we keep the displacement program?
- Max-peaking Business Process. This is more of a WAPA-internal business process to be evaluated.
- Resource Sufficiency within BANC
- Settlement allocation in BANC
 - Congestion revenue allocation
 - Transfer revenue allocation.
 - CVP generation GMC allocation.

EDAM Budget, Process, and Timeline

- **Arun Sethi, WAPA:** Currently, WAPA does not have any budget specifically marked for EDAM. However, as we firm up our decision to join, we will work with WAPA internal partners to secure funding. WAPA's current fiscal year ends on September 30, 2024, and our finance group has identified some capital funds which may be available to use during this fiscal year. If we decide to join, our biggest expense will be software tools. Currently WAPA uses OATI tools, and we would like to procure the EDAM base software module but will need to do it soon due to WAPA procurement requirements. Additionally, if we use these funds, we don't expect any impact to the Power Revenue Requirement (PRR). Autumn can discuss how using the FY24 funds will not impact the PRR.
- **Autumn Wolfe, WAPA:** The cost of the software if it is purchased this year, would be in addition to the costs already identified in the PRR; however, the rates teams have been closely monitoring the project revenues as it comes in and even though we dropped the PRR at mid-year by \$10 million, we still anticipate having more project revenue than



expected, which would take care of that purchase without any additional payment required and would not impact customer project capital repayment plan.

- **Kevin Howard, NCPA:** Has a decision been made?
- **Arun Sethi, WAPA:** No decision has been made, but WAPA has to budget in anticipation just in case. Hoping for a decision from the WAPA administrator by Fall 2024 and are working to align the timing of use of funds and have a decision. The cost estimate for the OATI EDAM base module is \$800,000.
- **Kevin Howard, NCPA:** Is it possible to get any additional cost estimates as to what the additional costs might be prior to gaining the support from the customers or going ahead and utilizing the current FY funds?
- **Arun Sethi, WAPA:** Yes, we will have the estimated costs in future EDAM meetings. Staff is also using some of the EIM estimates as a comparison. WAPA has scheduled additional meetings to discuss additional specifics for EDAM in July and August 2024, but will cancel the meetings if they are not needed. The first group of EDAM participants will go-live in Spring 2026. WAPA and BANC are still discussing their timeline but looking at Spring 2027.
- **Kevin Howard, NCPA:** Encourage WAPA to see if there is a cost or benefits to WAPA to go live at the same time at BANC.
- **Arun Sethi, WAPA:** We have been talking with BANC and we have discussed BANC provide funding, but it is a little complex. So, if we have some funding within WAPA, it is easier to manage that. In future meetings we will have estimates for all of the other tasks to implement EDAM.
- On the process, we have scheduled three more meetings to discuss specifics of EDAM and if we need more meetings, we'll schedule more meetings and if we don't need extra meetings, we will cancel those. They are scheduled in July and August. In those meetings we will cover more specifics on EDAM and of course the estimates. You should have these appointments in your calendar. After we go through this informal stakeholder process with you, we will go to our administrator for the final decision and that will be approved by WAPA Administrator. Currently, CAISO's Timeline is that they will start EDAM in spring of 2026. We are still discussing our timeline with BANC, but we are looking at the target timeline of spring of 2027.
- **Tony Braun, BANC:** We appreciate everything that WAPA has put together. We look forward to working with WAPA on the timeline. BANC has made its decision to move forward. We want to look to see whether Spring of 2026 is still doable, but we understand that there are some limitations, and we'll keep that dialogue going.
- **Kevin Howard, NCPA:** There might be some value in going live at the same time as BANC, potentially some savings as well as other things. So, encourage you to work actively with BANC to see what the difference would be. It seems like it would make a lot of sense to go live at the same time on the surface.
- **Arun Sethi, WAPA:** WAPA will work with BANC to align WAPA's participation as best as possible to provide value to all our customers.