

**Balancing Authority of Northern California**

# Regular Meeting of the Commissioners of BANC

**2:00 P.M.**

**Wednesday, January 27, 2021**

**Telephonic Meeting Only**

# Balancing Authority of Northern California

## NOTICE OF REGULAR MEETING AND AGENDA

Notice is hereby given that a regular meeting of the Commissioners of the Balancing Authority of Northern California (BANC) will be held on **January 27, 2021** at **2:00 p.m.** **The meeting will be telephonic only.**

The following information is being provided as the forum by which members of the public may observe the meeting and offer public comment:

**Phone number:** 1-408-418-9388  
**Meeting number (access code):** 126 847 4368  
**WebEx Meeting Link:**

<https://braunblaisingsmithwynne.my.webex.com/braunblaisingsmithwynne.my/j.php?MTID=mfcd5c3c29f86d867e09c9f3734555231>

### AGENDA

- 1 Call to Order.**
- 2 Matters subsequent to posting the Agenda.**
- 3 Public Comment** – any member of the public may address the Commissioners concerning any matter on the agenda.
- 4 Consent Agenda.**
  - A. Minutes of the Regular Commission Meeting held on December 16, 2020.
  - B. BANC Operator Report (December).
  - C. Compliance Officer Report (January).
  - D. PC Committee Chair Report (January).
  - E. General Manager's Report and Strategic Initiatives Update.
- 5 Regular Agenda Items – Discussion and Possible Action.**
  - A. General Manager Updates
    - i. EIM Update.
      1. BANC EIM Phase 2 Collateral Approach.
      2. Consider and Possibly Approve Resolution 21-01-20 *Approval of Second Amended and Restated EIM Participation Agreement.*
      3. Consider and Possibly Approve Resolution 21-01-21 *Approval of BANC EIM Phase 2 Energy Imbalance Market Meter Standards and Specified Delegation to the General Manager.*
    - ii. EDAM Update.
    - iii. BANC Summer Assessment Update.
    - iv. Strategic Planning Issues.
      1. Update on Business Case for BANC OATT/OASIS.
  - B. Discussion of GM Status & Agreements.
- 6 Closed Session:** Conference with legal counsel in anticipation of litigation pursuant to subdivision (c) of Cal. Gov't Code § 54956.9; one matter.
- 7 Adjournment.**

Accessible Public Meetings - Upon request, BANC will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Please send a written request, including your name, mailing address, phone number and brief description of the requested materials and preferred alternative format or auxiliary aid or service at least 3 days before the meeting. Requests should be sent to: Kris Kirkegaard, 555 Capitol Mall, Suite 570, Sacramento, CA 95814 or to [kirkegaard@braunlegal.com](mailto:kirkegaard@braunlegal.com).

## **Balancing Authority of Northern California**

# Consent Agenda Items

- A. Minutes of the December 16, 2020 BANC Regular Meeting.**
- B. BANC Operator Report (December ).**
- C. Compliance Officer Report (January).**
- D. PC Committee Chair Report (January).**
- E. General Manager's Report and Strategic Initiatives Update.**

MINUTES OF THE REGULAR MEETING OF THE COMMISSIONERS OF THE  
BALANCING AUTHORITY OF NORTHERN CALIFORNIA (BANC)

December 16, 2020

On this date, a Regular Meeting of the Commissioners of the Balancing Authority of Northern California (BANC) and Strategic Planning Session was held telephonically.

Representatives Present:

<b>Member Agency</b>	<b>Commissioner</b>
Modesto Irrigation District (MID)	James McFall
City of Redding	Dan Beans, Chair
City of Roseville	Michelle Bertolino
Sacramento Municipal Utility District (SMUD)	Paul Lau
City of Shasta Lake	James Takehara
Trinity Public Utilities District (TPUD)	Paul Hauser

<b>Agency</b>	<b>Liaison(s)</b>
Western Area Power Administration (WAPA)	Sonja Anderson Arun Sethi Brian Griess Jeanne Haas

1. Call to Order: Mr. Shetler reviewed attendance and confirmed that a quorum was present. Chair Beans called the meeting to order at 4:01 p.m.
2. Matters Subsequent to Posting the Agenda: None.
3. Public Comment: Chair Beans invited comments from the public and none were given.
4. Consent Agenda: Mr. McFall moved, Ms. Bertolino seconded, and the participating Commissioners unanimously approved the Consent Agenda items comprised of: (A) Minutes of the Regular Commission Meeting & Strategic Planning Session held on November 18, 2020; (B) BANC Operator Report for November; (C) Compliance Officer Report for December; (D) PC Committee Chair Report for December; and (E) General Manager's Report and Strategic Initiatives Update.
5. Regular Agenda Items – Discussion and Possible Action:
  - A. Mr. Shetler provided an EIM update and reported that EIM Entity discussions with CAISO continue regarding heatwave impacts. A summary of these discussions is expected in January and the Commission will be updated. It is anticipated that some adjustments to the resource sufficiency test and EIM operations may be made prior to Summer 2021, but no specifics are available at this time. All major activities for EIM Phase 2 Implementation are on track for the March 25 2021 go-live date.

MINUTES OF THE REGULAR MEETING OF THE COMMISSIONERS OF THE  
BALANCING AUTHORITY OF NORTHERN CALIFORNIA (BANC)

Mr. McFall thanked everyone who worked on this effort and subsequently moved, with Mr. Hauser seconding, and Commissioners voted unanimously in favor of Resolution 20-12-08 *Approval of Balancing Authority of Northern California Energy Imbalance Market Settlement Allocations Manual for BANC EIM Phase 2 Operations*.

Ms. Bertolino moved, Mr. Lau seconded, and the participating Commissioners voted unanimously in favor of Resolution 20-12-09 *Authorization of Amendment to Utilicast Contract for Extension of Services Related to Phase 2 of Energy Imbalance market Post Go-Live Support*.

Ms. Anderson raised a question regarding resolutions that the BANC Commission may pass affecting EIM budget allocations and how WAPA could be impacted without having a vote. Mr. Shetler suggested that one way to address this may be to address this through revisions to the EIM Participation Agreement, which will be forthcoming. Mr. Shetler committed to working directly with WAPA on this process.

A subsequent discussion regarding the CAISO Collateral Account followed, with Mr. Shetler updating the Commission regarding the expected increase in required collateral for Phase 2 participation. A BANC EIM Reserve Fund in the amount of \$4 million was proposed for consideration, with \$3 million funding the CAISO Collateral Account and \$1 million remaining in the Reserve Fund to be used for short-term collateral account adjustment. It was acknowledged that the allocation methodology would need to be reviewed after sufficient EIM Phase 2 operations experience. Ms. Bertolino expressed some concern about the potential member allocations and suggested that some members may be greater drivers of the need for additional collateral than others, in addition to a concern about whether WAPA may be expected to provide funding beyond what they've already committed to. Ms. Anderson concurred that funding above levels already committed to would be a challenge for WAPA and suggested that perhaps seasonal adjustments be considered. Mr. Lau and Mr. Beans also voiced support for exploring alternate allocation methodologies and identifying options which may limit WAPA's financial liabilities beyond any budgeted amounts that have already been approved.

Mr. Shetler wrapped up the EIM update by sharing that the following items will be brought forward for Commission action prior to EIM go-live: Metering Policy, Risk Policies, an amendment to the BANC/SMUD EIM Services Agreement, and individual Entity EIM Participation Agreements.

Regarding EDAM, Mr. Shetler gave a high-level EDAM update. No formal notice regarding next steps on the Bundle 1 items (Transmission, Resource Sufficiency, Congestion Revenues) are expected until early 2021. Bundle 2 items (GHG, Ancillary Services, Full network Model Phase 2, EDAM Administrative Fee) have been delayed while CAISO focuses on the Day Ahead Market Enhancements effort.

Mr. Shetler shared that a draft BANC Summer Assessment plan has been shared with the Operating Committee (OC) and Resource Committee, and the OC has concurred with the plan. Data requests have been sent out to members, with responses due in early January. The goal is to update the Commission by the end of the first quarter 2021. On a related note, the joint agencies have drafted their SB100 report, which is out for review and comment. Detailed reliability/deliverability analyses have not yet been performed. A reduced level of natural gas generation has been assumed, and there may be a push for an earlier goal for zero GHG.

MINUTES OF THE REGULAR MEETING OF THE COMMISSIONERS OF THE  
BALANCING AUTHORITY OF NORTHERN CALIFORNIA (BANC)

Finally, Mr. Shetler gave an overview of updates to the draft business case for a BANC OASIS. A draft cost/benefit analysis was provided and reviewed with the Commission. Mr. McFall asked for more information regarding the benefits to BANC. Mr. Shetler responded that the potential exists for better market benefits alignment under a BANC OATT/OASIS, with BANC as the market engagement entity. Ms. Bertolino also asked whether all of the other EIM Participants had their own OATT, which they do. Mr. Smith also provided insights related to market efficiency, coordination, and optimization. Mr. Shetler suggested that perhaps additional thought be given to how third party/non-members would be engaged in participation and that this be revisited in the second quarter of 2021, considering that strategic planning is happening on a parallel track at TANC.

- B. Mr. Braun provided an update regarding the General Manager status as an independent contractor in relation to AB 5 and AB 2257. Additional reviews are taking place to determine any potential impacts in parallel with performance review planning between BANC Counsel and the Commission Chair, along with a review of the existing GM agreement.

- 6. Closed Session: The Commission retired to closed session at 3:27 p.m. for conference with legal counsel in anticipation of litigation pursuant to subdivision (c) of Cal. Gov't Code § 54956.9; one matter.

The Commission adjourned from closed session at 3:46 p.m., where no formal action was taken.

Minutes approved on January 27, 2021.

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C. Anthony Braun, Secretary



# BALANCING AUTHORITY OF NORTHERN CALIFORNIA

P.O. BOX 15830 • D109 • SACRAMENTO • CA 95852 -1830

**TO:** BANC Commission

**RE:** BANC Operator Report for December 2020

## Operations:

- BA Operations: Normal
- Significant BA Issues: None
- NWPP Reserve Energy Activations
  - 0 contingency requiring activation of NWPP
  - 0 MW average generation lost
  - 0 MW maximum generation lost
  - Generating unit(s) and date(s) affected: None
  - All recoveries within 0 minutes
- USF
  - 5 of 31 days with instances of USF mitigation procedure utilized
  - 1 day on Path 66
  - No operational impact on BANC
- BAAL Operation:
  - Maximum duration of BAAL exceedance: 5 Minutes
  - Number of BAAL exceedance >10 minutes: None
  - BAAL violation (BAAL exceedance >30 minutes): None
- Frequency Response (FR) Performance – Quarterly Metric:
  - 2020 Frequency Response Obligation (FRO): -14.7 MW/0.1Hz
  - Q3 Frequency Response Measure (FRM): -66.5 MW/0.1Hz
  - Q3 Number of Under-Performed Events: 0 out of 4
  - Q1~Q3 Frequency Response Measure (FRM): -37.8 MW/0.1Hz
  - Q1~Q3 Number of Under-Performed Events: 1 out of 12
  - 2021 Frequency Response Obligation (FRO): -15.5 MW/0.1Hz

## Monthly Notes:

- No additional notes or impacts for December 2020

A JOINT POWERS AUTHORITY AMONG

Modesto Irrigation District, City of Redding, City of Roseville, Trinity Public Utilities District,

City of Shasta Lake, and Sacramento Municipal Utility District

# Compliance Officer Report

## BANC Commission Meeting

### January 2021

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The following summarizes routine issues for the Commission's information and consideration. Any major issues or action items will be identified separately on the Commission agenda for action.

#### **BA Compliance Issues:**

- No significant operational Balancing Authority compliance events occurred.
- All required BA compliance reports and operating data were submitted to WECC.
- A BA tagging adjacency issue will be included on the next self-log submittal, which is due to WECC by January 31st.
- All BA/PC-applicable NERC Standard requirements are currently being reviewed as part of the annual compliance self-certification submittal, which is due to WECC on or before March 1st.

#### **BANC MCRC:**

- The next BANC MCRC meeting is scheduled to be held at 10:00 AM on Monday, February 24th via webinar.

# PC Committee Chair Report

## BANC Commission Meeting

### January 2021

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The following summarizes Planning Coordinator-related issues for the Commission's information and consideration. Any major issues or action items will be identified separately on the Commission agenda for action.

#### **BANC PC Committee Issues:**

- SMUD staff continue to work toward demonstrating compliance with PC-related NERC reliability standards.
  - FAC-013-2 Transfer Capability for the Near-Term Planning Horizon – This standard was retired by NERC on December 14, 2020. BANC has demonstrated compliance and evidence through December 13, 2020.
  - MOD-031-2 Demand and Energy Data – 2021 Loads and Resources Data Request Part 1 is being sent to BANC PC Participants for review and will be due back by February 10, 2020.
  - MOD-033-1 Steady-State and Dynamic System Model Validation – The selection of a system event to use for the dynamic model validation portion of MOD-033-1 is under way.
  - TPL-001-4 - Transmission System Planning Performance - The annual assessment study plan is being developed and will be sent out to BANC PC Participants in mid-February.
  - TPL-007-4 - Transmission System Planned Performance for Geomagnetic Disturbance Events – The GIC monitor was installed at SMUD's Carmichael 230kV substation on November 2, 2020. Staff registered the SMUD/BANC PC GIC monitoring device with NERC to comply with requirement 12. Requirement 13 requires obtaining geomagnetic field data for the BANC PC planning area. Per NERC's recommendation, it was requested that the GIC device manufacturer increase the sampling rate from the default setting of once every hour to once every 10s or faster.
  - IRO-017-1 Outage Coordination – Will be contacting neighboring entities regarding system outages that may affect BANC PC participants by mid-February.
  - RSAWs – Various RSAWs are currently being updated. The due date is January 31, 2021.

The table below shows the current status of all PC-related standards:

	<b>PC Standard</b>	<b>Estimated % Complete</b>	<b>Notes</b>
1	FAC-002-2 Interconnection Studies	5%	There are 2 new and materially modifying transmission facilities projects in the BANC area in 2021 with in-service dates of 5/2021 and 12/2021.
2	FAC-010-3 SOL Methodology for Planning Horizon	100%	The finalized version was sent to external stakeholders and BANC PC Participants on 12/28/2020.
3	FAC-013-2 Transfer Capability for Near-Term Planning Horizon	N/A	Standard retired by NERC on 12/14/2020.
4	FAC-014-2 Establish and Communicate SOLs	0%	Study Plan is scheduled to be sent out in June.
5	IRO-017-1 Outage Coordination	0%	Will be contacting neighboring entities about any outages that may affect BANC PC participants in February.
6	MOD-031-2 Demand and Energy Data	25%	2021 Loads and Resources Data Request Part 1 is being sent to BANC PC Participants and will be due back by 2/10/2020.
7	MOD-032-1 Data for Power System Modeling & Analysis		Ongoing activity.
8	MOD-033-1 System Model Validation	0%	Selection of system event to use for the dynamic model validation portion is underway
9	PRC-006-3 Underfrequency Load Shedding	0%	
10	PRC-010-2 Undervoltage Load Shedding	100%	Study has been completed. The report was finalized on 12/30/2019.
11	PRC-012-2 Remedial Action Schemes	80%	New Standard effective 1/1/2021. Study Plan finalized 4/10/2020. Working on performing studies for each RAS scheme.
12	PRC-023-4 Transmission Relay Loadability	0%	Study Plan is scheduled to be sent out in March.

	<b>PC Standard</b>	<b>Estimated % Complete</b>	<b>Notes</b>
13	PRC-026-1 Relay Performance During Stable Power Swings	0%	Study Plan is scheduled to be sent out in April.
14	TPL-001-4 Transmission System Planning Performance	5%	Study plan is being developed and will be sent to BANC PC participants in mid-February.
15	TPL-007-4 R1 GMD	90%	Registered the SMUD/BANC PC GIC monitoring device at Carmichael to satisfy NERC – compliance requirement.  Made request of GIC manufacturer to increase sampling rate from the default once every hour to once every 10s or faster per NERC recommendation.

# GM Report

## BANC Commission Meeting

### January 27, 2021

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I wanted to summarize routine issues for the Commission's information and consideration. Any major issues or action items will be identified separately on the Commission agenda for action.

#### **Outreach Efforts:**

Refer to GM outreach report provided under separate distribution. In addition, here are some other noteworthy items:

#### **LADWP/Seattle City Light/SRP**

Dialogue continues with these entities regarding EIM participation. Based upon the group's discussions, we have agreed to continue to interact on an informal basis to make sure we are aligned on EIM issues from a POU perspective. We are routinely holding bi-weekly calls to provide updates and discuss issues. To date, we have collaborated with the other POUs on joint language to use in the EIM Entity agreement, on how to address market-based rate authority with DMM, potential common language for OATT revisions, and joint comments on the EIM governance issues. We have also used this forum to discuss POU positions regarding the EDAM development. Both LADWP and BANC – Phase 2 are on track for go-live 2021, with LADWP on 4/1/21 and BANC – Phase 2 on 3/25/21. We have also been using this forum to discuss potential 2020 heat wave impacts on EIM and EDAM design.

#### **POU Western Markets Initiative**

BANC continues to participate in this effort, which is being coordinated by APPA. The group will be stepping back and will take on a less formal role with occasional update conference calls, with the last call held on December 9<sup>th</sup>.

#### **Coronavirus Restrictions**

With the increased restrictions on public gatherings and travel, BANC has moved to remote meeting attendance, both for our own internal member meetings, as well as outside meetings, for the foreseeable future. We will maintain this approach until public health authorities advise the restrictions can be relaxed. In addition, the BANC BA Operator (SMUD) has instituted measures to reduce coronavirus risks, including stay at home for most employees with only essential staff working at the offices.

## August and Labor Day Weekend Heat Wave

The Joint Agencies (CPUC, CEC, and CAISO) issued their initial root cause report from the August 2020 heat wave incidents in late September. Their conclusion is that there was no single root cause for the rotating outages, but rather several contributing factors, including:

1. The climate change-induced extreme heat storm across the western U.S. resulted in the demand for electricity exceeding the existing electricity resource planning targets. The existing resource planning processes are not designed to fully address an extreme heat storm like the one experienced in mid-August.
2. In transitioning to a reliable, clean and affordable resource mix, resource planning targets have not kept pace to lead to sufficient resources that can be relied upon to meet demand in the early evening hours. This makes balancing demand and supply more challenging. These challenges were amplified by the extreme heat storm.
3. Some practices in the day-ahead energy market exacerbated the supply challenges under highly stressed conditions.

There is also a recommendation that the agencies conduct a state-wide summer assessment on resource adequacy for 2021. It is not clear how this will impact the POUs in California. Staff has reached out to the other POU BAs and the CAISO on how we should proceed. BANC is moving forward with a modification to our normal summer assessment, which will be coordinated through both the Operations and Resource Committees. BANC is also participating in discussions initiated by the EIM Entities with the CAISO on analysis of the heat wave incidents. The Joint Agencies issued their final report on the heat wave incidents on January 13, 2021.

## CAISO Path Operator Charges

About three years ago the BANC Operator (SMUD) requested BANC assistance in reaching out to the CAISO regarding the level of charges (\$2 million/year) that were being imposed for Path Operator services at COI. Working with SMUD, BANC initiated discussions with senior level management at the CAISO on this issue. The CAISO agreed that they would revisit the amount of this charge as part of its triennial GMC cost review. That was completed in 2020 and effective 2021 the Path Operator charge has been reduced to \$700,000/year.

## Market Initiatives:

### EIM Participation

The BANC EIM Phase 1 implementation effort was completed on April 3, 2019, with the successful go-live of BANC as the EIM Entity and SMUD as a Participating Resource. We are now monitoring EIM participation. CAISO quarterly benefit reports continue to show that BANC/SMUD is seeing benefits from the EIM participation, with the 3<sup>rd</sup> Quarter 2020 report showing gross benefits of \$8.7 million.

With respect to BANC EIM Phase 2 effort, staff is coordinating with the Phase 2 participants and Utilicast to move forward with implementation. Discussions are essentially complete on metering and CAISO Department of Market Monitoring default energy bids. Individual participant software testing and training is ongoing. We have worked with CAISO to resolve some of the unique issues associated with the BANC structure, which currently all seem to meet our needs. The Business Practices were approved at the Commission meeting in October and settlements allocation manual at the December Commission meeting. We are anticipating seeking Commission approval of the BANC Metering Policy and amended EIM Participation Agreement at the January meeting.

The issue of how to handle the Resource Sufficiency test (Balance and Flex Ramp tests) for EIM Phase 2 has been resolved and the proposal was approved by the Commission at the November meeting.

### **EDAM Participation**

The EDAM Feasibility Assessment is complete. The CAISO issued an initial EDAM issues white paper on October 10, 2019 and held a stakeholder webinar on October 17. The CAISO requested comments on the issues white paper by November 22, with the EDAM Entities filing joint comments and BANC also filing supporting comments. It is expected that the CAISO will use 2020 and 2021 to conduct the formal stakeholder process, including development of a straw proposal for EDAM, followed by tariff filings at FERC. The CAISO is currently estimating that the earliest EDAM implementation would be in 2023 with a go live in spring 2024. The EDAM Entities (including BANC) were active participants in the first EDAM public stakeholder workshop on February 11-12, 2020. Stakeholder comments have been submitted and the EDAM Entities are in the process of digesting the comments to determine our approach going forward. The CAISO issued the initial Bundle 1 straw proposal on July 20<sup>th</sup>. The CAISO held a stakeholder meeting on July 27<sup>th</sup> and 29<sup>th</sup>, which BANC attended. Stakeholder comments on the Bundle 1 issues were filed on November 12<sup>th</sup>. The EIM Entities developed comments on the Bundle 1 straw proposal, to which BANC signed on. The EIM Entities also have continued to do outreach to the CA PTOs. In parallel, the EIM Entities are evaluating the impacts seen on EIM market operations from the August and September heat wave incidents to determine how these might also impact EDAM design. We have kicked off more detailed discussions both internally and with the CAISO to understand the heat wave impacts, what changes to EIM might be required, and how these might impact an EDAM design. Based upon these discussions the CAISO has identified some initial improvements which are being discussed in summer readiness workshops in January and February.

The EIM Governance Review Committee (GRC) issued its straw proposal on July 31, 2020. The recommendations are consistent with positions that BANC has supported in both the EIM group and POU group. BANC joined in comments filed on August 28

by both the EIM Entities and POU group, which were mainly supportive of the GRC proposal. The GRC issued its revised straw proposal in late 2020, with comments due in late January 2021.

## **WAPA:**

### **Market Engagement**

We have included WAPA-SNR in our EIM Phase 2 planning efforts and WAPA-SNR is an active participant. The main discussions with WAPA-SNR have been around the approach for use of WAPA-SNR transmission in EIM and how the deviation band will be handled in EIM. Also, we are working proactively with WAPA-SNR to assist them in their OATT and Rates processes for EIM.

WAPA-SNR and BANC have initiated routine calls with NCPA to help facilitate discussions on joint issues.

### **San Luis Transmission Project**

WAPA-SNR has announced its intent to work with the Bureau of Reclamation and CDWR to construct the SLTP. BANC met with WAPA and the other parties to fully understand the implications of having this new transmission project in the BANC BA/WAPA-SNR sub-BA. The SLTP developers (DATC) have withdrawn from the project and the Delta-Mendota Water Agency has issued an RFP for development of the project. It is our understanding that responses to the RFP have been received and are currently being evaluated. We will keep the Commission informed as more information becomes available.

## **WECC**

### **WECC Board Meetings**

The last MAC and Board meetings were on December 8-9, 2020, via webinar rather than in person due to COVID-19 concerns. I was unable to attend due to schedule conflicts.

WECC finalized and posted in early December an event assessment of the recent August heat wave and CAISO load shedding incidents.

## **NWPP**

### **Resource Adequacy Project**

In light of the concerns raised in 2018 regarding resource adequacy (RA) for the PNW entities, NWPP initiated a formal project to develop an RA program for the region. As a NWPP member, BANC has been providing funding for the initial phases of this effort. NWPP updated the participants on June 25, 2020, regarding the scope,

schedule, and budget for the next phase of this effort (Phase 2B). Staff continues to engage in the Phase 2B effort, with active participation on the project design working groups and steering committee. It is expected that BANC will need to be prepared for a decision on joining the NWPP RA Program during the first half of 2021.

### **CDWR Delta Pumping Load:**

BANC is coordinating with SMUD, CDWR, WAPA, and the CAISO regarding how the construction and pumping loads and ancillary services will be provided for this project. The CAISO has reached out to BANC/SMUD/WAPA-SNR regarding contacts for initiating discussions on how CAISO will supply energy for the construction loads in our footprints. With the Governor's announcement that the project will be downsized from two to one tunnel, CDWR has withdrawn the current applications and will be submitting revised environmental documentation. SMUD reported that CDWR has approached them regarding the revised environmental review, which will be performed during 2020.

### **SB100 Implementation**

As part of SB100, the CPUC, CEC, and CARB (Joint Agencies) are required to collaborate with the California BAs to develop a quadrennial report on the status of achieving the goals of SB100. The initial report is due 1/1/21. The four POU BAs (BANC, IID, LADWP, and TID) are collaborating on positions and responses. In addition, we have done outreach to the CAISO, Pacificorp, NV Energy, and WAPA BA's in California to determine if there is benefit to all BAs coordinating on this effort. BANC filed comments with the agencies on 12/2/19. BANC stated that it supported the long-term goals of the State regarding GHG reductions. However, we also cautioned that the transition from the current mix of resources to the long-term resource mix needs to be done in an orderly manner to ensure that grid reliability and affordability can be maintained for the benefit of the end-use consumers. We also supported a "net zero" carbon approach to meeting the goals, at least on an interim basis. I attended the SB100 workshop on 2/24/2020 and participated on a BA reliability panel. Subsequent to the workshop, staff worked with the other POU BAs (LADWP, IID, and TID) regarding comments to the Joint Agencies. The Joint Agencies held an outreach meeting with the California BAs on August 25 to brief the BAs on the results of the Agencies initial analysis. This was followed by a public workshop on September 2. BANC coordinated with the POU BAs via CMUA and filed joint comments on September 15. The Joint Agencies have finalized the SB100 report and provided a briefing to the CA BAs on November 30<sup>th</sup> and conducted a public workshop on the report on December 4<sup>th</sup>. BANC provided comments as part of the workshop and filed written comments as well. The final report is scheduled for submittal to the Legislature in early January 2021.

## **Western Electricity Industry Leaders (WEIL) Group**

The WEIL group has done outreach to the Western Governors' Association with a request to hold discussions on how to better coordinate electricity policy in the West. Based upon these discussions, the Western Governors and WEIL have agreed to make use of the Center for a New Energy Economy (CNEE), which is headed by former CO Governor Ritter, to facilitate further dialogue. This effort has been designated as the Western Interconnection Regional Electricity Dialogue (WIRED). The group agreed to focus discussions around three topics:

- State clean electricity goals and GHG accounting
- Reliability/resource adequacy
- Transmission planning and development.

Initial draft reports have been developed by the work groups and are now being reviewed both by WEIL and the state energy policy advisors. The goal was to have a set of actionable recommendations that could be presented to the December Western Governors meeting. However, it is now expected that it will be mid-2021 before we are ready for any possible recommendations. The WEIL group will discuss the proposals and a possible consensus position at its February CEO meeting.

## **Strategic Initiatives**

An update of the 2020/2021 Strategic Initiatives is attached to this report.

BANC 2020/2021 Strategic Plan - Routine Initiatives January 2021 Update

No./Priority	Focus Area	Initiative	Responsibility	Target Due Date	Status
1 Medium	INDEPENDENCE	Effectively oversee the BA operations.	Jim Shetler	Ongoing	See monthly Ops, PC, Compliance, & GM Reports
2 Medium		Maintain long-term succession plan and traits for General Manager	Jim Shetler/Commission	Ongoing as Necessary	
3 Medium	OUTREACH	Engage in industry forums (WECC, Peak, NWPPA, etc.)	Jim Shetler	Ongoing	Attend RC West, WECC Board, WEIL, & NWPP Exec. Forum meetings
4 Medium		Coordinate with other POU BAs (Ca and regionally)	Jim Shetler	Ongoing	Coordinating with SCL, SRP, LA, TP, & TID on EIM/EDAM
5 Medium		Outreach to regulatory and legislative bodies on key issues	Jim Shetler/BBSW	Ongoing as Necessary	Participating in WEIL group outreach to West governors
6 Medium		More formal engagement with TID on BA/EIM/EDAM issues	Jim Shetler/BBSW	Ongoing	Continue periodic discussions on areas of collaboration
7 Medium	ASSETS	Evaluate joint options for resource needs for BA	Resource Committee	4th Qtr. 2021	
8 Low	MEMBER SERVICES	Identify and outreach to potential new BANC members	Jim Shetler	Ongoing	

BANC 2020/2021 Strategic Plan - Focused Initiatives January 2021 Update

No./Priority	Focus Area	Initiative	Responsibility	Target Due Date	Status
9 High	INDEPENDENCE	Manage implementation of EIM Phase 2 participation effort	Jim Shetler/SMUD	3/25/21	EIM Committee Meetings Parallel Ops - 1/27/21
10 High		Manage EIM Phase 2 Going Forward	Jim Shetler/SMUD	Ongoing	
11 High		EDAM evaluation effort ~ CAISO Stakeholder Process ~ CAISO Tariff Development	Jim Shetler/BBSW Jim Shetler/BBSW	3rd Qtr. 2021 1st Qtr. 2022	Bundle 1 comments filed
12 Medium	OUTREACH	Evaluate opportunities to engage other entities in market development	Jim Shetler	Ongoing	Coordinating with SCL, SRP, LADWP, TID, & Tacoma
13 Medium		Regional Policy Issues: Monitor/ weigh-in where appropriate	Jim Shetler/Commission	Ongoing	Participating in WEIL effort on WIRED issues
14 High		Regionalization: ~Monitor CAISO GRC effort	Jim Shetler/BBSW	4th Qtr. 2021	Tony Braun active on GRC. Draft proposals finalized
15 High		Coordinate with CA BAs on SB100 effort	Jim Shetler/BBSW	12/31/21	Participated/commented at 12/4 final report workshop
16 Medium	ASSETS	Evaluate resource criteria for BANC long-term needs	Jim S./Res. Com.	4th Qtr. 2021	
17 Medium	MEMBER SERVICES	Evaluate possible support to participants for EIM operations	Jim S.	Ongoing	Finalizing EIM Participation Agreement Amendments

## Balancing Authority of Northern California

### Agenda Item 5A

1. **First and Second Amended and Restated EIM PA Redline Compare.**
2. **Resolution 21-01-20 *Approval of Second Amended and Restated EIM Participation Agreement.***
3. **Attachment A to Resolution 21-01-20: Second Amended and Restated Energy Imbalance Market Participation Agreement between the Balancing Authority of Northern California and the Modesto Irrigation District, City of Redding, City of Roseville, Sacramento Municipal Utility District and the United States Department of Energy Western Area Power Administration Central Valley Project, California.**
4. **Procedures for Local Regulatory Agency Approval of Energy Imbalance Market Metering Standards for Energy Imbalance Market Entity and Energy Imbalance Market Participating Resource Scheduling Coordinators**
5. **Resolution 21-01-21 *Approval of BANC EIM Phase 2 Energy Imbalance Market Meter Standards and Specified Delegation to the General Manager.***
6. **Attachment A to Resolution 21-01-21: BANC EIM Phase 2 Existing and Upgrade Meter Standards.**
7. **DRAFT BANC White Paper: Cost/Benefit Discussion BANC OATT/OASIS.**

# **Braun Blaising Smith Wynne, P.C.**

Attorneys at Law

1/20/21

**To: BANC Commission**

**From: BANC Counsel**

**RE: Commission Approval of BANC Second Amended and Restated EIM (Phase 2) Participation Agreement**

## **Introduction**

We are seeking Commission approval of the Balancing Authority of Northern California (BANC) Second Amended and Restated Energy Imbalance Market (EIM) Participation Agreement (EIM PA). The EIM PA reflects changes and clarifications deemed necessary based on revised processes and allocations adopted since the previous version of the EIM PA (i.e., First Amended and Restated BANC EIM Participation Agreement), which was approved by the Commission for BANC EIM Phase 2 on August 21, 2019 by BANC Resolution 19-08-13.

## **Background**

The EIM PA is the project agreement which defines the respective roles and responsibilities of BANC, as the EIM Entity, and BANC EIM Participants. Initially, the agreement was between BANC and SMUD. However, subsequent decisions were made by several BANC members, the Modesto Irrigation District (MID), the City of Redding (Redding) and the City of Roseville (Roseville), as well as by the Western Area Power Administration – Sierra-Nevada Region (WAPA), to participate in EIM, along with the Sacramento Municipal Utility District (SMUD). The SMUD-only implementation was referred to as BANC EIM “Phase 1,” while this latter implementation refers to “Phase 2.”

In order to facilitate the expanded Phase 2 participation, BANC amended the original EIM PA between BANC and SMUD. The second version, referred to as the “First Amended and Restated EIM PA,” reflected the addition of the Phase 2 parties and, among other things, provided for the expanded scope of BANC’s role as the EIM Entity, along with revised obligations of the expanded pool of “EIM Participants” (defined as those who execute the EIM PA), cost allocation provisions, the EIM Entity footprint modeling approach approved by the EIM Participants and federal contracting provisions to address WAPA’s participation.

At the time BANC and EIM Participants executed the First Amended and Restated EIM PA, it was believed that this would carry us through the Phase 2 implementation. However, through this Phase 2 implementation process, several new issues were identified and required us to revisit the agreement. Thus, BANC along with EIM Participants, began a process to amend the original Phase 2 EIM PA – i.e., the First Amended and Restated EIM PA. Thus, today we are requesting

Commission approval of the Second Amended and Restated EIM PA. Below we have highlighted some of the key changes from the prior approved EIM PA. Additionally, you have been provided a “compare version” redline to highlight the changes, along with the draft final Second Amended and Restated EIM PA for Commission approval (Attachment A to the resolution.)

## **Summary of Key Changes**

### Recitals

The Recitals have been updated to better reflect the current status of the BANC EIM Phase 2 implementation.

### Section 3 (Definitions)

Several definitions have been revised or updated, as well as new definitions have been added. For example, “EIM Participant Reserve Account” is a new definition, which is needed to address the financial security obligations imposed on BANC, as the EIM Entity, under the California Independent System Operator Corporation’s (CAISO) Tariff.

### Section 5 (Scope of Agreement)

This section was amended to account for the expanded scope of the EIM PA to encompass new Exhibits related the “EIM Participant Reserve Account,” under Exhibit D, and “EIM Entity Supplemental Services” under Exhibit E. Both of these Exhibits are described further below.

### Section 6 (BANC (EIM Entity) Obligations)

This section was expanded by adding Section 6.12, to account for the added obligation of BANC to manage the EIM Participant Reserve Account, set forth in Exhibit D.

### Section 8 (EIM Participant and New EIM Participant Costs)

Section 8 and Section 8.1: Language was added to address the cost responsibility of what are being referred to as “Future EIM Participants,” which are those entities who seek to join the BANC EIM Entity footprint as an EIM Participant after Phase 2. Because all EIM Participants through Phase 2 have shared in the various EIM infrastructure costs, first contributed by SMUD, there will need to be a mechanism to collect a pro rata share of these costs from Future EIM Participants and allocate these monies back to those EIM Participants who have already shared in these costs – i.e., the existing Phase 1 and Phase 2 EIM Participants.

Section 8.3 was amended to include the new cost of funding the EIM Participant Reserve Account.

Section 8.4 was added to allow for the EIM Entity to provide additional services to EIM Participants and described the process for doing so, including the creation of separate service

schedules and funding arrangements for these services. This is further explained below, Exhibit E.

Section 8.6 was amended to bolster provisions to require WAPA consultation and concurrence for changes in EIM Participant Costs. This request was raised with the Commission, and it was added to provide WAPA, which is not a member of the BANC Joint Powers Agreement, to have a say in matters related to EIM costs being passed through to EIM Participants. The section also addresses a process for disputes related to this concurrence.

#### Section 10 (EIM Committee)

Section 10.7 was amended to specifically authorize the EIM Committee, under the direction of the General Manager, to form task-based working groups. It was decided to make this specific to better align with how various task groups were being used to address highly specialized areas of EIM participation, some of which were outside of the expertise of the EIM Committee members. An example of this includes the Settlements Working Group, which helped to develop the highly technical BANC EIM Settlements Manual.

#### Section 12 (BANC Violations of Reliability Standards Arising from EIM Participation)

Due to changes made in the allocation tables provided in Exhibit A, references had to be changed in Section 12.1 to clarify the correct allocation formula to be applied in the event of Reliability Standards violations. Originally, all of the allocation went to SMUD under Phase 1. With Phase 2, monetary penalties will be allocated to all BANC member EIM Participants, since WAPA cannot pay these penalties. Thus, the Table (Exhibit A Table 2) includes an allocation formula based only on MID, Redding, Roseville and SMUD.

#### Exhibit A (New EIM Participant Costs and EIM Participant Cost Allocations)

In the prior EIM PA, Exhibit A was simpler and described the allocation percentages, around the design originally adopted by the Commission, reflecting the 2017 NEL. At the time, this was the most current data available to BANC. However, through the WAPA stakeholder process related to its EIM Participation, this benchmark was questioned. It was subsequently agreed (and the Commission approved) that BANC would use a 3-year rolling average NEL, as opposed to a single year. This would help to avoid extremes, such as dry or wet year scenarios. The only exception is that BANC retained the 2017 NEL to address the allocation of the one-time start-up costs (the costs that all new EIM Participants need to pay to support the initial EIM infrastructure costs, first paid by SMUD as the sole Phase 1 EIM Participant). Thus, there are two tables, Table 1 and Table 2, shown below.

**Table 1: New EIM Participant Costs (Section 8.1)**

<b>EIM Participant</b>	<b>2017 NEL</b>	<b>EIM Participant Responsibility</b>
SMUD	11,598,647	63.5%
MID	2,623,552	14.4%
WAPA-SNR <sup>1</sup>	1,987,830	10.9%
Roseville	1,249,280	6.8%
Redding	798,841	4.4%
<b>TOTAL</b>	<b>18,258,150</b>	<b>100.0%</b>

**Table 2: EIM Participant Allocation Percentages based on 3-Year Average NEL**

<b>EIM Participant</b>	<b>Section 8.3/ Tier 1 Costs</b>	<b>Section 8.2/ Tier 2 Costs</b>	<b>Section 12.1/ Cost Allocation for Violations</b>	<b>Commission Approved Adjusted Allocations</b>
SMUD	64.3%	0	70.3%	X.X%
MID	14.6%	41.0%	16.0%	X.X%
WAPA-SNR	8.6%	24.1%	0.0%	X.X%
Roseville	6.9%	19.4%	7.6%	X.X%
Redding	5.5%	15.5%	6.1%	X.X%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>XXX.X%</b>

**Table 1** reflects the 2017 NEL, which was solely used for the allocation of the one-time startup costs. These cost have already been paid and it was decided to leave this formula “as is.”

**Table 2** is used for all other allocations, broken out by application into various categories/types and Tiers. *Tier 1 Costs* are paid by all five EIM Participants, which are reflective of the ongoing EIM costs post-Phase 2 go-live. This is, in essence, the main cost allocation formula.

*Tier 2 Costs* reflect costs related to implementation. Because SMUD has already paid its cost to implement EIM in Phase 1, it has a 0% allocation.

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<sup>1</sup> Western Area Power Administration – Sierra Nevada Region.

*Section 12.1* costs relate to what was previously discussed related to monetary penalties related to Reliability Standard Violations. As noted, in this allocation, WAPA has a 0% allocation.

Finally, the last column on the far right of Table 2 reflects any later adjustments the Commission may need to make related to allocations of responsibilities for funding the EIM Participant Reserve Account (i.e., “Commission Approved Adjusted Allocations”). As discussed at the December 2020 Commission meeting, WAPA may have limitations as to its ability to meet cash calls related to collateral, should these requires increase significantly next summer, for example. This would allow the Commission some flexibility to adjust or reallocate to the other EIM Participants in a manner they determine most equitable.

#### Exhibit B (BANC EIM Phase 2 Approach)

As you may recall, this exhibit provides a description of how BANC would implement EIM under Phase 2, but it was drafted prior to several key decisions being made, including whether WAPA would participate. In addition, several other minor changes have occurred through the actual implementation process that resulted in additions or modifications to Exhibit B. Thus, it was determined that it would be good to update the Phase 2 Approach description to better reflect these changes and updates.

#### Exhibit D (EIM Participant Reserve Account)

This new exhibit establishes the “EIM Participant Reserve Account,” which will be used to address the ongoing financial operational balance BANC is required to maintain as the EIM Entity. This has been discussed with the EIM Committee and will be discussed further with the Commission. The proposed allocations will follow the 3-year rolling average NEL used in Exhibit A. The Commission will approve the exact amounts to be included in this account.

However, as will be discussed further with the Commission, new developments with the CAISO may lessen or remove this requirement for BANC to post collateral. For this reason, the initially contemplated need for this account may change. In any case, given the fluid nature of the market and various uncertainties, even if not used for its original purpose, the account may have other uses in the future.

#### Exhibit E (EIM Entity Supplemental Services)

This new exhibit allows for additional services (hence, EIM Entity Supplemental Services) to be provided to EIM Participants by the EIM Entity, at the EIM Participants’ request. The first of these services relates to the addition of certain software functionality not shared among all EIM Participants. This is found in Service Schedule E-1. Subsequent services may be added in the future and reflected in Exhibit E under a new Service Schedule. Only those EIM Participants requesting these additional services will pay the costs.

## **Conclusion and Recommendation**

Based upon thorough vetting with the EIM Committee and Legal Committee, BANC Counsel recommends that the Commission approve and authorize the General Manager to execute the EIM PA inclusive of its various amended exhibits.

**SECOND AMENDED AND RESTATED**

**ENERGY IMBALANCE MARKET PARTICIPATION AGREEMENT**

**BETWEEN THE**

**BALANCING AUTHORITY OF NORTHERN CALIFORNIA**

**AND THE**

**MODESTO IRRIGATION DISTRICT,**

**CITY OF REDDING,**

**CITY OF ROSEVILLE**

**SACRAMENTO MUNICIPAL UTILITY DISTRICT**

**AND THE**

**UNITED STATES**

**DEPARTMENT OF ENERGY**

**WESTERN AREA POWER ADMINISTRATION**

**CENTRAL VALLEY PROJECT, CALIFORNIA**

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## 1 PREAMBLE

This [Second](#) Amended and Restated Energy Imbalance Market (EIM) Participation Agreement (Agreement) is entered into between the BALANCING AUTHORITY OF NORTHERN CALIFORNIA, a joint exercise of powers agency organized under Section 6500 *et seq.*, of the California Government Code, hereinafter called "BANC," its successors and assigns; and the MODESTO IRRIGATION DISTRICT (MID), the CITY OF REDDING, CA (Redding), the CITY OF ROSEVILLE, CA (Roseville), and the SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD), each created and existing under the laws of the State of California, and the UNITED STATES OF AMERICA, acting by and through the Administrator, WESTERN AREA POWER ADMINISTRATION, DEPARTMENT OF ENERGY (WAPA), all operating Electric Systems within the BANC Balancing Authority Area. BANC or EIM Participant may be referred to herein individually as the "EIM Participant" or "Party" or collectively as the "EIM Participants" or the "Parties."

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## 2 EXPLANATORY RECITALS

- 2.1 WHEREAS, BANC was created by a Joint Powers Agreement to, among other things, acquire, construct, maintain, operate, and finance projects;
- 2.2 WHEREAS, BANC had evaluated various market options including the Energy Imbalance Market operated by the California Independent System Operator Corporation (CAISO);
- 2.3 WHEREAS, BANC engaged certain consultants for the purposes of providing initial analytical studies to assess both the cost and the benefits of individual BANC member and WAPA participation in the CAISO EIM through the BANC Balancing Authority;
- 2.4 WHEREAS the initial studies produced on behalf of BANC did show net benefits to some BANC members, while also highlighting for some BANC members and WAPA that some of the technical and operational hurdles might take additional time to address;
- 2.5 WHEREAS, based upon these studies and further discussions among BANC members, WAPA and the CAISO, it was also determined that SMUD was in the best position to join the EIM initially and that subsequent phases of EIM implementation would continue to be investigated in order to allow other BANC members and WAPA to join if they determined it was in each of their respective interests to do so upon further study;
- 2.6 WHEREAS, the Commission therefore directed BANC staff to pursue the CAISO EIM under a phased approach, including that BANC become an EIM Entity and execute all applicable agreements with the CAISO and among BANC and EIM Participants, as approved by the Commission, and that SMUD, pursuant to approval by

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its governing board, might also become the first EIM Participating Resource in the BANC EIM footprint;

- 2.7 WHEREAS, it was contemplated that in the future, additional BANC members and/or WAPA may desire to become Parties to this Agreement, at which time BANC and SMUD would use reasonable efforts to accommodate new EIM Participants, including the adoption of any amendments to this Agreement deemed necessary to enable such participation;
- 2.8 WHEREAS, it was decided by certain non-participating BANC members and WAPA, to conduct further studies to determine what gaps need to be addressed in their systems and processes to participate in the CAISO EIM through BANC;
- 2.9 WHEREAS, on April 26, 2017, by Resolution 17-04-06, the Commission authorized the General Manager to enter into contracts with consultants to perform Phase 2 studies to further determine what might be required for certain BANC members and WAPA to participate in EIM;
- 2.10 WHEREAS, on April 3, 2019, BANC began participating in the CAISO EIM as an EIM Entity and SMUD as the first EIM Participating Resources within the BANC EIM Entity footprint;

2.11 WHEREAS, based upon extensive discussions among BANC staff, BANC members and WAPA, and the individual EIM Phase 2 assessments and approval processes, conducted by certain BANC members and WAPA, decisions were reached to participate in BANC EIM Phase 2 and to execute the First Amended and Restated Energy Imbalance Market Participation Agreement (First Amended Agreement), being approved by the Commission on August 21, 2019, by Resolution 19-08-13, and made effective on September, 17, 2019;

2.12 WHEREAS, based on the decision to proceed with EIM implementation for the specified BANC members and WAPA, the original EIM Participation Agreement was amended and restated by the First Amended Agreement to reflect the expanded participation within the BANC EIM Entity footprint;

2.13 WHEREAS, certain issues have arisen during the course of Phase 2 implementation that have prompted the need for additional changes to the First Amended Agreement;  
and

2.14 WHEREAS, this Second Amended and Restated Energy Imbalance Market Participation Agreement (Agreement) is intended to address such revisions as deemed necessary and appropriate by the Parties hereto.

**NOW THEREFORE**, in view of the understandings set forth in the recitals above, which the Parties acknowledge and agree are accurate representations of the facts, the Parties agree to the terms of this Agreement that set forth the roles, obligations, and responsibilities of each Party to one another.

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### 3 DEFINITIONS

Unless otherwise defined herein, capitalized terms when used with initial capitalization, whether singular or plural, shall have the meaning set forth in the FERC-approved Glossary of Terms used in NERC Reliability Standards, the NERC Functional Model, the CAISO Tariff, as defined, the BANC EIM Business Practices, the SMUD Open Access Transmission Tariff (OATT), the Interconnected Operating Agreements, and the WAPA OATT.

- 3.1 **Balancing Authority** shall mean the responsible entity that integrates resource plans ahead of time, matches generation and load, maintains interchange with other Balancing Authority Areas, and maintains frequency in real time of the electric power systems.
- 3.2 **Balancing Authority Area** shall mean the collection of generation, transmission, and loads within the metered electrical boundaries of the Balancing Authority.
- 3.3 **BANC EIM Business Practices or BPs** shall mean the business practices established by BANC to govern participation in EIM as these BANC EIM Business Practices may be adopted or amended from time-to-time in accordance with this Agreement.
- 3.4 **CAISO** shall mean the “California Independent System Operator Corporation,” or its successor. The CAISO serves as the EIM Market Operator and may be referred to as the “Market Operator” from time-to-time.
- 3.5 **CAISO Tariff** shall mean the CAISO’s open access transmission tariff filed with, and approved by, FERC, as that tariff may be amended from time-to-time.
- 3.6 **Commission** shall mean the “BANC Commission,” as established in the BANC Joint Powers Agreement, as that agreement may be amended from time-to-time.
- 3.7 **Compliance Costs** shall mean those costs described in Section 12.2.2 of this Agreement.
- 3.8 **Compliance Enforcement Authority** shall mean FERC, NERC, WECC, and any other agency, court, organization, or other entity or person duly authorized pursuant to law or regulation to: (a) audit or determine compliance with applicable Reliability Standards; or (b) impose, enforce, excuse, or rescind penalties or otherwise take action binding on one or more Parties with respect to a finding of failure to comply with a Reliability Standard.
- 3.9 **Confidential Information** shall mean : (a) all written materials marked “Confidential,” “Proprietary,” or with words of similar import provided to a Party by another Party; and (b) all observations of equipment (including computer screens) and oral disclosures related to a Party’s systems, operations, or activities that are indicated as such at the time of observation or disclosure (or are identified as "confidential" or "proprietary" in a letter sent to another Party no later than five (5) calendar days after the disclosure), respectively. Confidential Information includes portions of

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documents, records, and other material forms or representations that any Party may create, including but not limited to, handwritten notes or summaries that contain or are derived from such Confidential Information.

- 3.10 **Energy Imbalance Market or EIM** shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time.
- 3.11 **EIM Committee** shall mean the administrative committee established in Section 10 of this Agreement.
- 3.12 **EIM Entity** shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. BANC is the EIM Entity under this Agreement.
- 3.13 **EIM Entity Agreement** shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. The EIM Entity Agreement is between BANC and the CAISO.
- 3.14 **EIM Entity Supplemental Services shall mean any additional services and/or products provided by the EIM Entity to an EIM Participant or to EIM Participants as described in Section 8.4 of this Agreement.**
- 3.15 **EIM Implementation Agreement** shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. The EIM Implementation Agreement for this participation is between BANC and the CAISO.
- 3.16 **EIM Operator** shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. The CAISO is the EIM Operator.
- 3.17 **EIM Participant** shall mean a signatory to this Agreement.
- 3.18 **EIM Participant Cost(s)** shall mean the cost responsibility of each EIM Participant to BANC as described in Section 8 (**EIM Participant and New EIM Participant Costs**) of this Agreement.
- 3.19 **EIM Participant Reserve Account shall mean that account established in Section 8.3 of this Agreement and into which each EIM Participant shall contribute for purposes of ensuring sufficient funding for EIM Entity participation in accordance with the CAISO Tariff.**
- 3.20 **EIM Participating Resource** shall have the meaning set forth in the CAISO Tariff, as that tariff may be amended from time to time.
- 3.21 **EIM Participation Agreement** shall mean this Agreement, **as amended from time-to-time.**
- 3.22 **EIM Participation Percentage** shall mean the percentage allocation attributable to each EIM Participant for purposes of EIM Participant Costs in Section 8 (**EIM Participant and New EIM Participant Costs**) and Exhibit A (**New EIM Participant**

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[Costs and EIM Participant Allocations](#)) and liability for NERC Penalties as set forth in Section 12 ([BANC Violations of Reliability Standards Arising from EIM Participation](#)) of this Agreement.

- 3.23 **EIM Project Manager** shall mean the individual(s) selected by the Parties to oversee and manage BANC EIM implementation activities.
- 3.24 **EIM Project Work** shall mean the multi-phased work plan to implement and operate in the EIM as developed and overseen by the EIM Committee.
- 3.25 **EIM Services** shall mean the services provided by the EIM Services Provider to BANC, as set forth in the EIM Services Agreement.
- 3.26 **EIM Services Agreement** shall mean the agreement between BANC, as the EIM Entity, and the EIM Services Provider.
- 3.27 **EIM Services Provider** shall mean the entity providing EIM Services to BANC. SMUD, or its successor, shall be the EIM Services Provider.
- 3.28 **Electric System** shall mean all properties and assets that are owned or operated by a Party, including any interests in joint powers agency facilities, that are used for or pertain to the generation, transmission, transformation, or distribution of electric power, including all additions, replacements, extensions, expansions, improvements, and betterments thereto, and equipment associated therewith. Communication systems and equipment associated with operation of the Electric System shall be included as part of a Party's Electric System. To the extent a Party is not the sole owner of an asset or property, only that entity's ownership portion or entitlement in such property shall be considered as a part of its Electric System.
- 3.29 **FERC** shall mean the "Federal Energy Regulatory Commission," or its successor.
- 3.30 **Financial Penalties** shall mean those costs described in Section 12.2.1 of this Agreement.
- 3.31 **Interconnected Operating Agreements** shall mean agreements between WAPA and individual BANC members which define the roles and responsibilities of the interconnected parties.
- 3.32 **Internal Compliance Program** shall mean the BANC Internal Compliance Program, approved by the Commission, as that program may be amended from time-to-time.
- 3.33 **Internal Compliance Program Charter** shall mean the policy-level document outlining the Internal Compliance Program, which has been adopted by the Commission, as that program may be amended from time-to-time.
- 3.34 **NERC** shall mean the "North American Electric Reliability Corporation," or its successor.

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3.35 *NWPP* shall mean the “Northwest Power Pool.”

3.36 *Phase 1 EIM Participant* shall mean SMUD.

3.37 *Phase 2 EIM Participants* shall mean MID, Redding, Roseville and WAPA for Phase 2 implementation and these entities plus SMUD for ongoing EIM operations.

3.38 *Reliability Standards* shall mean those NERC Reliability Standards and WECC Regional Reliability Standards that have been approved by FERC under Section 215 of the Federal Power Act and WECC applicable Regional Criteria referenced in FERC-approved Reliability Standards.

3.39 *Reserve Sharing Group* shall mean the group operated by the NWPP to comply with Reliability Standard BAL-002-WECC-2a, or its successor standard. BANC is a member of the NWPP and a participant in the NWPP Reserve Sharing Group.

3.40 *SMUD OATT* shall mean the “Open Access Transmission Tariff” posted on the SMUD Open Access Same-Time Information System website.

3.41 *WAPA OATT* shall mean the “Open Access Transmission Tariff” posted on the WAPA Open Access Same-Time Information System website.

3.42 *WECC* shall mean the “Western Electricity Coordinating Council,” or its successor.

#### 4 TERM AND TERMINATION

##### 4.1 Effective Date

This Agreement shall be effective upon the date of execution by the Parties (Effective Date).

##### 4.2 Term

This Agreement shall remain in effect from the Effective Date until terminated pursuant to Section 4.3, (Termination by EIM Participants), 4.4 (Termination of this Agreement), or 4.5 (Surviving Obligations) of this Agreement.

##### 4.3 Termination by EIM Participants

Subject to Section 4.5 (Surviving Obligations), any EIM Participant may terminate its participation in this Agreement by providing a notice of termination not less than one (1) year in advance of the date of intended termination.

##### 4.4 Termination of this Agreement

This Agreement shall terminate if: 1) terminated by BANC, 2) if BANC ceases to be a Balancing Authority, 3) the CAISO terminates the EIM Entity Agreement between the

**Deleted:** <#>Phase 1 EIM Committee shall mean the EIM Committee established for Phase 1 of BANC EIM operations, which includes the sole Phase 1 EIM Participant, the BANC General Manager, one non-voting representative from among the non-participating BANC members and one non-voting representative from WAPA.

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CAISO and BANC, 4) there are no remaining EIM Participants, or 5) upon the expiration of forty (40) years from the Effective Date. BANC shall provide EIM Participants no less than sixty (60) calendar days written notice prior to seeking a termination decision by the Commission. In the event of a decision by the Commission to terminate this Agreement and there is a successor entity assuming the role of EIM Entity on behalf of the EIM Participant(s), BANC agrees to work with the successor EIM Entity and EIM Participant(s) to coordinate transfer of the EIM Entity responsibilities to a successor EIM Entity. BANC shall also conform its termination with the EIM Participant(s) timelines and procedures required for termination as an EIM Entity as set forth in its EIM Entity Agreement with the CAISO.

#### 4.5 Surviving Obligations

Termination of this Agreement or a Party's participation herein shall not extinguish the obligation of any Party to complete in-progress compliance investigations, implement any resulting corrective mitigating actions and otherwise complete any active compliance process as well as satisfy all other obligations, including any financial responsibilities. In addition, any outstanding financial right or obligation, and any provision of this Agreement necessary to give effect to such right or obligation, shall survive until satisfied, and all limitations of liability provided in this Agreement will survive until all statutes of limitation related to claims that could be made in connection with this Agreement have run.

### 5 SCOPE OF AGREEMENT

This Agreement, including its Exhibit A (EIM Participation Percentages), Exhibit B (BANC EIM Phase 2 Model), Exhibit C (BANC Phase 2 EIM Implementation Agreement), [Exhibit D \(EIM Participant Reserve Account\)](#), [Exhibit E \(EIM Entity Supplemental Services\)](#), and [Exhibit F \(BANC Phase 2 EIM Entity Agreement\)](#), which are incorporated herein by reference, is for the purpose of establishing BANC as the EIM Entity in support of the EIM Participant(s) and is the sole expression of the Parties. Exhibits may be subject to future revision in accordance with the individual terms contained in that Exhibit and such changes do not constitute an amendment hereto.

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### 6 BANC (EIM ENTITY) OBLIGATIONS

BANC shall be responsible for the following:

- 6.1 Negotiating a new or amended EIM Implementation Agreement and a new or amended EIM Entity Agreement with the CAISO which reflects the directive of the Commission;
- 6.2 Participating, through the General Manager, on the EIM Committee as set forth in Section 10 ([EIM Committee](#)) of this Agreement and providing support to Committee activities, as needed;

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- 6.3 Managing the EIM Services Agreement between BANC and SMUD, which contains the agreed upon terms and conditions respecting the EIM Services to be provided by SMUD to BANC;
- 6.4 Cooperating with the EIM Participant(s) in the exchange of data and information necessary to support EIM activities;
- 6.5 Providing support and information needed to facilitate EIM examination and/or participation by any proposed new EIM Participant;
- 6.6 Providing regular updates to the Commission, as needed;
- 6.7 Participating, as the EIM Entity, in any relevant stakeholder activities related to EIM;
- 6.8 To the extent reasonably practicable, taking any position on regulatory actions to ensure that the interest of BANC, as an EIM Entity, and those of the EIM Participant(s), are reasonably maintained, as deemed necessary by the Commission, or by the General Manager, to the extent consistent with authority delegated by the Commission for participation in those fora;
- 6.9 Serving as the EIM Entity on behalf of the EIM Participant(s) in accordance with this Agreement, including its Exhibits, as they may be amended from time-to-time;
- 6.10 Ensuring its role as EIM Entity does not adversely affect its compliance with NERC Reliability Standards;
- 6.11 Complying with CAISO Tariff provisions applicable to an EIM Entity; and
- 6.12 [Management and oversight of the EIM Participant Reserve Account as set forth in Section 8 \(EIM Participant and New EIM Participant Costs\) of this Agreement; and](#)
- 6.13 Coordinating with the CAISO on EIM activities related to the operation and implementation of EIM.

**7 EIM PARTICIPANT OBLIGATIONS**

The EIM Participant shall be responsible for the following, “EIM Participant Obligations,” as set forth herein:

- 7.1 Negotiating necessary agreements for its EIM participation;
- 7.2 Working collaboratively with BANC in the most transparent means practicable;
- 7.3 Along with BANC, using reasonable efforts to control costs associated with EIM implementation with respect to costs re-assignable to new the EIM Participant(s) under the terms of this Agreement;

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- 7.4 Comply with CAISO Tariff provisions applicable to EIM Participating Resources or EIM non-Participating Resources;
- 7.5 Using reasonable efforts to comply and/or abide by any directives of the EIM Entity, consistent with BANC EIM Business Practices, the CAISO Tariff and procedures, policies or timelines adopted by the EIM Committee;
- 7.6 Participating on the EIM Committee, as set forth in Section 10 ([EIM Committee](#)) of this Agreement;
- 7.7 Paying in a timely manner any cost assessed to the EIM Participant, including but not limited to EIM Participant Costs as set forth in Section 8 and any final costs associated with EIM-related violation(s) of Reliability Standards applicable to the Balancing Authority, as set forth in Section 12 ([BANC Violations of Reliability Standards Arising from EIM Participation](#)) of this Agreement; and
- 7.8 To the extent reasonably practicable, taking any positions on regulatory actions deemed needed to ensure that the interest of BANC, as the EIM Entity, and those of the EIM Participant(s), are reasonably maintained; however, nothing herein requires EIM Participant to take a position that it reasonably believes is contrary to its own interests.

## 8 EIM PARTICIPANT AND NEW EIM PARTICIPANT COSTS

Each EIM Participant shall be responsible to pay its share of costs associated with its participation in EIM within the BANC EIM Entity footprint. First, all EIM Participants shall pay a one-time assessment associated with becoming a new EIM Participant as described below in Section 8.1. Second, each EIM Participant shall pay its share of the BANC EIM implementation costs associated with its phase of EIM implementation, as described in Section 8.2. Third, each EIM Participant shall pay its share of the ongoing costs incurred by BANC as the EIM Entity, as described in Section 8.3, [including the “as needed” funding of the EIM Participant Reserve Account](#). Collectively, these costs set forth in Sections 8.1, 8.2, and 8.3 herein are referred to as EIM Participant Costs and are described as follows:

- 8.1 [Phase 1 and Phase 2](#) EIM Participants shall be required to pay a one-time EIM assessment to BANC based on BANC’s implementation costs multiplied by the allocation percentage contained in [Table 1 of Exhibit A](#). This one-time EIM assessment is intended to cover the new EIM Participant’s share of the costs incurred by the BANC in order to facilitate it becoming an EIM Entity and EIM participation by entities within the BANC footprint. These costs should be allocated to [Phase 1 and Phase 2](#) EIM Participants based on their respective load ratio percentage of overall BANC member load.
- 8.1.1 [For Phase 2 EIM Participants, the](#) costs collected by BANC shall be allocated back to the Phase 1 EIM Participant, consistent with those accounting and tracking metrics developed and adopted by the EIM Committee and approved

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by the Commission. [BANC and the Phase 2 EIM Participants may agree on the method of payment of the EIM assessment, which may be paid in installments in any manner agreed upon by the Parties](#)

[8.1.2 For any future EIM Participant\(s\) \(Future EIM Participant\) which join subsequent to Phase 2, the Future EIM Participant\(s\) shall work with BANC and the EIM Committee to determine either a pro rata share, or some other reasonable share, of the costs paid by Phase 1 and Phase 2 EIM Participants under this section, and the Future EIM Participant\(s\) shall pay BANC this amount in a manner and timeline determined by the Commission. Existing EIM Participants shall be reimbursed this full amount by BANC in accordance with the percentages set forth in Table 1 of Exhibit A, or by another manner so approved by the Commission.](#)

8.2 In addition to the payments set forth in Sections 8.1 and 8.3, each EIM Participant shall pay its share of the BANC EIM Implementation costs for its EIM Implementation phase described in this Section 8.2. These costs shall be allocated to EIM Participants based on the applicable EIM Participation Percentages set forth in [Table 2 of Exhibit A](#) to this Agreement, as that Exhibit A may be amended from time-to-time, and include the costs incurred by BANC in its performance under the EIM Implementation Agreement, including implementation costs for the new EIM Participant.

8.3 In addition to the payments set forth in Sections 8.1 and 8.2, each EIM Participant shall pay its share of costs related to the ongoing operations of BANC as the EIM Entity described in this Section 8.3. These costs shall be allocated to EIM Participants based on the applicable EIM Participation Percentages set forth in [Table 2 of Exhibit A](#) to this Agreement, as that Exhibit A may be amended from time-to-time, and include the following components:

8.3.1 Costs reasonably incurred by BANC in fulfilling its obligations as an EIM Entity, including, but not limited to:

8.3.1.1 costs associated with BANC's obligations under its EIM Entity Agreement; and

8.3.1.2 costs associated with BANC's obligations under the EIM Services Agreement; Deleted: and

[8.3.1.3 ongoing costs, including administrative, legal and regulatory, as reviewed by the EIM Committee and approved by the Commission; and](#) Deleted: .

[8.3.1.4 ongoing funding of the EIM Participant Reserve Account as reviewed by the EIM Committee and approved by the Commission in accordance with 8.3.1.4.1;](#)

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8.3.1.4.1 such funding obligations and timelines of the EIM Participant Reserve Account, as approved by the Commission, shall be conducted in accordance with Exhibit D to this Agreement.

8.4 Any EIM Participant may request and agree to additional services to be provided by the EIM Entity, including but not limited to, technical assistance, analysis, software acquisition, and energy and/or capacity-related products. Any additional costs incurred by an EIM Participant in accordance with this Section 8.4 shall be approved by the Commission and shall be recovered solely from the EIM Participant(s) which have made such a request or requests and set forth in Exhibit E to this Agreement, each separate product and service set forth with its own title and in a separate numbered attachment to Exhibit E (e.g., Exhibit E, Service Schedule E-1 (Title of Product/Service)).

All costs to be recovered by the EIM Entity from an EIM Participant under this Section 8.4 shall be invoiced and charged in accordance with Section 8.5 and the relevant attachment to Exhibit E.

**8.5** BANC shall calculate the EIM Participant Costs and invoice each EIM Participant to the addresses set forth in Appendix 1 (Notices) to this Agreement. Except as provided in Section 8.3.1.4, above, the EIM Participant shall pay this invoice within thirty (30) calendar days of receipt of the invoice. Payments shall be sent by each EIM Participant to the following address:

Balancing Authority of Northern California  
6001 S Street  
M.S. D-109  
Sacramento, CA 95852-1830

**8.6** EIM Participant Costs will be determined through the EIM Committee process unless otherwise agreed, in writing, between the Parties. Any costs allocated by BANC to EIM Participants must be placed in the budget and reviewed and concurred with by the EIM Committee prior to submittal to the Commission for final approval. In addition, BANC will obtain written concurrence by WAPA for their share of EIM Participant costs in advance of seeking final approval from the Commission. In the case that WAPA does not provide its concurrence, the General Manager shall work with EIM Participants to reach consensus. Failure to reach a consensus may require Commission action, including but not limited to reallocation to non-WAPA EIM Participants or referral to the Dispute Resolution provisions provided in Section 14 (Dispute Resolution) of this Agreement.

In the event BANC anticipates its costs may exceed the approved budget, BANC shall submit such costs to the EIM Committee and WAPA for review and concurrence prior to submitting a revised budget request to the Commission for approval. Failure of

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[approval by WAPA shall be addressed in a similar manner to that in the preceding paragraph of this Section 8.6.](#)

8.7 EIM Participants shall be responsible for their costs incurred in becoming an EIM Participating Resource under the terms of the CAISO tariff.

## 9 NEW EIM PARTICIPANTS

9.1 [Any entity inside of the EIM Entity BAA footprint](#) may become an EIM Participant by executing an EIM Participation Agreement with BANC, paying BANC a one-time EIM assessment, as determined in accordance with Section 8.1 of this Agreement, and entering into any other arrangements required by the CAISO Tariff and the Commission. BANC and the existing EIM Participants will work cooperatively with the proposed new EIM Participant to minimize the impact on the proposed new EIM Participant, other BANC members, and existing EIM Participants.

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9.2 Upon the execution of an EIM Participation Agreement with BANC, the new EIM Participant shall be allowed to participate on the EIM Committee in accordance with Section 10 (EIM Committee) of this Agreement.

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## 10 EIM COMMITTEE

### 10.1 Establishment of EIM Committee

On or after the Effective Date of this Agreement, the General Manager shall establish the EIM Committee by appointing EIM Committee members as set forth in Section 10.4 [\(EIM Committee Representation and Alternates\)](#).

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### 10.2 General Responsibilities of EIM Committee

The EIM Committee is an advisory body to the General Manager and responsible for providing advice and counsel for matters related to the operation of EIM within the BANC EIM Entity footprint. Specifically, the EIM Committee may be called upon by the General Manager for advice on the following matters:

- 10.2.1 Establishing roles and responsibilities among BANC, the EIM Participant(s) and the EIM Operator;
- 10.2.2 Reviewing of budgets and costs incurred by BANC, for both EIM implementation and EIM operations and providing concurrence with respect to those costs prior to the submission to the Commission for approval in accordance with Section 8.6;
- 10.2.3 Developing and updating (as necessary), a scope for EIM Project Work according to Section 11 [\(EIM Project Work\)](#) of this Agreement.

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- 10.2.4 Developing metrics to track and categorize EIM costs for purposes of budgeting and determining the one-time assessment applied to any new EIM Participant(s), as set forth in Section 8.1 of this Agreement;
- 10.2.5 Developing metrics to measure EIM costs, gross benefits and net benefits from actual EIM operations;
- 10.2.6 Providing data and information, as reasonably requested, to BANC members and/or WAPA for the purpose of assessing their potential participation in the EIM;
- 10.2.7 Developing comments and positions for stakeholder processes that concern or relate to the EIM;
- 10.2.8 Coordinating relevant data and information as needed for any compliance-related inquiry or investigation, or in the furtherance of any assessment in conjunction with Section 12 (BANC Violations of Reliability Standards Arising from EIM Participation) in this Agreement;
- 10.2.9 Ensuring that required documentation and data transfers among the EIM Participant(s) the EIM Entity and the EIM Operator are occurring and assisting in the development of processes and procedures to aid is such transfers, as needed;
- 10.2.10 Providing regular reports and updates to the General Manager on EIM-related activities and operations, as requested;
- 10.2.11 Providing reports, data, and other information as necessary to the CAISO;
- 10.2.12 Assisting in the development of procedures and processes to improve the accuracy and efficiency of data transfers from the EIM Participant(s) to EIM Entity;
- 10.2.13 Recommendations to the General Manager with respect to BANC EIM Business Practices or amendments thereto for consideration by the Commission;
- 10.2.14 General oversight of any request for proposals (RFP) or request for offer of services (RFO) by the Parties; and
- 10.2.15 Oversight of the EIM Project Manager(s), system integrator(s) or other consultants.

**10.3 EIM Committee Meetings**

The EIM Committee may be convened on an “as needed” basis by the General Manager or the EIM Participant(s).

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**10.4 EIM Committee Representation and Alternates**

Each EIM Participant shall select a primary voting representative and at least one alternate to the EIM Committee and provide those names to the General Manager. The General Manager will also participate on the EIM Committee. The EIM Services Provider shall also have a representative present at EIM Committee meetings, unless agreed to otherwise between the General Manager and the EIM Services Provider. Under the direction of the General Manager, the EIM Committee may form subgroups or delegate tasks to subject matter experts as it deems appropriate; provided, however, that any tasks delegated must be overseen and/or approved by the EIM Committee.

**10.5 EIM Committee Chair**

The EIM Committee may appoint a chair to conduct meetings. In the absence of an appointed chair, the General Manager will serve in that role.

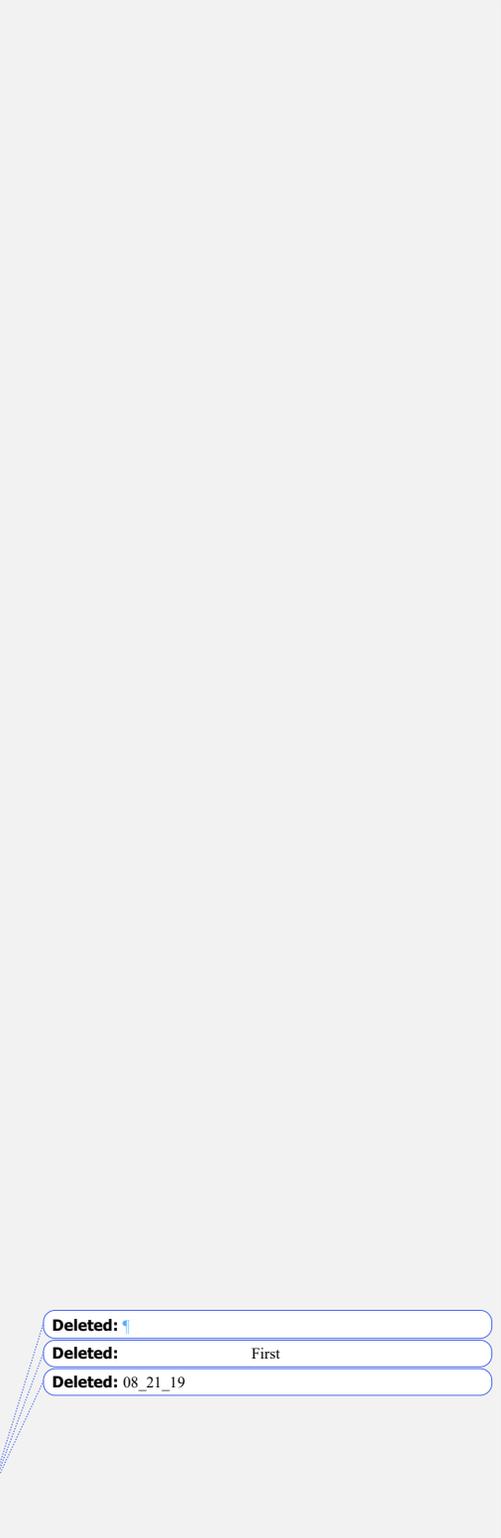
**10.6 EIM Committee Actions or Decisions**

The EIM Committee will seek consensus on any actions or decisions in the furtherance of its responsibilities set forth in this Section. If an action or decision requires voting, each EIM Committee representative shall have one vote. In the event of a tie, an executive from BANC and the EIM Participant(s) shall attempt to reach consensus. If consensus cannot be reached, the General Manager shall serve as the tie breaker vote.

- 10.6.1 Conflicts Between the EIM Committee and the General Manager. If the EIM Committee and the General Manager have a dispute related to an action or proposal of either the EIM Committee or the General Manager, the EIM Committee or a subgroup shall meet with the General Manager and attempt to reach resolution. Should the Parties fail to resolve the conflict, the General Manager shall make the final decision; however, the General Manager shall inform the Commission of the dispute. The EIM Committee Chair, if that person is not the General Manager, or anyone delegated by the EIM Committee, may prepare a memorandum framing the disputed issue, and provide that memorandum to the General Manager for his or her consideration, and the General Manager shall provide a copy of the memorandum to the Commission for their information and any other action they may decide.

**10.7 EIM Committee Charter and Procedures**

In consultation with the General Manager, the EIM Committee may adopt a charter and/or procedures in furtherance of its internal administration. [Furthermore, the EIM Committee may form working groups or subcommittees for the performance of specific tasks requiring subject matter expertise. Such working groups or subcommittees will report to the EIM Committee or the General Manager, as directed by the General Manager.](#)



## 11 EIM PROJECT WORK

It is expected that there will be multiple phases of EIM Project Work to be conducted by the Parties, including, but not limited to, the scoping and contracting aspects of the project, the RFP/RFO processes and implementation and testing of EIM systems, up to and until parallel testing with the CAISO. The Scope of EIM Project Work shall be developed by the EIM Committee under the direction of the General Manager, on an agreed upon schedule in coordination with the schedule developed between BANC and the CAISO contained in the BANC EIM Implementation Agreement.

## 12 BANC VIOLATIONS OF RELIABILITY STANDARDS ARISING FROM EIM PARTICIPATION

### 12.1 Violations

Any potential or actual violations of Reliability Standards applicable to the BANC Balancing Authority which are the result of a failure related to BANC, acting as the EIM Entity, or the EIM Participant's, or the EIM Participants', participation in the EIM, shall be addressed in accordance with the processes and procedures adopted in the Internal Compliance Program Charter and the BANC Member Agreement; provided, however, any Financial Penalties, as described in Section 12.2.1 of this Agreement, associated with violation(s) of Reliability Standards applicable to the BANC Balancing Authority arising directly as the result of EIM-related activities of BANC, as the EIM Entity, or the EIM Participant(s), shall be allocated, to the extent such Party or Parties are not legally proscribed from paying Financial Penalties, such costs shall be allocated to the EIM Participant(s) directly responsible for the activity or activities that gave rise to the violation(s), or, if no EIM Participant(s) are directly responsible for the activity or activities that gave rise to the violation(s), Financial Penalties shall be allocated to EIM Participants based on their EIM Participation Percentages as set forth in [Table 2 of Exhibit A \(Cost Allocation for Violations\)](#). Any Party which cannot legally pay such costs will remain responsible for any Compliance Costs, as described in Section 12.2.2 of this Agreement, as may be prescribed by a Compliance Enforcement Authority.

**Deleted:** Exhibit A to this Agreement, as that Exhibit may be amended from time-to-time.

### 12.2 Payment of Final Costs

12.2.1 Financial Penalties. Final costs associated with this Section 12 shall be paid by the EIM Participant(s) within thirty (30) days of a written request by BANC. Such request shall be in accordance with Section 24 (Notices) of this Agreement. Final costs are those monies which are required to be paid by BANC to NERC based upon a confirmed and final penalty amount in accordance with the NERC Rules of Procedure.

12.2.2 Compliance Costs. A mitigation plan or any regulatory directive(s) issued by a Compliance Enforcement Authority associated with this Section 12 shall be followed by the Parties in accordance with that plan or directive; however, the

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Compliance Costs incurred by the Parties based upon the mitigation plan or directive shall be the sole responsibility of the EIM Participant(s). BANC shall provide the EIM Participant(s) with an itemization of costs under this Section 12.2.2 as part of BANC's written request to the EIM Participant(s) for payment. Such request shall be in accordance with Section 24 (Notices) of this Agreement.

### 13 CONFLICT BETWEEN EIM PARTICIPATION AGREEMENT AND OTHER BANC AGREEMENTS

Nothing in this Agreement is intended to alter or amend other BANC agreements or program documents, including, but not limited to, the Joint Exercise of Powers Agreement, the Balancing Authority Operation Services Agreement, the Member Agreement, the NWPP Reserve Sharing Group Agreement, the Internal Compliance Program Charter, the Member Compliance Review Committee Charter, the Planning Coordinator Services Agreement, or the Planning Coordinator Participation Agreement (BANC Agreement(s)). To the extent a conflict arises between a BANC Agreement and this Agreement, the BANC Agreement(s) shall prevail; however, reasonable efforts should be made to reconcile the matter among EIM Participant(s) and BANC. Notwithstanding the foregoing, penalties allocated to BANC due to BANC violations of Reliability Standards arising from EIM Participation will be addressed in accordance with this Agreement and not the Member Agreement.

### 14 DISPUTE RESOLUTION

Except as provided in Section 10.6 (EIM Committee Actions or [Decisions](#)), any dispute arising between the Parties regarding performance of their obligations under this Agreement shall be resolved according to the following procedures:

#### 14.1 Informal Settlement

The Parties shall attempt in good faith to resolve any dispute arising out of or relating to this Agreement promptly by negotiations between BANC and an executive of the EIM Participant(s), or, in the event there is more than one EIM Participant, BANC and an executive of each of the EIM Participants. Any Party may give the other Party, or Parties, written notice of any dispute, and within twenty (20) calendar days after delivery of such notice, the executives shall meet at a mutually acceptable time and place and thereafter as often as they reasonably deem necessary to exchange information and to attempt to resolve the dispute. If the matter has not been resolved within sixty (60) calendar days of the first meeting, any of the Parties may initiate a mediation of the controversy in accordance with Section 14.2, [\(Mediation\)](#).

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**14.2 Mediation**

Prior to initiation of litigation, disputing Parties shall initiate a mediation of the controversy. All negotiations, settlement conferences, compromise discussions, and any mediation conducted pursuant to this clause are non-binding, confidential, and shall be treated as compromise and settlement negotiations. Included in such mediation shall be negotiations including executive level management of each of the disputing Parties.

**14.3 Retained Rights Under Law and Equity**

Absent resolution of any dispute through mediation, each Party retains all rights in a court of law or equity to enforce its rights under this Agreement.

**14.4 Continuing Performance Obligations**

While a dispute, controversy, or claim is pending, each Party will continue to perform its respective obligations under the Agreement, unless such Party is otherwise entitled to terminate the Agreement in accordance with the terms hereof.

**15 AMENDMENT**

Except as specified in Appendix 1 and Exhibits A through F, which shall be amended in accordance with the terms set forth therein, this Agreement may only be amended or otherwise modified with the written agreement of the Parties.

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**16 ASSIGNMENT**

This Agreement may be assigned by a Party only with the written consent of the other Parties, which consent shall not be unreasonably withheld.

**17 CONFIDENTIALITY**

**17.1 Treatment of Confidential Information**

The Parties recognize and agree that for the purposes of their respective roles in the EIM, complying with the Reliability Standards, and responding to any report or notice of potential violation, the Parties may receive information from each other that has been marked as Confidential Information. Except as set forth herein, the Parties agree to keep in confidence and not to copy, disclose, or distribute any Confidential Information or any part thereof, without the prior written permission of the Party that produced the information.

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**17.2 Required Disclosure of Confidential Information**

As provided in the CMEP, or as required by subpoena, request under the California Public Records Act (PRA), the Freedom of Information Act (FOIA), or other legal or regulatory processes, the Parties may be required to disclose Confidential Information so designated by another Party. Compliance with that subpoena, request under the PRA, FOIA, or other legal or regulatory process shall not constitute a breach of this Agreement. If any Party is required to disclose any Confidential Information so designated by any other Party, the disclosing Party shall notify the other Party in writing as promptly as feasible so that the other Party may, if it so chooses and at its own expense, challenge the disclosure or seek a protective order. The disclosing Party shall reasonably cooperate in resolving the dispute.

**17.3 Third Parties**

Except as set forth herein, each Party shall keep Confidential Information in confidence and shall not disclose such information or otherwise make it available, in any form or manner, to any other person or entity other than its employees, consultants, sub-contractors, sub-contractors' employees, attorneys, and agents without the prior written consent of the Party that produced the information. Each Party will cause each of its employees, contractors, sub-contractors, sub-contractors' employees, attorneys, and agents who will have access to Confidential Information, if any, to acknowledge that they have read this Agreement and agree to abide by all of its terms regarding use and disclosure of Confidential Information. For purposes of this Agreement, Confidential Information may also be shared with the EIM Operator in accordance with the terms of the agreements between each of the Parties and the EIM Operator.

**17.4 FERC Jurisdiction**

Nothing in this Agreement shall be meant to imply or cede jurisdiction to FERC, NERC, and other regulatory or Compliance Enforcement Authority entities having no or limited jurisdiction over the Parties. FERC, NERC, and other regulatory or Compliance Enforcement Authority entities have limited jurisdiction over the Parties and, by executing this Agreement, no Party is waiving or conceding any defenses it has to assert jurisdictional defenses, including, but not limited to, sovereign immunity, intergovernmental immunities, or lack of subject matter jurisdiction.

**18 INDEMNIFICATION**

Notwithstanding anything herein to the contrary, BANC shall indemnify, defend, and hold EIM Participants (including their governing bodies, officers, employees, assigns, and agents) harmless from and against any and all claims, demands, liabilities imposed for injury (as defined by Government Code Section 810.8), losses, costs, expenses, penalties, suits, judgments, or damages, arising in whole or in part, directly or indirectly, from performance or non-performance of EIM Participant Obligations set forth in Section 7 ([EIM Participant Obligations](#)) of this Agreement.

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## 19 GOVERNING LAW

### 19.1 Non-Federal EIM Participants

The rights and obligations of the non-federal EIM Participants and the interpretation and performance of this Agreement shall be governed by the laws of the State of California.

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### 19.2 Federal EIM Participants

Interpretation of this Agreement, and performance and enforcement thereof with regard to federal EIM Participants, shall be determined in accordance with Federal law, as if performed wholly within the State of California.

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## 20 HEADINGS

The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

## 21 SEVERABILITY

If any term, covenant, or condition of this Agreement, or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest, by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby but shall remain in full force and effect, and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such determination unless a court or governmental agency of competent jurisdiction holds that such provision is not separable from all other provisions of this Agreement.

## 22 LIMITATION ON LIABILITY

Except for costs for violation(s) of Reliability Standards incurred pursuant to Section 12 ([BANC Violations of Reliability Standards Arising from EIM Participation](#)) of this Agreement, or EIM Participant Costs in accordance with Section 8 ([EIM Participant and New EIM Participant Costs](#)) of this Agreement, no Party to this Agreement shall be liable to any other Party for any direct, indirect, special, incidental, exemplary, or consequential damages, claims, liabilities, costs or expenses (including attorneys fees and court costs) arising from tort or the performance or non-performance of its obligations under this Agreement regardless of the cause, including

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intentional action, willful action, gross or ordinary negligence, or an Uncontrollable Force (as defined in Section 25 of this Agreement).

### 23 NO THIRD PARTY BENEFICIARIES

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

### 24 NOTICES

Any notice, demand, or request in accordance with this Agreement shall be in writing and shall be deemed properly served, given, or made if delivered in person or sent by first class United States mail, postage prepaid, by electronic facsimile confirmed by the recipient, electronic mail confirmed by the recipient, or by prepaid commercial courier service to a Party via its representative or alternate representative at the address set forth in Appendix 1, unless otherwise provided in this Agreement. Any Party may at any time change the designation or address of a person specified in Appendix 1 upon written notice to the other Parties. Such a change to Appendix 1 shall not constitute an amendment to this Agreement.

### 25 UNCONTROLLABLE FORCE

No Party shall be considered to be in default in respect to any obligation hereunder if prevented from fulfilling such obligation by reason of an Uncontrollable Force. The term "Uncontrollable Force" for the purpose of this Agreement shall mean any cause beyond the control of the Party affected, including but not limited to flood, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance, labor disturbance, sabotage, and restraint by court or public authority, which Uncontrollable Force by exercise of due diligence and foresight, such Party could not reasonably have been expected to avoid. Any Party rendered unable to fulfill any obligation by reason of Uncontrollable Force shall exercise commercially reasonable efforts to remove such inability with all reasonable dispatch.

### 26 WAIVER

The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed

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a waiver with respect to any subsequent default or other matter arising in connection with this Agreement.

## 27 NO DEDICATION OF FACILITIES

Any undertaking by a Party under any provision of this Agreement is rendered strictly as an accommodation and shall not constitute the dedication of its Electric System or any portion thereof by the undertaking Party to the public, to any other Party, or to any third party, and any such undertaking by a Party shall cease upon the termination of such Party's obligations under this Agreement. The Electric System of a Party shall at all times be, and remain, in the exclusive ownership, possession, and control of that Party, and nothing in this Agreement shall be construed to give any other Party any right of ownership, possession, or control of such Electric System.

## 28 MULTIPLE COUNTERPARTS

This Agreement may be executed in two or more counterparts, each of which is deemed an original, but all constitute one and the same instrument.

## 29 FEDERAL CONTRACT PROVISIONS

### 29.1 Covenant Against Contingency Fees

The Parties warrant that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Parties for the purpose of securing business. For breach or violation of this warranty, WAPA shall have the right to annul this Agreement without liability or in its discretion to deduct from the price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

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### 29.2 Contingent Upon Appropriations

Where activities provided for in this Agreement extend beyond the current fiscal year, continued expenditures by WAPA are contingent upon Congress making the necessary appropriations required for the continued performance of WAPA's obligations under this Agreement. In case such appropriation is not made, Parties hereby release WAPA from its obligations and from all liability due to the failure of Congress to make such appropriation.

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### 29.3 Contract Work Hours and Safety Standards

This Agreement, to the extent that it is of a character specified in Section 103 of the Contract Work Hours and Safety Standards Act, 40 U.S.C.A. § 3701, is subject to the

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provisions of the Act, 40 U.S.C.A. §§ 3701-3708, and to regulations promulgated by the Secretary of Labor pursuant to the Act.

**29.4 Equal Opportunity Employment Practices**

Section 202 of Executive Order No. 11246, 30 Fed. Reg. 12319 (1965), as amended by Executive Order No. 12086, 43 Fed. Reg. 46501 (1978), as amended or supplemented, which provides, among other things, that Parties will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, is incorporated herein by reference the same as if the specific language had been written into this Agreement, except that Indian Tribes and tribal organizations may apply Indian preference to the extent permitted by Federal Law.

**29.5 Use of Convict Labor**

Parties agrees not to employ any person undergoing sentence of imprisonment in the performance of this Agreement, except as provided by 18 U.S.C. § 3622 (c) (2) and Executive Order 11755, December 29, 1973.

**30 SIGNATURE CLAUSE**

The signatories to this Agreement represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign.

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IN WITNESS THEREOF, the Parties have executed this Agreement and it is effective as of the Effective Date set forth in Section 4.1.

**Balancing Authority of Northern California**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**Sacramento Municipal Utility District**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**Modesto Irrigation District**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**City of Redding**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**City of Roseville**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

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**United States of America  
Department of Energy  
Western Area Power Administration  
Central Valley Project, California**

By:	
Name:	
Title:	
Date:	

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## Appendix 1 – Notices

### Balancing Authority of Northern California

Name of Primary Representative:	James R. Shetler
Title:	General Manager
Company:	Balancing Authority of Northern California
Address:	P.O. Box 15830, MS D109
City/State/Zip Code:	Sacramento, CA 95852-1830
Email Address:	jimshetler@thebanc.org
Phone:	(916) 870-3774
Fax:	

Name of Alternative Representative:	Charles A. Braun
Title:	General Counsel
Company:	Braun Blaising Smith Wynne, P.C.
Address:	555 Capitol Mall, Suite 570
City/State/Zip Code:	Sacramento, CA 95814
Email Address:	braun@braunlegal.com
Phone:	916-326-5812
Fax:	916-330-4337

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### Sacramento Municipal Utility District

Name of Primary Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

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**Modesto Irrigation District**

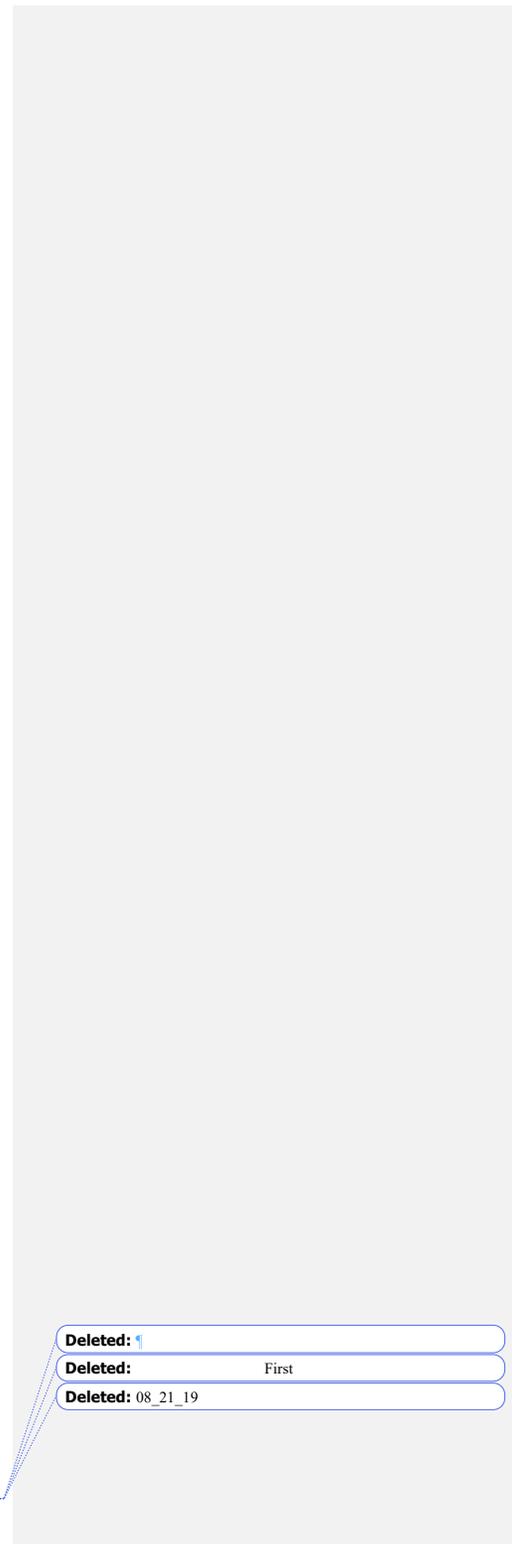
Name of Primary Representative:	
Title:	
Company:	
Address:	
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Phone:	
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Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

**City of Redding**

Name of Primary Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
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**City of Roseville**

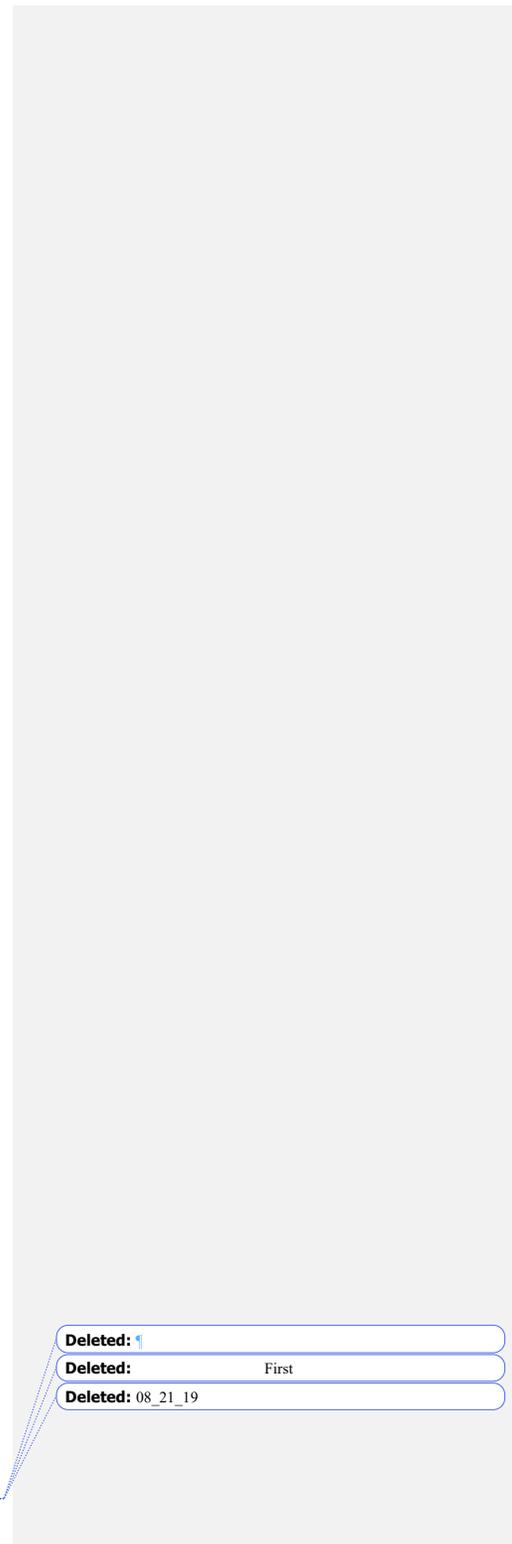
Name of Primary Representative:	
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Address:	
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Email Address:	
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Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

**United States Department of Energy  
Western Area Power Administration  
Central Valley Project, California**

Name of Primary Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

Name of Alternative Representative:	
Title:	
Company:	
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**EXHIBIT A: New EIM Participant Costs and EIM Participant Allocations**

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**Purpose**

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This Exhibit A sets forth the Commission-approved cost allocation percentages for costs associated with Section 8.1 (New EIM Participant Costs), Section 8.2 (Tier 2 Costs) and Section 8.3 (Tier 1 Costs).

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**Table 1: New EIM Participant Costs (Section 8.1)<sup>1</sup>**

<u>EIM Participant</u>	<u>2017 NEL</u>	<u>EIM Participant Responsibility</u>
SMUD	11,598,647	63.5%
MID	2,623,552	14.4%
WAPA-SNR <sup>2</sup>	1,987,830	10.9%
Roseville	1,249,280	6.8%
Redding	798,841	4.4%
<b>TOTAL</b>	<b>18,258,150</b>	<b>100.0%</b>

**Table 2: EIM Participant Allocation Percentages based on 3-Year Average NEL**

<u>EIM Participant</u>	<u>Section 8.3/ Tier 1 Costs</u>	<u>Section 8.2/ Tier 2 Costs</u>	<u>Section 12.1/ Cost Allocation for Violations</u>	<u>Commission Approved Adjusted Allocations</u>
SMUD	64.3%	0	70.3%	X.X%
MID	14.6%	41.0%	16.0%	X.X%
WAPA-SNR	8.6%	24.1%	0.0%	X.X%
Roseville	6.9%	19.4%	7.6%	X.X%
Redding	5.5%	15.5%	6.1%	X.X%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>XXX.X%</b>

<sup>1</sup> The 2017 NEL was agreed upon as the basis for New EIM Participant Costs. Based on further BANC discussions, all other costs, unless specified otherwise, will be based on the Commission-approved 3-year rolling average percentages, which are set forth in Exhibit A-2, as that exhibit may be updated and amended from time-to-time.  
<sup>2</sup> Western Area Power Administration – Sierra Nevada Region.

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The various allocation tiers are defined as follows:

- **Tier 1:** All five (5) EIM Participants will be paying the costs (e.g. – ongoing EIM costs post-Phase 2 go-live)
- **Tier 2:** The four (4) Phase 2 EIM Participants will be paying the costs (e.g. – EIM Phase 2 implementation costs)

### Amendments

This Exhibit A may be amended as determined by the Commission; however, allocation adjustments to WAPA-SNR shall require its written consent. Should WAPA-SNR disagree to the change its allocation, the remaining Parties to this Agreement may make adjustments to the non-WAPA-SNR allocations, subject to Commission approval consistent with Section 8.6 of this Agreement. Any amendment to this Exhibit A shall be reflected through a change in the Version History. Minor, non-substantive changes will be reflected in 1/10<sup>th</sup> increments to the Version History (e.g., 1.1, 1.2, etc.).

### Version History

VERSION	CHANGE	BY	DATE
1.0	Initial Version	Commission	02/22/2017
2.0	Phase 2 Version	Commission	8/21/2019
	3.0	Amended Phase 2 Version	Commission XX/XX/2021

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- Moved (insertion) [3]
- Moved (insertion) [4]
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- Any changes will be reflected through a change in the Version History. Minor, non-substantive changes will be reflected in 1/10<sup>th</sup> increments to the Version History (e.g., 1.1, 1.2, etc.).
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- ATTACHMENT TO EXHIBIT A: EIM Phase 2 Cost Allocation Methodology
- BACKGROUND
- As part of the original BANC EIM evaluation in 2016, BANC, its members, and WAPA-SNR discussed how to allocate the costs of EIM participation among the EIM Participants should other entities elect to join SMUD in future EIM phases. During those discussions, several options were discussed, including:
- Load ratio share
- Gross benefits
- EIM volume.
- After discussing these options, BANC, its members, and WAPA-SNR agreed to use the load ratio share (i.e., net energy load, or "NEL") approach for EIM cost allocation. The entities felt most,
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**EXHIBIT B: BANC EIM Phase 2 Approach**

**Purpose**

This Exhibit B provides a description of the planned functional approach for implementing the Balancing Authority of Northern California (BANC) Energy Imbalance Market (EIM) Phase 2 and the relative roles and responsibilities of the California Independent System Operator (CAISO), BANC, its EIM participating members and the Western Area Power Administration – Sierra Nevada Region (WAPA-SNR).<sup>6</sup> It is recognized that there may be some modifications to this approach based upon the gap analyses performed on behalf of the EIM participating members and WAPA-SNR and on issues identified during Phase 2 implementation that are mutually agreed upon by BANC and the EIM Phase 2 parties.

**Functional Approach**

The functional approach for handling BANC EIM Phase 2 participation will rely on leveraging the existing BANC EIM Entity/Sacramento Municipal Utility District (SMUD) EIM Services Provider arrangement that was developed for BANC EIM Phase 1. The intent is to have BANC/SMUD be the primary interface between the EIM Market Operator (CAISO) and BANC for EIM Entity functions. Each of the BANC EIM Participants, including WAPA-SNR/USBR, will have a direct contractual relationship with the CAISO/EIM Market Operator as EIM Participating Resources. Market dispatch signals through the CAISO’s Automated Dispatch System (ADS) will flow from the CAISO to the respective entity’s real-time operation’s systems via the SMUD/BANC Energy Management System (EMS)<sup>7</sup>. In addition, BANC/SMUD will provide necessary EIM data/information required to ensure sub-BAA operations to WAPA-SNR.

Figure 1, below, provides a schematic flow for the EIM Phase 2 approach.

<sup>6</sup> WAPA-SNR is not a formal BANC member but participates in most BANC activities. Further discussions regarding a more formalized role for WAPA-SNR are intended as issues are addressed through BANC EIM Phase 2 implementation process.

BANC and WAPA-SNR will also coordinate closely with the United States Bureau of Reclamation (USBR) due to the integrated nature of USBR generation within the WAPA-SNR footprint and within the BANC Balancing Authority Area (BAA).

<sup>7</sup> Phase 2 EIM Participants have the option of obtaining dispatch DOTs directly from the CAISO ADS system via a self-created/self-supported interface application.

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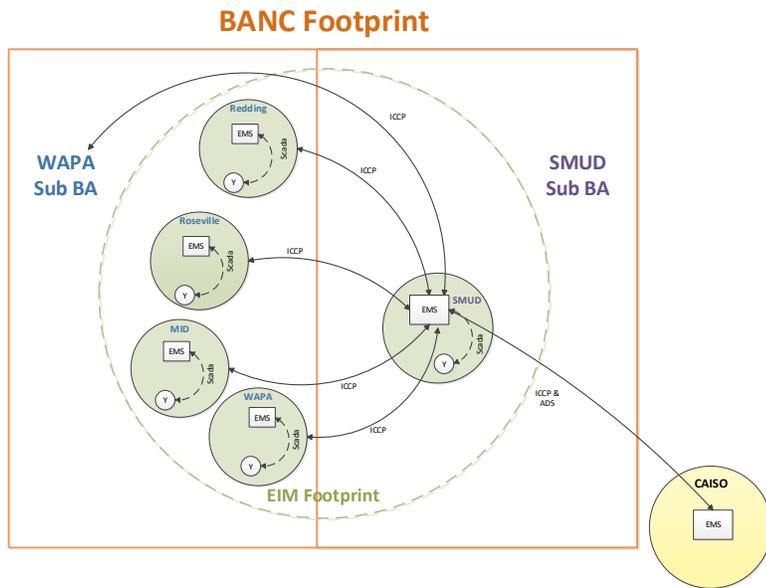
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**Figure 1 – Option 2: EIM Phase 2 Functionality with WAPA-SNR in EIM<sup>8</sup>**



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Figure 2 –

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It is recognized that under each of these options, the

The goal is to preserve the existing BAA and sub-BAA relationships between BANC and SMUD and BANC and WAPA-SNR and to preserve the existing contractual arrangements.<sup>9</sup> Because EIM is a market function, there are no changes to the existing reliability compliance responsibilities of the EIM Participants.

**Roles and Responsibilities**

The following outlines the roles and responsibilities for participation in BANC EIM Phase 2:

**EIM Operator – CAISO**

- Load forecast for each EIM BAA
  - Individual load forecasts and settlement points (ELAP) for each entity (SMUD, Modesto, Redding, Roseville, WAPA-SNR)
  - Non-conforming loads (i.e. – irrigation pumping loads) will require input from USBR and other EIM Participants as appropriate

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In discussions among the EIM participating members, WAPA-SNR, and the CAISO, it is recognized that Option 2 provides the best arrangement for interfacing the unique BANC arrangement with the CAISO and will require fewer special arrangements than Option 1. Therefore, Option 2 has been selected as the BANC EIM Phase 2 Model. ¶

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<sup>8</sup> The communication from SMUD EMS to the BANC EIM Participants may be through either ICCP or DNP3 to the generation plant RTU.

<sup>9</sup> It has been recognized that some contractual changes may be required to BANC member contracts with WAPA-SNR to enable EIM participation. These changes are anticipated to be minor and are not expected to disrupt the benefits of the existing contractual relationships.

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- Resource plan feasibility
  - Includes evaluating resource sufficiency (RS) tests (balancing, bid capacity, flex ramp, and transmission feasibility)
- Run the EIM
- Settling EIM charges through the particular Scheduling Coordinator (SC) (i.e., EIM Entity SC and EIM Participating Resource SC)

**EIM Entity – BANC BAA (Supported by BANC EIM Services Provider [SMUD] and EIM Entity SC [SMUD])**

- Manage/Update/Submit BANC EIM Participant PRSC Base Schedules between T-55 and T-40 minutes
- Manage/Submit Day Ahead EIM Resource Plan interchange schedules for the BANC BA.
- Manage/Submit EIM interchange Base Schedules for the BANC BA
- Current operating characteristics (Note: The vast majority of this data will be obtained by the BANC EIM Entity through EIM Participant data submittals to the CAISO)
  - Outages (Both planned and unplanned)
  - Meter/telemetry
  - Transmission capacity available for EIM transfers – i.e., Energy Transfer System Resources, or “ETSRs”
- Market resource sufficiency tests performed at the BAA level
  - Balancing, flex ramp, and bid range capacity
    - An allocation methodology among the BANC EIM Participating Resources has been developed
- Settlements – through EIM Entity SC
  - All BANC EIM Participant load imbalance
  - BANC EIM Participant non-EIM Participating Resources imbalance
  - Interchange Schedule Imbalance
  - Other BANC EIM Entity fee, offset, and uplift charges
  - An allocation methodology has been developed

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**EIM Participating Resources (Supported by EIM Participating Resource SC)**

- Phase 2 EIM Participating Resources
  - SMUD
  - Modesto Irrigation District (MID)
  - City of Redding (Redding)
  - City of Roseville (Roseville)
  - WAPA-SNR/USBR Central Valley Project (CVP)
- Manage/Submit Day Ahead EIM Generator Resource Plans for the EIM Participant-area
- Manage/Submit EIM Bids for the EIM Participant’s Participating Resources
- Manage/Submit EIM Participating Resource Generator Base Schedules at T-75 and T-55 minutes for EIM Participant’s generators
  - Assure EIM Participant-area Base Schedules and Bids pass EIM Sufficiency Tests at T-75 and T-55 minutes
- Settlement of EIM Participant’s Participating Resource SC EIM Resources

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**Other Issues Addressed During Implementation**

As part of the Phase 2 implementation, the following additional issues were addressed and resolved by the EIM Participants:

1. Deviation Band (Contract arrangement between WAPA-SNR and MID/Redding/Roseville).
  - a. BANC EIM Participants want to preserve this real-time balancing capability.
  - b. BANC EIM Participants will continue to require real-time AGC balancing and the associated Regulation Up/Down reserves in an EIM paradigm.
  - c. The Deviation MW calculation will be analyzed to determine if a change is required to account for EIM redispatch of EIM Participants' generators.<sup>10</sup>
2. EIM hourly Sufficiency Test
  - a. Defined and executed by CAISO at the BANC BA level.
  - b. EIM Participants will each be required to provide EIM capacity so that BANC collectively passes the EIM Sufficiency Tests.
  - c. EIM Participants with no generation on-line may need to make an arrangement with other BANC members that have generation on-line to meet their portion of the total BANC EIM Sufficiency capacity MW requirements.
3. BANC EIM Entity Settlement Charge allocations; allocation invoicing to EIM Participants; and EIM Participant payment schedule for allocations.
4. Treatment of EIM dynamic transfers between sub-BAs within BANC, and between LSE's within the WAPA Sub-BA
5. Ensuring all appropriate technical and operational information and data will be provided to WAPA-SNR that will allow it to operate its sub-BA.

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Do not submit bids in EIM  
 Need to provide input to EIM Entity for Base Schedule and Resource Plan  
 Subject to EIM Entity imbalance charges/payments based on deviations from the Base Schedules provided to the EIM Entity  
 Recommend for all Resources to be designated as EIM Participating Resources even if they do not expect to bid (Note: During EIM implementation each EIM Participating Resource will need to decide how to handle the resources within their respective footprints, including solar, small, and distribution level resources with respect to Participating or non-EIM Participating Resources)

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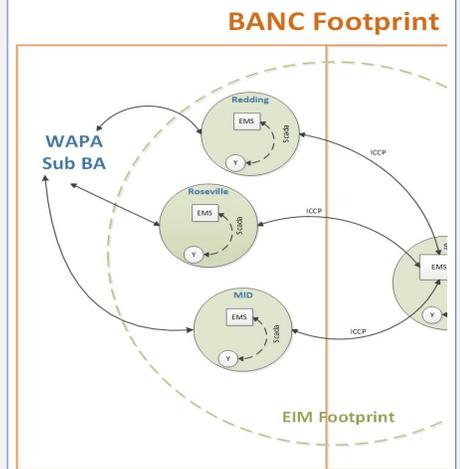
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**Figure 1 - Option 1: EIM Phase 2 Functionality without WAPA-SNR in EIM**



**Figure 2 - Option 2: EIM Phase 2 Functionality with WAPA-SNR in EIM**

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<sup>10</sup> I.e., Due to CAISO EIM timelines, CAISO EIM dispatches would have already occurred prior to WAPA-SNR dispatches under the Deviation Band, which should result in less regulation and imbalance energy required from WAPA-SNR/USBR resources.

**Amendments**

This Exhibit B may only be amended with written consent of all Parties and approval of the Commission. Any amendment to this Exhibit B shall be in writing and transmitted to all Parties to this Agreement within seven (7) business days of the version change contained in the document Version History.

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Any changes will be reflected through a change in the Version History. Minor, non-substantive changes will be reflected in 1/10<sup>th</sup> increments to the Version History (e.g., 1.1, 1.2, etc.).

**Version History**

VERSION	CHANGE	BY	DATE
1.0	Initial Version	Commission	08/21/2019
<u>2.0</u>	<u>Amended</u>	<u>Commission</u>	

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**EXHIBIT C: BANC Phase 2 EIM Implementation Agreement**

(To Be [Included in Final PDF Version](#))

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**EXHIBIT D: EIM Participant Reserve Account**

**Purpose and Scope**

The EIM Participant Reserve Account is hereby established to provide ongoing operating capital to the EIM Entity to meet its EIM obligations in accordance with the CAISO/Market Operator Tariff. The gross amount of capital held in the EIM Participant Reserve Account shall be calculated by the BANC Finance Group and the General Manager, in consultation with the EIM Committee and approved by the Commission. Contributions to the EIM Participant Reserve Account by each EIM Participant are to be in accordance with the cost allocation percentages set forth in Tier 1 of Exhibit A – Table 2 to this Agreement, unless adjusted by mutual consent of the EIM Participants and approved by the BANC Commission (Adjusted Contributions), in which case such Adjusted Contributions shall be adopted by a Resolution of the Commission and subsequently memorialized in a revision to Exhibit A – Table 2 (Commission Approved Adjusted Allocation), and a change in the Version History of this Exhibit D.

Review for potential adjustments to the EIM Participant Reserve Account shall be made by BANC at least annually and “true ups” may be required on an “as needed” basis in accordance with any cash obligations imposed on the EIM Entity by the Market Operator. Such “true ups” shall be the responsibility of the EIM Participants in proportion to their allocation responsibilities set forth in Tier 1 of Exhibit A – Table 2 of this Agreement, except in the case of Commission approval of Adjusted Contributions, in which such allocations shall be in accordance with such Adjusted Contributions also set forth in Exhibit A – Table 2.

The EIM Committee may advise the General Manager with the ongoing monitoring of the EIM Participant Reserve Account and may be called upon for the review of proposed true ups and/or credits. At least annually, the EIM Committee and General Manager shall review the EIM Participant Reserve Account and make a recommendation to the Commission for the next fiscal year.

The EIM Committee may be consulted on the development of more detailed protocols or guidelines for administration of the EIM Participant Reserve Account. Such a protocol or guideline is merely administrative and does not require Commission approval.

Monies deposited in the EIM Participant Reserve Account shall be used solely for purposes of EIM administration in accordance with cost obligations imposed on the EIM Entity by the CAISO/Market Operator Tariff.

**Amendments**

This Exhibit D may only be amended with written consent of all EIM Participants and approval of the Commission. Any amendment to this Exhibit D shall be reflected through a change in the Version History. Minor, non-substantive changes will be reflected in 1/10<sup>th</sup> increments to the Version History (e.g., 1.1, 1.2, etc.).

**Version History**

<u>VERSION</u>	<u>CHANGE</u>	<u>BY</u>	<u>DATE</u>
1.0	<u>Initial Version (New Exhibit to Second Amended and Restated Agreement)</u>	<u>Commission</u>	

**EXHIBIT E: EIM Entity Supplemental Services**

**Purpose**

This Exhibit E provides for additional services to be provided through BANC to EIM Participants in accordance with Section 8.4. These can be provided by BANC to a single EIM Participant or to multiple EIM Participants. The service shall be set forth in a separate Service Schedule to this Exhibit, the first additional service performed by BANC being referred to as Service Schedule E-1 and so forth (i.e., the second service would be Service Schedule E-2, etc.).

**EXHIBIT E**

**Service Attachment E-1**

**Additional Power Settlements Software Functionality**

**Description:**

The EIM Participants listed in Table E-1 (Responsible EIM Participants), below, have requested and agreed to pay for additional software functionality from Power Settlements, inclusive of the “CAISO Shadow Settlements Module” and the “CAISO Allocations Module,” (Additional Modules), both of which constitute sub-modules to the primary “CAISO SettleCore Software,” licensed to SMUD and BANC. The Additional Modules, for which there are additional costs, are being provided solely to the two Responsible EIM Participants (Sub-Licensees) listed below, and all costs associated with these Additional Modules shall be their sole responsibility, all in accordance with the “Optional Extended Sublicense to the License and Software Services Agreement,” (Sublicense Agreement) effective September 1, 2020, attached as Appendix E-1 to this Agreement. Such costs and payments shall be in accordance with the cost and allocation schedule listed in Table 1 and Section 8.4 of this Agreement.

**Table E-1**

<b><u>Responsible EIM Participant</u></b>	<b><u>Description</u></b>	<b><u>Cost</u></b>	<b><u>Payment Cycle</u></b>
Modesto Irrigation District City of Redding	Additional Modules, as set forth in the Description, above.	Year 1: \$50,000.00 Year 2 and subsequent Years, in accordance with Section 2a of the Sublicense Agreement (Appendix E-1).	Year 1: Within 30 Days of Execution of this Agreement.  Year 2 and subsequent years, within 30 days of an invoice from BANC in accordance with Section 8.5 of this Agreement.

**Service Identification in Exhibit E**

Each additional service requested by an EIM Participant or EIM Participants shall be reflected by numerals attached to the Exhibit “E” identification, such as service 1, being reflected as “E-1” (thus, Attachment E-1, Table E-1 and Appendix E-1) and future service 2 being reflected by “E-2,” (thus, Attachment E-2, Table E-2 and Appendix E-2, etc. ).

**Amendments**

Amendments to Exhibit E require the written consent of all of the Responsible EIM Participants and approval of the Commission. Any amendment to this Exhibit E shall be reflected through a change in the Version History (e.g., 1.0, 2.0, etc.). Minor, non-substantive changes will be reflected in 1/10<sup>th</sup> increments to the Version History (e.g., 1.1, E-1.2, etc.). Individual Version Histories shall be provided for each specific service to Responsible EIM Participants.

Version History

<u>VERSION</u>	<u>CHANGE</u>	<u>BY</u>	<u>DATE</u>
1.0	<u>Initial Version (New Exhibit to Second Amended and Restated Agreement)</u>	<u>Commission</u>	

Appendix E-1

Optional Extended Sublicense to the License and Software Services Agreement

(To Be Included in PDF Final Version)

**EXHIBIT F: BANC Phase 2 EIM Entity Agreement**

(To Be Included in PDF Final Version)

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			3.0	Amended Phase 2 Version	Commission	XX/XX/2021
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**Balancing Authority of Northern California  
Resolution 21-01-20**

**APPROVAL OF SECOND AMENDED AND RESTATED EIM PARTICIPATION AGREEMENT**

WHEREAS, the Balancing Authority of Northern California ("BANC") was created by a Joint Powers Agreement to, among other things, acquire, construct, maintain, operate, and finance Projects; and

WHEREAS, the Commission authorized BANC to become an EIM Entity and directed BANC staff to pursue the CAISO EIM under a phased approach, including that BANC become an EIM Entity and execute all applicable agreements with the California Independent System Operator and among BANC and EIM Participants, as approved by the Commission; and

WHEREAS, the Sacramento Municipal Utility District ("SMUD"), pursuant to approval by its governing board, became the first EIM Participating Resource in the BANC EIM footprint; and

WHEREAS, this first implementation between BANC and SMUD, which occurred on April 3, 2019, was referred to as BANC EIM "Phase 1"; and

WHEREAS, it was contemplated that in the future, additional BANC members and/or the Western Area Power Administration – Sierra-Nevada Region ("WAPA") may desire to become Parties to this Agreement, at which time BANC and SMUD would use reasonable efforts to accommodate new EIM Participants, including the adoption of any amendments to this Agreement deemed necessary to enable such participation; and

WHEREAS, such additional participation by other BANC members and/or WAPA is referred to as BANC EIM "Phase 2"; and

WHEREAS, based upon extensive discussions among BANC staff, BANC members and WAPA, and the individual Phase 2 assessments and approval processes conducted by certain BANC members and WAPA, decisions were reached to participate in BANC EIM Phase 2 and to execute the First Amended and Restated Energy Imbalance Market Participation Agreement (First Amended Agreement), approved by the Commission on August 21, 2019 by Resolution 19-08-13, and made effective on September, 17, 2019; and

WHEREAS, based on the decision to proceed with EIM implementation for the specified BANC members and WAPA, the original EIM Participation Agreement was amended and restated by the First Amended Agreement to reflect the expanded participation within the BANC EIM Entity footprint; and

WHEREAS, certain issues have arisen during the course of Phase 2 implementation that have prompted the need for additional substantive changes to the First Amended Agreement; and

WHEREAS, this Second Amended and Restated Energy Imbalance Market Participation Agreement (Agreement) is intended to address such revisions as deemed necessary and appropriate by the Parties hereto; and

WHEREAS, this Agreement has been reviewed and accepted by the EIM Committee and Legal Committee.

NOW, THEREFORE, BE IT RESOLVED that the Commissioners of the Balancing Authority of Northern California hereby Approve the EIM PA and authorize and direct the General Manager to execute Agreement, as attached in substantially final form.

**Balancing Authority of Northern California  
Resolution 21-01-20**

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 27th day of January 2021, by the following vote:

		Aye	No	Abstain	Absent
Modesto ID	James McFall				
City of Redding	Dan Beans				
City of Roseville	Michelle Bertolino				
City of Shasta Lake	James Takahara				
SMUD	Paul Lau				
TPUD	Paul Hauser				

---

Dan Beans  
Chair

---

Attest by: C. Anthony Braun  
Secretary

**SECOND AMENDED AND RESTATED  
ENERGY IMBALANCE MARKET PARTICIPATION AGREEMENT  
BETWEEN THE  
BALANCING AUTHORITY OF NORTHERN CALIFORNIA  
AND THE  
MODESTO IRRIGATION DISTRICT,  
CITY OF REDDING,  
CITY OF ROSEVILLE,  
SACRAMENTO MUNICIPAL UTILITY DISTRICT  
AND THE  
UNITED STATES  
DEPARTMENT OF ENERGY  
WESTERN AREA POWER ADMINISTRATION  
CENTRAL VALLEY PROJECT, CALIFORNIA**

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## **1 PREAMBLE**

This Second Amended and Restated Energy Imbalance Market (EIM) Participation Agreement (Agreement) is entered into between the BALANCING AUTHORITY OF NORTHERN CALIFORNIA, a joint exercise of powers agency organized under Section 6500 *et seq.*, of the California Government Code, hereinafter called “BANC,” its successors and assigns; and the MODESTO IRRIGATION DISTRICT (MID), the CITY OF REDDING, CA (Redding), the CITY OF ROSEVILLE, CA (Roseville), and the SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD), each created and existing under the laws of the State of California, and the UNITED STATES OF AMERICA, acting by and through the Administrator, WESTERN AREA POWER ADMINISTRATION, DEPARTMENT OF ENERGY (WAPA), all operating Electric Systems within the BANC Balancing Authority Area. BANC or EIM Participant may be referred to herein individually as the “EIM Participant” or “Party” or collectively as the “EIM Participants” or the “Parties.”

## **2 EXPLANATORY RECITALS**

- 2.1** WHEREAS, BANC was created by a Joint Powers Agreement to, among other things, acquire, construct, maintain, operate, and finance projects;
- 2.2** WHEREAS, BANC had evaluated various market options including the Energy Imbalance Market operated by the California Independent System Operator Corporation (CAISO);
- 2.3** WHEREAS, BANC engaged certain consultants for the purposes of providing initial analytical studies to assess both the cost and the benefits of individual BANC member and WAPA participation in the CAISO EIM through the BANC Balancing Authority;
- 2.4** WHEREAS the initial studies produced on behalf of BANC did show net benefits to some BANC members, while also highlighting for some BANC members and WAPA that some of the technical and operational hurdles might take additional time to address;
- 2.5** WHEREAS, based upon these studies and further discussions among BANC members, WAPA and the CAISO, it was also determined that SMUD was in the best position to join the EIM initially and that subsequent phases of EIM implementation would continue to be investigated in order to allow other BANC members and WAPA to join if they determined it was in each of their respective interests to do so upon further study;
- 2.6** WHEREAS, the Commission therefore directed BANC staff to pursue the CAISO EIM under a phased approach, including that BANC become an EIM Entity and execute all applicable agreements with the CAISO and among BANC and EIM Participants, as approved by the Commission, and that SMUD, pursuant to approval by

its governing board, might also become the first EIM Participating Resource in the BANC EIM footprint;

- 2.7 WHEREAS, it was contemplated that in the future, additional BANC members and/or WAPA may desire to become Parties to this Agreement, at which time BANC and SMUD would use reasonable efforts to accommodate new EIM Participants, including the adoption of any amendments to this Agreement deemed necessary to enable such participation;
- 2.8 WHEREAS, it was decided by certain non-participating BANC members and WAPA, to conduct further studies to determine what gaps need to be addressed in their systems and processes to participate in the CAISO EIM through BANC;
- 2.9 WHEREAS, on April 26, 2017, by Resolution 17-04-06, the Commission authorized the General Manager to enter into contracts with consultants to perform Phase 2 studies to further determine what might be required for certain BANC members and WAPA to participate in EIM;
- 2.10 WHEREAS, on April 3, 2019, BANC began participating in the CAISO EIM as an EIM Entity and SMUD as the first EIM Participating Resources within the BANC EIM Entity footprint;
- 2.11 WHEREAS, based upon extensive discussions among BANC staff, BANC members and WAPA, and the individual EIM Phase 2 assessments and approval processes conducted by certain BANC members and WAPA, decisions were reached to participate in BANC EIM Phase 2 and to execute the First Amended and Restated Energy Imbalance Market Participation Agreement (First Amended Agreement), being approved by the Commission on August 21, 2019, by Resolution 19-08-13, and made effective on September, 17, 2019;
- 2.12 WHEREAS, based on the decision to proceed with EIM implementation for the specified BANC members and WAPA, the original EIM Participation Agreement was amended and restated by the First Amended Agreement to reflect the expanded participation within the BANC EIM Entity footprint;
- 2.13 WHEREAS, certain issues have arisen during the course of Phase 2 implementation that have prompted the need for additional changes to the First Amended Agreement; and
- 2.14 WHEREAS, this Second Amended and Restated Energy Imbalance Market Participation Agreement (Agreement) is intended to address such revisions as deemed necessary and appropriate by the Parties hereto.

**NOW THEREFORE**, in view of the understandings set forth in the recitals above, which the Parties acknowledge and agree are accurate representations of the facts, the Parties agree to the terms of this Agreement that set forth the roles, obligations, and responsibilities of each Party to one another.

### 3 DEFINITIONS

Unless otherwise defined herein, capitalized terms when used with initial capitalization, whether singular or plural, shall have the meaning set forth in the FERC-approved Glossary of Terms used in NERC Reliability Standards, the NERC Functional Model, the CAISO Tariff, as defined, the BANC EIM Business Practices, the SMUD Open Access Transmission Tariff (OATT), the Interconnected Operating Agreements, and the WAPA OATT.

- 3.1 **Balancing Authority** shall mean the responsible entity that integrates resource plans ahead of time, matches generation and load, maintains interchange with other Balancing Authority Areas, and maintains frequency in real time of the electric power systems.
- 3.2 **Balancing Authority Area** shall mean the collection of generation, transmission, and loads within the metered electrical boundaries of the Balancing Authority.
- 3.3 **BANC EIM Business Practices or BPs** shall mean the business practices established by BANC to govern participation in EIM as these BANC EIM Business Practices may be adopted or amended from time-to-time in accordance with this Agreement.
- 3.4 **CAISO** shall mean the “California Independent System Operator Corporation,” or its successor. The CAISO serves as the EIM Market Operator and may be referred to as the “Market Operator” from time-to-time.
- 3.5 **CAISO Tariff** shall mean the CAISO’s open access transmission tariff filed with, and approved by, FERC, as that tariff may be amended from time-to-time.
- 3.6 **Commission** shall mean the “BANC Commission,” as established in the BANC Joint Powers Agreement, as that agreement may be amended from time-to-time.
- 3.7 **Compliance Costs** shall mean those costs described in Section 12.2.2 of this Agreement.
- 3.8 **Compliance Enforcement Authority** shall mean FERC, NERC, WECC, and any other agency, court, organization, or other entity or person duly authorized pursuant to law or regulation to: (a) audit or determine compliance with applicable Reliability Standards; or (b) impose, enforce, excuse, or rescind penalties or otherwise take action binding on one or more Parties with respect to a finding of failure to comply with a Reliability Standard.
- 3.9 **Confidential Information** shall mean : (a) all written materials marked “Confidential,” “Proprietary,” or with words of similar import provided to a Party by another Party; and (b) all observations of equipment (including computer screens) and oral disclosures related to a Party's systems, operations, or activities that are indicated as such at the time of observation or disclosure (or are identified as "confidential" or "proprietary" in a letter sent to another Party no later than five (5) calendar days after the disclosure), respectively. Confidential Information includes portions of

documents, records, and other material forms or representations that any Party may create, including but not limited to, handwritten notes or summaries that contain or are derived from such Confidential Information.

- 3.10 *Energy Imbalance Market or EIM*** shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time.
- 3.11 *EIM Committee*** shall mean the administrative committee established in Section 10 of this Agreement.
- 3.12 *EIM Entity*** shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. BANC is the EIM Entity under this Agreement.
- 3.13 *EIM Entity Agreement*** shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. The EIM Entity Agreement is between BANC and the CAISO.
- 3.14 *EIM Entity Supplemental Services*** shall mean any additional services and/or products provided by the EIM Entity to an EIM Participant or to EIM Participants as described in Section 8.4 of this Agreement.
- 3.15 *EIM Implementation Agreement*** shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. The EIM Implementation Agreement for this participation is between BANC and the CAISO.
- 3.16 *EIM Operator*** shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. The CAISO is the EIM Operator.
- 3.17 *EIM Participant*** shall mean a signatory to this Agreement.
- 3.18 *EIM Participant Cost(s)*** shall mean the cost responsibility of each EIM Participant to BANC as described in Section 8 (EIM Participant and New EIM Participant Costs) of this Agreement.
- 3.19 *EIM Participant Reserve Account*** shall mean that account established in Section 8.3 of this Agreement and into which each EIM Participant shall contribute for purposes of ensuring sufficient funding for EIM Entity participation in accordance with the CAISO Tariff.
- 3.20 *EIM Participating Resource*** shall have the meaning set forth in the CAISO Tariff, as that tariff may be amended from time to time.
- 3.21 *EIM Participation Agreement*** shall mean this Agreement, as amended from time-to-time.
- 3.22 *EIM Participation Percentage*** shall mean the percentage allocation attributable to each EIM Participant for purposes of EIM Participant Costs in Section 8 (EIM Participant and New EIM Participant Costs) and Exhibit A (New EIM Participant

Costs and EIM Participant Allocations) and liability for NERC Penalties as set forth in Section 12 (BANC Violations of Reliability Standards Arising from EIM Participation) of this Agreement.

- 3.23 *EIM Project Manager*** shall mean the individual(s) selected by the Parties to oversee and manage BANC EIM implementation activities.
- 3.24 *EIM Project Work*** shall mean the multi-phased work plan to implement and operate in the EIM as developed and overseen by the EIM Committee.
- 3.25 *EIM Services*** shall mean the services provided by the EIM Services Provider to BANC, as set forth in the EIM Services Agreement.
- 3.26 *EIM Services Agreement*** shall mean the agreement between BANC, as the EIM Entity, and the EIM Services Provider.
- 3.27 *EIM Services Provider*** shall mean the entity providing EIM Services to BANC. SMUD, or its successor, shall be the EIM Services Provider.
- 3.28 *Electric System*** shall mean all properties and assets that are owned or operated by a Party, including any interests in joint powers agency facilities, that are used for or pertain to the generation, transmission, transformation, or distribution of electric power, including all additions, replacements, extensions, expansions, improvements, and betterments thereto, and equipment associated therewith. Communication systems and equipment associated with operation of the Electric System shall be included as part of a Party's Electric System. To the extent a Party is not the sole owner of an asset or property, only that entity's ownership portion or entitlement in such property shall be considered as a part of its Electric System.
- 3.29 *FERC*** shall mean the "Federal Energy Regulatory Commission," or its successor.
- 3.30 *Financial Penalties*** shall mean those costs described in Section 12.2.1 of this Agreement.
- 3.31 *Interconnected Operating Agreements*** shall mean agreements between WAPA and individual BANC members which define the roles and responsibilities of the interconnected parties.
- 3.32 *Internal Compliance Program*** shall mean the BANC Internal Compliance Program, approved by the Commission, as that program may be amended from time-to-time.
- 3.33 *Internal Compliance Program Charter*** shall mean the policy-level document outlining the Internal Compliance Program, which has been adopted by the Commission, as that program may be amended from time-to-time.
- 3.34 *NERC*** shall mean the "North American Electric Reliability Corporation," or its successor.

**3.35** *NWPP* shall mean the “Northwest Power Pool.”

**3.36** *Phase 1 EIM Participant* shall mean SMUD.

**3.37** *Phase 2 EIM Participants* shall mean MID, Redding, Roseville and WAPA for Phase 2 implementation and these entities plus SMUD for ongoing EIM operations.

**3.38** *Reliability Standards* shall mean those NERC Reliability Standards and WECC Regional Reliability Standards that have been approved by FERC under Section 215 of the Federal Power Act and WECC applicable Regional Criteria referenced in FERC-approved Reliability Standards.

**3.39** *Reserve Sharing Group* shall mean the group operated by the NWPP to comply with Reliability Standard BAL-002-WECC-2a, or its successor standard. BANC is a member of the NWPP and a participant in the NWPP Reserve Sharing Group.

**3.40** *SMUD OATT* shall mean the “Open Access Transmission Tariff” posted on the SMUD Open Access Same-Time Information System website.

**3.41** *WAPA OATT* shall mean the “Open Access Transmission Tariff” posted on the WAPA Open Access Same-Time Information System website.

**3.42** *WECC* shall mean the “Western Electricity Coordinating Council,” or its successor.

#### **4 TERM AND TERMINATION**

##### **4.1 Effective Date**

This Agreement shall be effective upon the date of execution by the Parties (Effective Date).

##### **4.2 Term**

This Agreement shall remain in effect from the Effective Date until terminated pursuant to Section 4.3 (Termination by EIM Participants), 4.4 (Termination of this Agreement), or 4.5 (Surviving Obligations) of this Agreement.

##### **4.3 Termination by EIM Participants**

Subject to Section 4.5 (Surviving Obligations), any EIM Participant may terminate its participation in this Agreement by providing a notice of termination not less than one (1) year in advance of the date of intended termination.

##### **4.4 Termination of this Agreement**

This Agreement shall terminate if: 1) terminated by BANC, 2) if BANC ceases to be a Balancing Authority, 3) the CAISO terminates the EIM Entity Agreement between the

CAISO and BANC, 4) there are no remaining EIM Participants, or 5) upon the expiration of forty (40) years from the Effective Date. BANC shall provide EIM Participants no less than sixty (60) calendar days written notice prior to seeking a termination decision by the Commission. In the event of a decision by the Commission to terminate this Agreement and there is a successor entity assuming the role of EIM Entity on behalf of the EIM Participant(s), BANC agrees to work with the successor EIM Entity and EIM Participant(s) to coordinate transfer of the EIM Entity responsibilities to a successor EIM Entity. BANC shall also conform its termination with the EIM Participant(s) timelines and procedures required for termination as an EIM Entity as set forth in its EIM Entity Agreement with the CAISO.

#### **4.5 Surviving Obligations**

Termination of this Agreement or a Party's participation herein shall not extinguish the obligation of any Party to complete in-progress compliance investigations, implement any resulting corrective mitigating actions and otherwise complete any active compliance process as well as satisfy all other obligations, including any financial responsibilities. In addition, any outstanding financial right or obligation, and any provision of this Agreement necessary to give effect to such right or obligation, shall survive until satisfied, and all limitations of liability provided in this Agreement will survive until all statutes of limitation related to claims that could be made in connection with this Agreement have run.

### **5 SCOPE OF AGREEMENT**

This Agreement, including its Exhibit A (EIM Participation Percentages), Exhibit B (BANC EIM Phase 2 Model), Exhibit C (BANC Phase 2 EIM Implementation Agreement), Exhibit D (EIM Participant Reserve Account), Exhibit E (EIM Entity Supplemental Services), and Exhibit F (BANC Phase 2 EIM Entity Agreement), which are incorporated herein by reference, is for the purpose of establishing BANC as the EIM Entity in support of the EIM Participant(s) and is the sole expression of the Parties. Exhibits may be subject to future revision in accordance with the individual terms contained in that Exhibit and such changes do not constitute an amendment hereto.

### **6 BANC (EIM ENTITY) OBLIGATIONS**

BANC shall be responsible for the following:

- 6.1** Negotiating a new or amended EIM Implementation Agreement and a new or amended EIM Entity Agreement with the CAISO which reflects the directive of the Commission;
- 6.2** Participating, through the General Manager, on the EIM Committee as set forth in Section 10 (EIM Committee) of this Agreement and providing support to Committee activities, as needed;

- 6.3** Managing the EIM Services Agreement between BANC and SMUD, which contains the agreed upon terms and conditions respecting the EIM Services to be provided by SMUD to BANC;
- 6.4** Cooperating with the EIM Participant(s) in the exchange of data and information necessary to support EIM activities;
- 6.5** Providing support and information needed to facilitate EIM examination and/or participation by any proposed new EIM Participant;
- 6.6** Providing regular updates to the Commission, as needed;
- 6.7** Participating, as the EIM Entity, in any relevant stakeholder activities related to EIM;
- 6.8** To the extent reasonably practicable, taking any position on regulatory actions to ensure that the interest of BANC, as an EIM Entity, and those of the EIM Participant(s), are reasonably maintained, as deemed necessary by the Commission, or by the General Manager, to the extent consistent with authority delegated by the Commission for participation in those fora;
- 6.9** Serving as the EIM Entity on behalf of the EIM Participant(s) in accordance with this Agreement, including its Exhibits, as they may be amended from time-to-time;
- 6.10** Ensuring its role as EIM Entity does not adversely affect its compliance with NERC Reliability Standards;
- 6.11** Complying with CAISO Tariff provisions applicable to an EIM Entity; and
- 6.12** Management and oversight of the EIM Participant Reserve Account as set forth in Section 8 (EIM Participant and New EIM Participant Costs) of this Agreement; and
- 6.13** Coordinating with the CAISO on EIM activities related to the operation and implementation of EIM.

## **7 EIM PARTICIPANT OBLIGATIONS**

The EIM Participant shall be responsible for the following, “EIM Participant Obligations,” as set forth herein:

- 7.1** Negotiating necessary agreements for its EIM participation;
- 7.2** Working collaboratively with BANC in the most transparent means practicable;
- 7.3** Along with BANC, using reasonable efforts to control costs associated with EIM implementation with respect to costs re-assignable to new the EIM Participant(s) under the terms of this Agreement;

- 7.4 Comply with CAISO Tariff provisions applicable to EIM Participating Resources or EIM non-Participating Resources;
- 7.5 Using reasonable efforts to comply and/or abide by any directives of the EIM Entity, consistent with BANC EIM Business Practices, the CAISO Tariff and procedures, policies or timelines adopted by the EIM Committee;
- 7.6 Participating on the EIM Committee, as set forth in Section 10 (EIM Committee) of this Agreement;
- 7.7 Paying in a timely manner any cost assessed to the EIM Participant, including but not limited to EIM Participant Costs as set forth in Section 8 and any final costs associated with EIM-related violation(s) of Reliability Standards applicable to the Balancing Authority, as set forth in Section 12 (BANC Violations of Reliability Standards Arising from EIM Participation) of this Agreement; and
- 7.8 To the extent reasonably practicable, taking any positions on regulatory actions deemed needed to ensure that the interest of BANC, as the EIM Entity, and those of the EIM Participant(s), are reasonably maintained; however, nothing herein requires EIM Participant to take a position that it reasonably believes is contrary to its own interests.

## **8 EIM PARTICIPANT AND NEW EIM PARTICIPANT COSTS**

Each EIM Participant shall be responsible to pay its share of costs associated with its participation in EIM within the BANC EIM Entity footprint. First, all EIM Participants shall pay a one-time assessment associated with becoming a new EIM Participant as described below in Section 8.1. Second, each EIM Participant shall pay its share of the BANC EIM implementation costs associated with its phase of EIM implementation, as described in Section 8.2. Third, each EIM Participant shall pay its share of the ongoing costs incurred by BANC as the EIM Entity, as described in Section 8.3, including the “as needed” funding of the EIM Participant Reserve Account. Collectively, these costs set forth in Sections 8.1, 8.2, and 8.3 herein are referred to as EIM Participant Costs and are described as follows:

- 8.1 Phase 1 and Phase 2 EIM Participants shall be required to pay a one-time EIM assessment to BANC based on BANC’s implementation costs multiplied by the allocation percentage contained in Table 1 of Exhibit A. This one-time EIM assessment is intended to cover the new EIM Participant’s share of the costs incurred by the BANC in order to facilitate it becoming an EIM Entity and EIM participation by entities within the BANC footprint. These costs should be allocated to Phase 1 and Phase 2 EIM Participants based on their respective load ratio percentage of overall BANC member load.
  - 8.1.1 For Phase 2 EIM Participants, the costs collected by BANC shall be allocated back to the Phase 1 EIM Participant, consistent with those accounting and tracking metrics developed and adopted by the EIM Committee and approved

by the Commission. BANC and the Phase 2 EIM Participants may agree on the method of payment of the EIM assessment, which may be paid in installments in any manner agreed upon by the Parties

8.1.2 For any future EIM Participant(s) (Future EIM Participant) which join subsequent to Phase 2, the Future EIM Participant(s) shall work with BANC and the EIM Committee to determine either a pro rata share, or some other reasonable share, of the costs paid by Phase 1 and Phase 2 EIM Participants under this section, and the Future EIM Participant(s) shall pay BANC this amount in a manner and timeline determined by the Commission. Existing EIM Participants shall be reimbursed this full amount by BANC in accordance with the percentages set forth in Table 1 of Exhibit A, or by another manner so approved by the Commission.

**8.2** In addition to the payments set forth in Sections 8.1 and 8.3, each EIM Participant shall pay its share of the BANC EIM Implementation costs for its EIM Implementation phase described in this Section 8.2. These costs shall be allocated to EIM Participants based on the applicable EIM Participation Percentages set forth in Table 2 of Exhibit A to this Agreement, as that Exhibit A may be amended from time-to-time, and include the costs incurred by BANC in its performance under the EIM Implementation Agreement, including implementation costs for the new EIM Participant.

**8.3** In addition to the payments set forth in Sections 8.1 and 8.2, each EIM Participant shall pay its share of costs related to the ongoing operations of BANC as the EIM Entity described in this Section 8.3. These costs shall be allocated to EIM Participants based on the applicable EIM Participation Percentages set forth in Table 2 of Exhibit A to this Agreement, as that Exhibit A may be amended from time-to-time, and include the following components:

8.3.1 Costs reasonably incurred by BANC in fulfilling its obligations as an EIM Entity, including, but not limited to:

8.3.1.1 costs associated with BANC's obligations under its EIM Entity Agreement; and

8.3.1.2 costs associated with BANC's obligations under the EIM Services Agreement;

8.3.1.3 ongoing costs, including administrative, legal and regulatory, as reviewed by the EIM Committee and approved by the Commission; and

8.3.1.4 ongoing funding of the EIM Participant Reserve Account as reviewed by the EIM Committee and approved by the Commission in accordance with 8.3.1.4.1:

8.3.1.4.1 such funding obligations and timelines of the EIM Participant Reserve Account, as approved by the Commission, shall be conducted in accordance with Exhibit D to this Agreement.

**8.4** Any EIM Participant may request and agree to additional services to be provided by the EIM Entity, including but not limited to, technical assistance, analysis, software acquisition, and energy and/or capacity-related products. Any additional costs incurred by an EIM Participant in accordance with this Section 8.4 shall be approved by the Commission and shall be recovered solely from the EIM Participant(s) which have made such a request or requests and set forth in Exhibit E to this Agreement, each separate product and service set forth with its own title and in a separate numbered attachment to Exhibit E (e.g., Exhibit E, Service Schedule E-1 (Title of Product/Service)).

All costs to be recovered by the EIM Entity from an EIM Participant under this Section 8.4 shall be invoiced and charged in accordance with Section 8.5 and the relevant attachment to Exhibit E.

**8.5** BANC shall calculate the EIM Participant Costs and invoice each EIM Participant to the addresses set forth in Appendix 1 (Notices) to this Agreement. Except as provided in Section 8.3.1.4, above, the EIM Participant shall pay this invoice within thirty (30) calendar days of receipt of the invoice. Payments shall be sent by each EIM Participant to the following address:

Balancing Authority of Northern California  
6001 S Street  
M.S. D-109  
Sacramento, CA 95852-1830

**8.6** EIM Participant Costs will be determined through the EIM Committee process unless otherwise agreed, in writing, between the Parties. Any costs allocated by BANC to EIM Participants must be placed in the budget and reviewed and concurred with by the EIM Committee prior to submittal to the Commission for final approval. In addition, BANC will obtain written concurrence by WAPA for their share of EIM Participant costs in advance of seeking final approval from the Commission. In the case that WAPA does not provide its concurrence, the General Manager shall work with EIM Participants to reach consensus. Failure to reach a consensus may require Commission action, including but not limited to reallocation to non-WAPA EIM Participants or referral to the Dispute Resolution provisions provided in Section 14 (Dispute Resolution) of this Agreement.

In the event BANC anticipates its costs may exceed the approved budget, BANC shall submit such costs to the EIM Committee and WAPA for review and concurrence prior to submitting a revised budget request to the Commission for approval. Failure of

approval by WAPA shall be addressed in a similar manner to that in the preceding paragraph of this Section 8.6.

- 8.7** EIM Participants shall be responsible for their costs incurred in becoming an EIM Participating Resource under the terms of the CAISO tariff.

## **9 NEW EIM PARTICIPANTS**

- 9.1** Any entity inside of the EIM Entity BAA footprint may become an EIM Participant by executing an EIM Participation Agreement with BANC, paying BANC a one-time EIM assessment, as determined in accordance with Section 8.1 of this Agreement, and entering into any other arrangements required by the CAISO Tariff and the Commission. BANC and the existing EIM Participants will work cooperatively with the proposed new EIM Participant to minimize the impact on the proposed new EIM Participant, other BANC members, and existing EIM Participants.
- 9.2** Upon the execution of an EIM Participation Agreement with BANC, the new EIM Participant shall be allowed to participate on the EIM Committee in accordance with Section 10 (EIM Committee) of this Agreement.

## **10 EIM COMMITTEE**

### **10.1 Establishment of EIM Committee**

On or after the Effective Date of this Agreement, the General Manager shall establish the EIM Committee by appointing EIM Committee members as set forth in Section 10.4 (EIM Committee Representation and Alternates).

### **10.2 General Responsibilities of EIM Committee**

The EIM Committee is an advisory body to the General Manager and responsible for providing advice and counsel for matters related to the operation of EIM within the BANC EIM Entity footprint. Specifically, the EIM Committee may be called upon by the General Manager for advice on the following matters:

- 10.2.1 Establishing roles and responsibilities among BANC, the EIM Participant(s) and the EIM Operator;
- 10.2.2 Reviewing of budgets and costs incurred by BANC, for both EIM implementation and EIM operations and providing concurrence with respect to those costs prior to the submission to the Commission for approval in accordance with Section 8.6;
- 10.2.3 Developing and updating (as necessary), a scope for EIM Project Work according to Section 11 (EIM Project Work) of this Agreement.

- 10.2.4 Developing metrics to track and categorize EIM costs for purposes of budgeting and determining the one-time assessment applied to any new EIM Participant(s), as set forth in Section 8.1 of this Agreement;
- 10.2.5 Developing metrics to measure EIM costs, gross benefits and net benefits from actual EIM operations;
- 10.2.6 Providing data and information, as reasonably requested, to BANC members and/or WAPA for the purpose of assessing their potential participation in the EIM;
- 10.2.7 Developing comments and positions for stakeholder processes that concern or relate to the EIM;
- 10.2.8 Coordinating relevant data and information as needed for any compliance-related inquiry or investigation, or in the furtherance of any assessment in conjunction with Section 12 (BANC Violations of Reliability Standards Arising from EIM Participation) in this Agreement;
- 10.2.9 Ensuring that required documentation and data transfers among the EIM Participant(s) the EIM Entity and the EIM Operator are occurring and assisting in the development of processes and procedures to aid in such transfers, as needed;
- 10.2.10 Providing regular reports and updates to the General Manager on EIM-related activities and operations, as requested;
- 10.2.11 Providing reports, data, and other information as necessary to the CAISO;
- 10.2.12 Assisting in the development of procedures and processes to improve the accuracy and efficiency of data transfers from the EIM Participant(s) to EIM Entity;
- 10.2.13 Recommendations to the General Manager with respect to BANC EIM Business Practices or amendments thereto for consideration by the Commission;
- 10.2.14 General oversight of any request for proposals (RFP) or request for offer of services (RFO) by the Parties; and
- 10.2.15 Oversight of the EIM Project Manager(s), system integrator(s) or other consultants.

### **10.3 EIM Committee Meetings**

The EIM Committee may be convened on an “as needed” basis by the General Manager or the EIM Participant(s).

#### **10.4 EIM Committee Representation and Alternates**

Each EIM Participant shall select a primary voting representative and at least one alternate to the EIM Committee and provide those names to the General Manager. The General Manager will also participate on the EIM Committee. The EIM Services Provider shall also have a representative present at EIM Committee meetings, unless agreed to otherwise between the General Manager and the EIM Services Provider. Under the direction of the General Manager, the EIM Committee may form subgroups or delegate tasks to subject matter experts as it deems appropriate; provided, however, that any tasks delegated must be overseen and/or approved by the EIM Committee.

#### **10.5 EIM Committee Chair**

The EIM Committee may appoint a chair to conduct meetings. In the absence of an appointed chair, the General Manager will serve in that role.

#### **10.6 EIM Committee Actions or Decisions**

The EIM Committee will seek consensus on any actions or decisions in the furtherance of its responsibilities set forth in this Section. If an action or decision requires voting, each EIM Committee representative shall have one vote. In the event of a tie, an executive from BANC and the EIM Participant(s) shall attempt to reach consensus. If consensus cannot be reached, the General Manager shall serve as the tie breaker vote.

- 10.6.1 **Conflicts Between the EIM Committee and the General Manager.** If the EIM Committee and the General Manager have a dispute related to an action or proposal of either the EIM Committee or the General Manager, the EIM Committee or a subgroup shall meet with the General Manager and attempt to reach resolution. Should the Parties fail to resolve the conflict, the General Manager shall make the final decision; however, the General Manager shall inform the Commission of the dispute. The EIM Committee Chair, if that person is not the General Manager, or anyone delegated by the EIM Committee, may prepare a memorandum framing the disputed issue, and provide that memorandum to the General Manager for his or her consideration, and the General Manager shall provide a copy of the memorandum to the Commission for their information and any other action they may decide.

#### **10.7 EIM Committee Charter and Procedures**

In consultation with the General Manager, the EIM Committee may adopt a charter and/or procedures in furtherance of its internal administration. Furthermore, the EIM Committee may form working groups or subcommittees for the performance of specific tasks requiring subject matter expertise. Such working groups or subcommittees will report to the EIM Committee or the General Manager, as directed by the General Manager.

## **11 EIM PROJECT WORK**

It is expected that there will be multiple phases of EIM Project Work to be conducted by the Parties, including, but not limited to, the scoping and contracting aspects of the project, the RFP/RFO processes and implementation and testing of EIM systems, up to and until parallel testing with the CAISO. The Scope of EIM Project Work shall be developed by the EIM Committee under the direction of the General Manager, on an agreed upon schedule in coordination with the schedule developed between BANC and the CAISO contained in the BANC EIM Implementation Agreement.

## **12 BANC VIOLATIONS OF RELIABILITY STANDARDS ARISING FROM EIM PARTICIPATION**

### **12.1 Violations**

Any potential or actual violations of Reliability Standards applicable to the BANC Balancing Authority which are the result of a failure related to BANC, acting as the EIM Entity, or the EIM Participant's, or the EIM Participants', participation in the EIM, shall be addressed in accordance with the processes and procedures adopted in the Internal Compliance Program Charter and the BANC Member Agreement; provided, however, any Financial Penalties, as described in Section 12.2.1 of this Agreement, associated with violation(s) of Reliability Standards applicable to the BANC Balancing Authority arising directly as the result of EIM-related activities of BANC, as the EIM Entity, or the EIM Participant(s), shall be allocated, to the extent such Party or Parties are not legally proscribed from paying Financial Penalties, such costs shall be allocated to the EIM Participant(s) directly responsible for the activity or activities that gave rise to the violation(s), or, if no EIM Participant(s) are directly responsible for the activity or activities that gave rise to the violation(s), Financial Penalties shall be allocated to EIM Participants based on their EIM Participation Percentages as set forth in Table 2 of Exhibit A (Cost Allocation for Violations). Any Party which cannot legally pay such costs will remain responsible for any Compliance Costs, as described in Section 12.2.2 of this Agreement, as may be prescribed by a Compliance Enforcement Authority.

### **12.2 Payment of Final Costs**

12.2.1 Financial Penalties. Final costs associated with this Section 12 shall be paid by the EIM Participant(s) within thirty (30) days of a written request by BANC. Such request shall be in accordance with Section 24 (Notices) of this Agreement. Final costs are those monies which are required to be paid by BANC to NERC based upon a confirmed and final penalty amount in accordance with the NERC Rules of Procedure.

12.2.2 Compliance Costs. A mitigation plan or any regulatory directive(s) issued by a Compliance Enforcement Authority associated with this Section 12 shall be followed by the Parties in accordance with that plan or directive; however, the

Compliance Costs incurred by the Parties based upon the mitigation plan or directive shall be the sole responsibility of the EIM Participant(s). BANC shall provide the EIM Participant(s) with an itemization of costs under this Section 12.2.2 as part of BANC's written request to the EIM Participant(s) for payment. Such request shall be in accordance with Section 24 (Notices) of this Agreement.

### **13 CONFLICT BETWEEN EIM PARTICIPATION AGREEMENT AND OTHER BANC AGREEMENTS**

Nothing in this Agreement is intended to alter or amend other BANC agreements or program documents, including, but not limited to, the Joint Exercise of Powers Agreement, the Balancing Authority Operation Services Agreement, the Member Agreement, the NWPP Reserve Sharing Group Agreement, the Internal Compliance Program Charter, the Member Compliance Review Committee Charter, the Planning Coordinator Services Agreement, or the Planning Coordinator Participation Agreement (BANC Agreement(s)). To the extent a conflict arises between a BANC Agreement and this Agreement, the BANC Agreement(s) shall prevail; however, reasonable efforts should be made to reconcile the matter among EIM Participant(s) and BANC. Notwithstanding the foregoing, penalties allocated to BANC due to BANC violations of Reliability Standards arising from EIM Participation will be addressed in accordance with this Agreement and not the Member Agreement.

### **14 DISPUTE RESOLUTION**

Except as provided in Section 10.6 (EIM Committee Actions or Decisions), any dispute arising between the Parties regarding performance of their obligations under this Agreement shall be resolved according to the following procedures:

#### **14.1 Informal Settlement**

The Parties shall attempt in good faith to resolve any dispute arising out of or relating to this Agreement promptly by negotiations between BANC and an executive of the EIM Participant(s), or, in the event there is more than one EIM Participant, BANC and an executive of each of the EIM Participants. Any Party may give the other Party, or Parties, written notice of any dispute, and within twenty (20) calendar days after delivery of such notice, the executives shall meet at a mutually acceptable time and place and thereafter as often as they reasonably deem necessary to exchange information and to attempt to resolve the dispute. If the matter has not been resolved within sixty (60) calendar days of the first meeting, any of the Parties may initiate a mediation of the controversy in accordance with Section 14.2 (Mediation).

## **14.2 Mediation**

Prior to initiation of litigation, disputing Parties shall initiate a mediation of the controversy. All negotiations, settlement conferences, compromise discussions, and any mediation conducted pursuant to this clause are non-binding, confidential, and shall be treated as compromise and settlement negotiations. Included in such mediation shall be negotiations including executive level management of each of the disputing Parties.

## **14.3 Retained Rights Under Law and Equity**

Absent resolution of any dispute through mediation, each Party retains all rights in a court of law or equity to enforce its rights under this Agreement.

## **14.4 Continuing Performance Obligations**

While a dispute, controversy, or claim is pending, each Party will continue to perform its respective obligations under the Agreement, unless such Party is otherwise entitled to terminate the Agreement in accordance with the terms hereof.

## **15 AMENDMENT**

Except as specified in Appendix 1 and Exhibits A through F, which shall be amended in accordance with the terms set forth therein, this Agreement may only be amended or otherwise modified with the written agreement of the Parties.

## **16 ASSIGNMENT**

This Agreement may be assigned by a Party only with the written consent of the other Parties, which consent shall not be unreasonably withheld.

## **17 CONFIDENTIALITY**

### **17.1 Treatment of Confidential Information**

The Parties recognize and agree that for the purposes of their respective roles in the EIM, complying with the Reliability Standards, and responding to any report or notice of potential violation, the Parties may receive information from each other that has been marked as Confidential Information. Except as set forth herein, the Parties agree to keep in confidence and not to copy, disclose, or distribute any Confidential Information or any part thereof, without the prior written permission of the Party that produced the information.

## **17.2 Required Disclosure of Confidential Information**

As provided in the CMEP, or as required by subpoena, request under the California Public Records Act (PRA), the Freedom of Information Act (FOIA), or other legal or regulatory processes, the Parties may be required to disclose Confidential Information so designated by another Party. Compliance with that subpoena, request under the PRA, FOIA, or other legal or regulatory process shall not constitute a breach of this Agreement. If any Party is required to disclose any Confidential Information so designated by any other Party, the disclosing Party shall notify the other Party in writing as promptly as feasible so that the other Party may, if it so chooses and at its own expense, challenge the disclosure or seek a protective order. The disclosing Party shall reasonably cooperate in resolving the dispute.

## **17.3 Third Parties**

Except as set forth herein, each Party shall keep Confidential Information in confidence and shall not disclose such information or otherwise make it available, in any form or manner, to any other person or entity other than its employees, consultants, sub-contractors, sub-contractors' employees, attorneys, and agents without the prior written consent of the Party that produced the information. Each Party will cause each of its employees, contractors, sub-contractors, sub-contractors' employees, attorneys, and agents who will have access to Confidential Information, if any, to acknowledge that they have read this Agreement and agree to abide by all of its terms regarding use and disclosure of Confidential Information. For purposes of this Agreement, Confidential Information may also be shared with the EIM Operator in accordance with the terms of the agreements between each of the Parties and the EIM Operator.

## **17.4 FERC Jurisdiction**

Nothing in this Agreement shall be meant to imply or cede jurisdiction to FERC, NERC, and other regulatory or Compliance Enforcement Authority entities having no or limited jurisdiction over the Parties. FERC, NERC, and other regulatory or Compliance Enforcement Authority entities have limited jurisdiction over the Parties and, by executing this Agreement, no Party is waiving or conceding any defenses it has to assert jurisdictional defenses, including, but not limited to, sovereign immunity, intergovernmental immunities, or lack of subject matter jurisdiction.

## **18 INDEMNIFICATION**

Notwithstanding anything herein to the contrary, BANC shall indemnify, defend, and hold EIM Participants (including their governing bodies, officers, employees, assigns, and agents) harmless from and against any and all claims, demands, liabilities imposed for injury (as defined by Government Code Section 810.8), losses, costs, expenses, penalties, suits, judgments, or damages, arising in whole or in part, directly or indirectly, from performance or non-performance of EIM Participant Obligations set forth in Section 7 (EIM Participant Obligations) of this Agreement.

## **19 GOVERNING LAW**

### **19.1 Non-Federal EIM Participants**

The rights and obligations of the non-federal EIM Participants and the interpretation and performance of this Agreement shall be governed by the laws of the State of California.

### **19.2 Federal EIM Participants**

Interpretation of this Agreement, and performance and enforcement thereof with regard to federal EIM Participants, shall be determined in accordance with Federal law, as if performed wholly within the State of California.

## **20 HEADINGS**

The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

## **21 SEVERABILITY**

If any term, covenant, or condition of this Agreement, or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest, by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby but shall remain in full force and effect, and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such determination unless a court or governmental agency of competent jurisdiction holds that such provision is not separable from all other provisions of this Agreement.

## **22 LIMITATION ON LIABILITY**

Except for costs for violation(s) of Reliability Standards incurred pursuant to Section 12 (BANC Violations of Reliability Standards Arising from EIM Participation) of this Agreement, or EIM Participant Costs in accordance with Section 8 (EIM Participant and New EIM Participant Costs) of this Agreement, no Party to this Agreement shall be liable to any other Party for any direct, indirect, special, incidental, exemplary, or consequential damages, claims, liabilities, costs or expenses (including attorneys fees and court costs) arising from tort or the performance or non-performance of its obligations under this Agreement regardless of the cause, including

intentional action, willful action, gross or ordinary negligence, or an Uncontrollable Force (as defined in Section 25 of this Agreement).

### **23 NO THIRD PARTY BENEFICIARIES**

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

### **24 NOTICES**

Any notice, demand, or request in accordance with this Agreement shall be in writing and shall be deemed properly served, given, or made if delivered in person or sent by first class United States mail, postage prepaid, by electronic facsimile confirmed by the recipient, electronic mail confirmed by the recipient, or by prepaid commercial courier service to a Party via its representative or alternate representative at the address set forth in Appendix 1, unless otherwise provided in this Agreement. Any Party may at any time change the designation or address of a person specified in Appendix 1 upon written notice to the other Parties. Such a change to Appendix 1 shall not constitute an amendment to this Agreement.

### **25 UNCONTROLLABLE FORCE**

No Party shall be considered to be in default in respect to any obligation hereunder if prevented from fulfilling such obligation by reason of an Uncontrollable Force. The term "Uncontrollable Force" for the purpose of this Agreement shall mean any cause beyond the control of the Party affected, including but not limited to flood, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance, labor disturbance, sabotage, and restraint by court or public authority, which Uncontrollable Force by exercise of due diligence and foresight, such Party could not reasonably have been expected to avoid. Any Party rendered unable to fulfill any obligation by reason of Uncontrollable Force shall exercise commercially reasonable efforts to remove such inability with all reasonable dispatch.

### **26 WAIVER**

The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed

a waiver with respect to any subsequent default or other matter arising in connection with this Agreement.

## **27 NO DEDICATION OF FACILITIES**

Any undertaking by a Party under any provision of this Agreement is rendered strictly as an accommodation and shall not constitute the dedication of its Electric System or any portion thereof by the undertaking Party to the public, to any other Party, or to any third party, and any such undertaking by a Party shall cease upon the termination of such Party's obligations under this Agreement. The Electric System of a Party shall at all times be, and remain, in the exclusive ownership, possession, and control of that Party, and nothing in this Agreement shall be construed to give any other Party any right of ownership, possession, or control of such Electric System.

## **28 MULTIPLE COUNTERPARTS**

This Agreement may be executed in two or more counterparts, each of which is deemed an original, but all constitute one and the same instrument.

## **29 FEDERAL CONTRACT PROVISIONS**

### **29.1 Covenant Against Contingency Fees**

The Parties warrant that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Parties for the purpose of securing business. For breach or violation of this warranty, WAPA shall have the right to annul this Agreement without liability or in its discretion to deduct from the price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

### **29.2 Contingent Upon Appropriations**

Where activities provided for in this Agreement extend beyond the current fiscal year, continued expenditures by WAPA are contingent upon Congress making the necessary appropriations required for the continued performance of WAPA's obligations under this Agreement. In case such appropriation is not made, Parties hereby release WAPA from its obligations and from all liability due to the failure of Congress to make such appropriation.

### **29.3 Contract Work Hours and Safety Standards**

This Agreement, to the extent that it is of a character specified in Section 103 of the Contract Work Hours and Safety Standards Act, 40 U.S.C.A. § 3701, is subject to the

provisions of the Act, 40 U.S.C.A. §§ 3701-3708, and to regulations promulgated by the Secretary of Labor pursuant to the Act.

#### **29.4 Equal Opportunity Employment Practices**

Section 202 of Executive Order No. 11246, 30 Fed. Reg. 12319 (1965), as amended by Executive Order No. 12086, 43 Fed. Reg. 46501 (1978), as amended or supplemented, which provides, among other things, that Parties will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, is incorporated herein by reference the same as if the specific language had been written into this Agreement, except that Indian Tribes and tribal organizations may apply Indian preference to the extent permitted by Federal Law.

#### **29.5 Use of Convict Labor**

Parties agrees not to employ any person undergoing sentence of imprisonment in the performance of this Agreement, except as provided by 18 U.S.C. § 3622 (c) (2) and Executive Order 11755, December 29, 1973.

### **30 SIGNATURE CLAUSE**

The signatories to this Agreement represent that they have been appropriately authorized to enter into this Agreement on behalf of the Party for whom they sign.

Approval Draft

**IN WITNESS THEREOF**, the Parties have executed this Agreement and it is effective as of the Effective Date set forth in Section 4.1.

**Balancing Authority of Northern California**

By:	
Name:	
Title:	
Date:	

**Sacramento Municipal Utility District**

By:	
Name:	
Title:	
Date:	

**Modesto Irrigation District**

By:	
Name:	
Title:	
Date:	

**City of Redding**

By:	
Name:	
Title:	
Date:	

**City of Roseville**

By:	
Name:	
Title:	
Date:	

**United States of America  
Department of Energy  
Western Area Power Administration  
Central Valley Project, California**

By:	
Name:	
Title:	
Date:	

Approval Draft

## Appendix 1 – Notices

### Balancing Authority of Northern California

Name of Primary Representative:	James R. Shetler
Title:	General Manager
Company:	Balancing Authority of Northern California
Address:	P.O. Box 15830, MS D109
City/State/Zip Code:	Sacramento, CA 95852-1830
Email Address:	jimshetler@thebanc.org
Phone:	(916) 870-3774
Fax:	

Name of Alternative Representative:	Charles A. Braun
Title:	General Counsel
Company:	Braun Blaising Smith Wynne, P.C.
Address:	555 Capitol Mall, Suite 570
City/State/Zip Code:	Sacramento, CA 95814
Email Address:	braun@braunlegal.com
Phone:	916-326-5812
Fax:	916-330-4337

### Sacramento Municipal Utility District

Name of Primary Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

**Modesto Irrigation District**

Name of Primary Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

**City of Redding**

Name of Primary Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

**City of Roseville**

Name of Primary Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

**United States Department of Energy  
Western Area Power Administration  
Central Valley Project, California**

Name of Primary Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	

## EXHIBIT A : New EIM Participant Costs and EIM Participant Allocations

### Purpose

This Exhibit A sets forth the Commission-approved cost allocation percentages for costs associated with Section 8.1 (New EIM Participant Costs), Section 8.2 (Tier 2 Costs) and Section 8.3 (Tier 1 Costs).

**Table 1: New EIM Participant Costs (Section 8.1)<sup>1</sup>**

<b>EIM Participant</b>	<b>2017 NEL</b>	<b>EIM Participant Responsibility</b>
SMUD	11,598,647	63.5%
MID	2,623,552	14.4%
WAPA-SNR <sup>2</sup>	1,987,830	10.9%
Roseville	1,249,280	6.8%
Redding	798,841	4.4%
<b>TOTAL</b>	<b>18,258,150</b>	<b>100.0%</b>

**Table 2: EIM Participant Allocation Percentages based on 3-Year Average NEL**

<b>EIM Participant</b>	<b>Section 8.3/ Tier 1 Costs</b>	<b>Section 8.2/ Tier 2 Costs</b>	<b>Section 12.1/ Cost Allocation for Violations</b>	<b>Commission Approved Adjusted Allocations</b>
SMUD	64.3%	0	70.3%	X.X%
MID	14.6%	41.0%	16.0%	X.X%
WAPA-SNR	8.6%	24.1%	0.0%	X.X%
Roseville	6.9%	19.4%	7.6%	X.X%
Redding	5.5%	15.5%	6.1%	X.X%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>XXX.X%</b>

<sup>1</sup> The 2017 NEL was agreed upon as the basis for New EIM Participant Costs. Based on further BANC discussions, all other costs, unless specified otherwise, will be based on the Commission-approved 3-year rolling average percentages, which are set forth in Exhibit A-2, as that exhibit may be updated and amended from time-to-time.

<sup>2</sup> Western Area Power Administration – Sierra Nevada Region.

The various allocation tiers are defined as follows:

- **Tier 1:** All five (5) EIM Participants will be paying the costs (e.g. – ongoing EIM costs post-Phase 2 go-live)
- **Tier 2:** The four (4) Phase 2 EIM Participants will be paying the costs (e.g. – EIM Phase 2 implementation costs)

### Amendments

This Exhibit A may be amended as determined by the Commission; however, allocation adjustments to WAPA-SNR shall require its written consent. Should WAPA-SNR disagree to the change its allocation, the remaining Parties to this Agreement may make adjustments to the non-WAPA-SNR allocations, subject to Commission approval consistent with Section 8.6 of this Agreement. Any amendment to this Exhibit A shall be reflected through a change in the Version History. Minor, non-substantive changes will be reflected in 1/10<sup>th</sup> increments to the Version History (e.g., 1.1, 1.2, etc.).

### Version History

VERSION	CHANGE	BY	DATE
1.0	Initial Version	Commission	02/22/2017
2.0	Phase 2 Version	Commission	8/21/2019
3.0	Amended Phase 2 Version	Commission	XX/XX/2021

## EXHIBIT B: BANC EIM Phase 2 Approach

### Purpose

This Exhibit B provides a description of the planned functional approach for implementing the Balancing Authority of Northern California (BANC) Energy Imbalance Market (EIM) Phase 2 and the relative roles and responsibilities of the California Independent System Operator (CAISO), BANC, its EIM participating members and the Western Area Power Administration – Sierra Nevada Region (WAPA-SNR).<sup>3</sup> It is recognized that there may be some modifications to this approach based upon the gap analyses performed on behalf of the EIM participating members and WAPA-SNR and on issues identified during Phase 2 implementation that are mutually agreed upon by BANC and the EIM Phase 2 parties.

### Functional Approach

The functional approach for handling BANC EIM Phase 2 participation will rely on leveraging the existing BANC EIM Entity/Sacramento Municipal Utility District (SMUD) EIM Services Provider arrangement that was developed for BANC EIM Phase 1. The intent is to have BANC/SMUD be the primary interface between the EIM Market Operator (CAISO) and BANC for EIM Entity functions. Each of the BANC EIM Participants, including WAPA-SNR/USBR, will have a direct contractual relationship with the CAISO/EIM Market Operator as EIM Participating Resources. Market dispatch signals through the CAISO's Automated Dispatch System (ADS) will flow from the CAISO to the respective entity's real-time operation's systems via the SMUD/BANC Energy Management System (EMS)<sup>4</sup>. In addition, BANC/SMUD will provide necessary EIM data/information required to ensure sub-BAA operations to WAPA-SNR.

Figure 1, below, provides a schematic flow for the EIM Phase 2 approach.

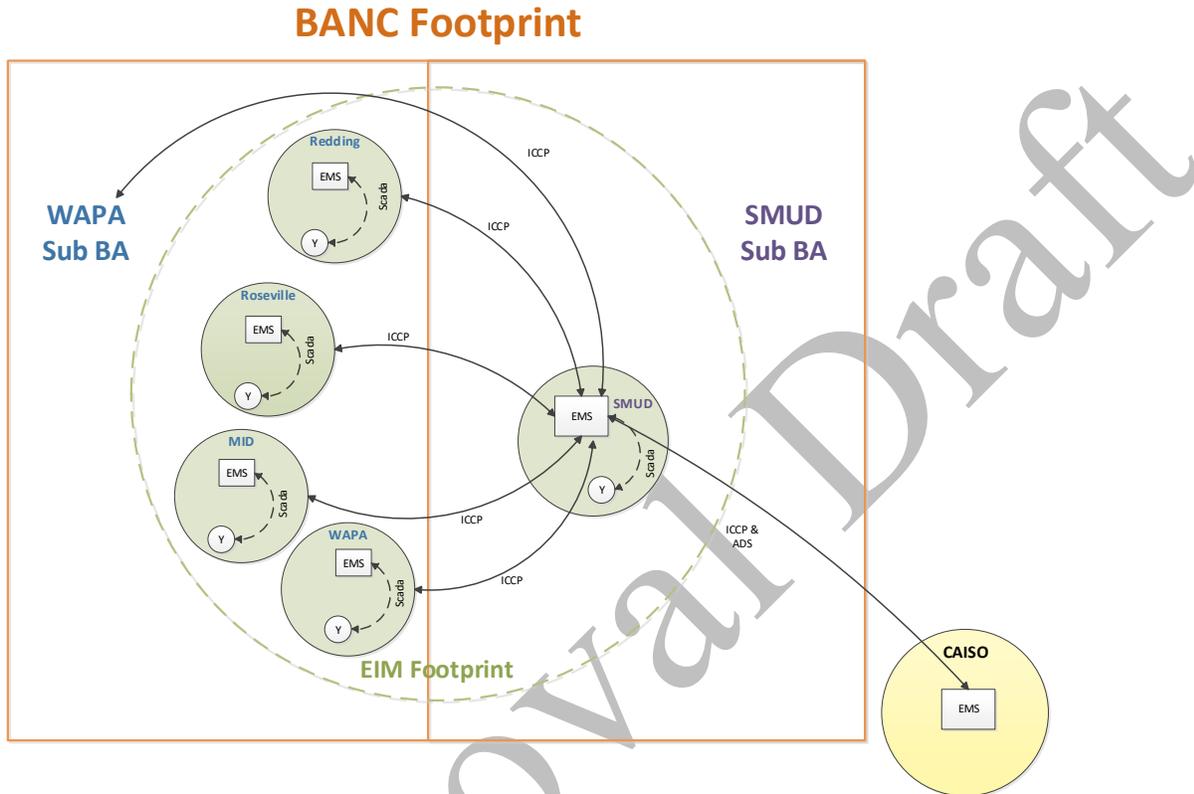
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<sup>3</sup> WAPA-SNR is not a formal BANC member but participates in most BANC activities. Further discussions regarding a more formalized role for WAPA-SNR are intended as issues are addressed through BANC EIM Phase 2 implementation process.

BANC and WAPA-SNR will also coordinate closely with the United States Bureau of Reclamation (USBR) due to the integrated nature of USBR generation within the WAPA-SNR footprint and within the BANC Balancing Authority Area (BAA).

<sup>4</sup> Phase 2 EIM Participants have the option of obtaining dispatch DOTs directly from the CAISO ADS system via a self-created/self-supported interface application.

**Figure 1 -- Option 2: EIM Phase 2 Functionality with WAPA-SNR in EIM5**



The goal is to preserve the existing BAA and sub-BAA relationships between BANC and SMUD and BANC and WAPA-SNR and to preserve the existing contractual arrangements.<sup>6</sup> Because EIM is a market function, there are no changes to the existing reliability compliance responsibilities of the EIM Participants.

### Roles and Responsibilities

The following outlines the roles and responsibilities for participation in BANC EIM Phase 2:

#### EIM Operator – CAISO

- Load forecast for each EIM BAA
  - Individual load forecasts and settlement points (ELAP) for each entity (SMUD, Modesto, Redding, Roseville, WAPA-SNR)
  - Non-conforming loads (i.e. – irrigation pumping loads) will require input from USBR and other EIM Participants as appropriate

<sup>5</sup> The communication from SMUD EMS to the BANC EIM Participants may be through either ICCP or DNP3 to the generation plant RTU.

<sup>6</sup> It has been recognized that some contractual changes may be required to BANC member contracts with WAPA-SNR to enable EIM participation. These changes are anticipated to be minor and are not expected to disrupt the benefits of the existing contractual relationships.

- Resource plan feasibility
  - Includes evaluating resource sufficiency (RS) tests (balancing, bid capacity, flex ramp, and transmission feasibility)
- Run the EIM
- Settling EIM charges through the particular Scheduling Coordinator (SC) (i.e., EIM Entity SC and EIM Participating Resource SC)

**EIM Entity – BANC BAA (Supported by BANC EIM Services Provider [SMUD] and EIM Entity SC [SMUD])**

- Manage/Update/Submit BANC EIM Participant PRSC Base Schedules between T-55 and T-40 minutes
- Manage/Submit Day Ahead EIM Resource Plan interchange schedules for the BANC BA.
- Manage/Submit EIM interchange Base Schedules for the BANC BA
- Current operating characteristics (Note: The vast majority of this data will be obtained by the BANC EIM Entity through EIM Participant data submittals to the CAISO)
  - Outages (Both planned and unplanned)
  - Meter/telemetry
  - Transmission capacity available for EIM transfers – i.e., Energy Transfer System Resources, or “ETSRs”
- Market resource sufficiency tests performed at the BAA level
  - Balancing, flex ramp, and bid range capacity
    - An allocation methodology among the BANC EIM Participating Resources has been developed
- Settlements – through EIM Entity SC
  - All BANC EIM Participant load imbalance
  - BANC EIM Participant non-EIM Participating Resources imbalance
  - Interchange Schedule Imbalance
  - Other BANC EIM Entity fee, offset, and uplift charges
  - An allocation methodology has been developed

**EIM Participating Resources (Supported by EIM Participating Resource SC)**

- Phase 2 EIM Participating Resources
  - SMUD
  - Modesto Irrigation District (MID)
  - City of Redding (Redding)
  - City of Roseville (Roseville)
  - WAPA-SNR/USBR Central Valley Project (CVP)
- Manage/Submit Day Ahead EIM Generator Resource Plans for the EIM Participant-area
- Manage/Submit EIM Bids for the EIM Participant’s Participating Resources
- Manage/Submit EIM Participating Resource Generator Base Schedules at T-75 and T-55 minutes for EIM Participant’s generators
  - Assure EIM Participant-area Base Schedules and Bids pass EIM Sufficiency Tests at T-75 and T-55 minutes
- Settlement of EIM Participant’s Participating Resource SC EIM Resources

## Other Issues Addressed During Implementation

As part of the Phase 2 implementation, the following additional issues were addressed and resolved by the EIM Participants:

1. Deviation Band (Contract arrangement between WAPA-SNR and MID/Redding/Roseville).
  - a. BANC EIM Participants want to preserve this real-time balancing capability.
  - b. BANC EIM Participants will continue to require real-time AGC balancing and the associated Regulation Up/Down reserves in an EIM paradigm.
  - c. The Deviation MW calculation will be analyzed to determine if a change is required to account for EIM redispatch of EIM Participants' generators.<sup>7</sup>
2. EIM hourly Sufficiency Test
  - a. Defined and executed by CAISO at the BANC BA level.
  - b. EIM Participants will each be required to provide EIM capacity so that BANC collectively passes the EIM Sufficiency Tests.
  - c. EIM Participants with no generation on-line may need to make an arrangement with other BANC members that have generation on-line to meet their portion of the total BANC EIM Sufficiency capacity MW requirements.
3. BANC EIM Entity Settlement Charge allocations; allocation invoicing to EIM Participants; and EIM Participant payment schedule for allocations.
4. Treatment of EIM dynamic transfers between sub-BAs within BANC, and between LSE's within the WAPA Sub-BA
5. Ensuring all appropriate technical and operational information and data will be provided to WAPA-SNR that will allow it to operate its sub-BA.

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<sup>7</sup> I.e., Due to CAISO EIM timelines, CAISO EIM dispatches would have already occurred prior to WAPA-SNR dispatches under the Deviation Band, which should result in less regulation and imbalance energy required from WAPA-SNR/USBR resources.

### **Amendments**

This Exhibit B may only be amended with written consent of all Parties and approval of the Commission. Any amendment to this Exhibit B shall be in writing and transmitted to all Parties to this Agreement within seven (7) business days of the version change contained in the document Version History.

Any changes will be reflected through a change in the Version History. Minor, non-substantive changes will be reflected in 1/10<sup>th</sup> increments to the Version History (e.g., 1.1, 1.2, etc.).

### **Version History**

<b>VERSION</b>	<b>CHANGE</b>	<b>BY</b>	<b>DATE</b>
1.0	Initial Version	Commission	08/21/2019
2.0	Amended	Commission	

Approval Draft

**EXHIBIT C: BANC Phase 2 EIM Implementation Agreement**

(To Be Included in Final PDF Version )

Approval Draft

## **EXHIBIT D: EIM Participant Reserve Account**

### **Purpose and Scope**

The EIM Participant Reserve Account is hereby established to provide ongoing operating capital to the EIM Entity to meet its EIM obligations in accordance with the CAISO/Market Operator Tariff. The gross amount of capital held in the EIM Participant Reserve Account shall be calculated by the BANC Finance Group and the General Manager, in consultation with the EIM Committee and approved by the Commission. Contributions to the EIM Participant Reserve Account by each EIM Participant are to be in accordance with the cost allocation percentages set forth in Tier 1 of Exhibit A – Table 2 to this Agreement, unless adjusted by mutual consent of the EIM Participants and approved by the BANC Commission (Adjusted Contributions), in which case such Adjusted Contributions shall be adopted by a Resolution of the Commission and subsequently memorialized in a revision to Exhibit A – Table 2 (Commission Approved Adjusted Allocation), and a change in the Version History of this Exhibit D.

Review for potential adjustments to the EIM Participant Reserve Account shall be made by BANC at least annually and “true ups” may be required on an “as needed” basis in accordance with any cash obligations imposed on the EIM Entity by the Market Operator. Such “true ups” shall be the responsibility of the EIM Participants in proportion to their allocation responsibilities set forth in Tier 1 of Exhibit A – Table 2 of this Agreement, except in the case of Commission approval of Adjusted Contributions, in which such allocations shall be in accordance with such Adjusted Contributions also set forth in Exhibit A – Table 2.

The EIM Committee may advise the General Manager with the ongoing monitoring of the EIM Participant Reserve Account and may be called upon for the review of proposed true ups and/or credits. At least annually, the EIM Committee and General Manager shall review the EIM Participant Reserve Account and make a recommendation to the Commission for the next fiscal year.

The EIM Committee may be consulted on the development of more detailed protocols or guidelines for administration of the EIM Participant Reserve Account. Such a protocol or guideline is merely administrative and does not require Commission approval.

Monies deposited in the EIM Participant Reserve Account shall be used solely for purposes of EIM administration in accordance with cost obligations imposed on the EIM Entity by the CAISO/Market Operator Tariff.

### Amendments

This Exhibit D may only be amended with written consent of all EIM Participants and approval of the Commission. Any amendment to this Exhibit D shall be reflected through a change in the Version History. Minor, non-substantive changes will be reflected in 1/10<sup>th</sup> increments to the Version History (e.g., 1.1, 1.2, etc.).

### Version History

VERSION	CHANGE	BY	DATE
1.0	Initial Version (New Exhibit to Second Amended and Restated Agreement)	Commission	

Approval Draft

## **EXHIBIT E: EIM Entity Supplemental Services**

### **Purpose**

This Exhibit E provides for additional services to be provided through BANC to EIM Participants in accordance with Section 8.4. These can be provided by BANC to a single EIM Participant or to multiple EIM Participants. The service shall be set forth in a separate Service Schedule to this Exhibit, the first additional service performed by BANC being referred to as Service Schedule E-1 and so forth (i.e., the second service would be Service Schedule E-2, etc.).

Approval Draft

## EXHIBIT E

### Service Attachment E-1

#### Additional Power Settlements Software Functionality

##### Description:

The EIM Participants listed in Table E-1 (Responsible EIM Participants), below, have requested and agreed to pay for additional software functionality from Power Settlements, inclusive of the “CAISO Shadow Settlements Module” and the “CAISO Allocations Module,” (Additional Modules), both of which constitute sub-modules to the primary “CAISO SettleCore Software,” licensed to SMUD and BANC. The Additional Modules, for which there are additional costs, are being provided solely to the two Responsible EIM Participants (Sub-Licensees) listed below, and all costs associated with these Additional Modules shall be their sole responsibility, all in accordance with the “Optional Extended Sublicense to the License and Software Services Agreement,” (Sublicense Agreement) effective September 1, 2020, attached as Appendix E-1 to this Agreement. Such costs and payments shall be in accordance with the cost and allocation schedule listed in Table 1 and Section 8.4 of this Agreement.

**Table E-1**

Responsible EIM Participant	Description	Cost	Payment Cycle
Modesto Irrigation District City of Redding	Additional Modules, as set forth in the Description, above.	Year 1: \$50,000.00 Year 2 and subsequent Years, in accordance with Section 2a of the Sublicense Agreement (Appendix E-1).	Year 1: Within 30 Days of Execution of this Agreement.  Year 2 and subsequent years, within 30 days of an invoice from BANC in accordance with Section 8.5 of this Agreement.

##### Service Identification in Exhibit E

Each additional service requested by an EIM Participant or EIM Participants shall be reflected by numerals attached to the Exhibit “E” identification, such as service 1, being reflected as “E-1” (thus, Attachment E-1, Table E-1 and Appendix E-1) and future service 2 being reflected by “E-2,” (thus, Attachment E-2, Table E-2 and Appendix E-2, etc. ).

##### Amendments

Amendments to Exhibit E require the written consent of all of the Responsible EIM Participants and approval of the Commission. Any amendment to this Exhibit E shall be reflected through a change in the Version History (e.g., 1.0, 2.0, etc.). Minor, non-substantive changes will be reflected in 1/10<sup>th</sup> increments to the Version History (e.g., 1.1, E-1.2, etc.). Individual Version Histories shall be provided for each specific service to Responsible EIM Participants.

**Version History**

<b>VERSION</b>	<b>CHANGE</b>	<b>BY</b>	<b>DATE</b>
1.0	Initial Version (New Exhibit to Second Amended and Restated Agreement)	Commission	

Approval Draft

Appendix E-1

Optional Extended Sublicense to the License and Software Services Agreement

(To Be Included in PDF Final Version)

Approval Draft

**EXHIBIT F: BANC Phase 2 EIM Entity Agreement**

(To Be Included in PDF Final Version)

Approval Draft

# **Braun Blaising Smith Wynne, P.C.**

Attorneys at Law

1/21/21

**To: BANC Commission**

**From: BANC Counsel**

**RE: Approval of Balancing Authority of Northern California Energy Imbalance Phase 2 Metering Standards and Delegation for Specified Changes to the General Manager**

## **Introduction**

In this memorandum, BANC counsel seeks Commission approval of the Balancing Authority of Northern California's (BANC) Energy Imbalance Market (EIM) Phase 2 meter standards, described herein, and the delegation of specified authority to the General Manager to make any future changes to the adopted meter standards deemed necessary, as requested by the EIM Service Provider. Both the meter standards approval and delegation are set forth in the attached resolution.

## **Discussion**

As part of its role as the EIM Entity, the Balancing Authority of Northern California (BANC) also serves as the California Independent System Operator (CAISO) Scheduling Coordinator (SC) in order to submit schedules and perform imbalance settlements within the metered boundary of the BANC EIM footprint. As described in its Tariff, the CAISO does not accept Settlement Quality Metering Data relating to a SC Metered Entity (i.e., BANC as the (EIM) SC Metered Entity) unless it is produced by metering facilities that are certified in accordance with certification or similar criteria prescribed by the Local Regulatory Authority (LRA).<sup>1</sup> Specifically, Section 10.3.9 of the CAISO Tariff States:

Scheduling Coordinators shall ensure that revenue meters and related Metering Facilities of those Scheduling Coordinator Metered Entities whom they represent *are certified in accordance with any certification criteria prescribed by the relevant Local Regulatory Authority* or, if no such criteria have been prescribed by that Local Regulatory Authority, certified in accordance with this Section 10. Scheduling Coordinators shall upon request of the CAISO supply promptly copies of all certificates issued by the relevant Local Regulatory Authority. (Emphasis added.)

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<sup>1</sup> As described in the CAISO Tariff, a LRA is: "[t]he state or local governmental authority, or the board of directors of an electric cooperative, responsible for the regulation or oversight of a utility." CAISO Tariff, Appendix A (Master Definition Supplement).

With respect to the BANC EIM Entity, its LRA is the Commission. Thus, for purposes of meter certification related to the BANC EIM Entity footprint, the Commission, as the LRA, has the authority to both prescribe and approve the certification criteria for any revenue meters and metering facilities used by the BANC EIM Entity.

In order to effectuate this approval, BANC counsel had developed procedures for LRA approvals of both metering standards and meters relating to the BANC EIM footprint, both with respect to the (BANC) EIM Entity, where the Commission is the LRA, as well as for any BANC member EIM participants, which will seek individual approval from their own respective LRAs/Boards relating to meters necessary to enable their individual EIM participation as EIM Participating Resources. These LRA Procedures, provided as Exhibit A to this memorandum, were approved by the Commission as part of the BANC EIM Phase 1 implementation via BANC Resolution 18-04-19, on April 25, 2018. Of course, these standards essentially adopted the standards used by the Sacramento Municipal Utility District (SMUD), which was the only participant in Phase 1.

For BANC EIM Phase 2, BANC staff, along with subject matter experts from the EIM Participants, collaborated to develop a new set of broadly applicable metering standards which comport with CAISO requirements and ensure accurate metering of the BANC EIM Entity for its market participation, taking into account all of the varying technologies being used by EIM Participants. These new standards for BANC EIM Phase 2 are referred to as the “BANC EIM Existing and Upgrade Meter Standards” (Standards). The Standards, provided as Attachment A to the resolution, have been reviewed and accepted by the both the EIM Committee and the Operations Committee (OC).

The Standards cover two distinct subsets of meters:

- those Settlement Quality Meter Data (SQMD) meters which are in place and approved upon the commencement of BANC EIM Phase 2 operations (Existing Meter Standards); and
- future replacement SQMD meters which are proposed and installed subsequent to BANC EIM Phase 2 operations (Upgrade Meter Standards) – i.e., meters purchased and installed subsequent to March 25, 2021.

The Existing Meter Standards provide minimum threshold guidance for EIM Participants to meet upon the commencement of BANC EIM Phase 2 operations on March 25, 2021. Subsequent changes and upgrades in meters by EIM Participants, however, will be informed by making reasonable business efforts to meet the Upgrade Meter Standards. However, should an EIM Participant be unable to meet the Upgrade Meter Standards, the Commission, as the LRA for the EIM Entity, may waive this requirement.

In addition to seeking Commission approval of the Standards, and given the potential need to revise the Standards and/or to exchange and/or add new meters to the BANC EIM Entity footprint, BANC staff and counsel are further seeking a delegation by the Commission to the General Manager to make any future changes to the Meter Standards deemed necessary, as requested by the EIM Service Provider (SMUD) upon review by both the EIM Committee and

OC, with the exception that any substantial changes made to the metering configuration and associated procedures and protocols due to the expansion of the BANC EIM Entity footprint (e.g., through the addition of new EIM Participants) would require Commission approval. A similar approach was approved for the meter standards adopted under Phase 1, also as part of BANC Resolution 18-04-19. The difference is that, under Phase 1, only SMUD was involved, so the General Manager could act upon request of the EIM Services Provider (SMUD). With the expanded participation under Phase 2, we are further requiring review of the EIM Committee and OC as part of the delegation.

As noted above, the Standards before you are the result of a collaborative effort of BANC staff and the EIM Participants. Furthermore, they have been reviewed and accepted by the EIM Committee as well as the OC, in accordance with our adopted procedures. We therefore respectfully request Commission approval of the Standards and Delegation in accordance with the attached resolution.

# **Exhibit A**

**Procedures for Local Regulatory Agency Approval of Energy Imbalance Market Metering  
Standards for Energy Imbalance Market Entity and Energy Imbalance Market  
Participating Resource Scheduling Coordinators**

1.1 The Balancing Authority of Northern California (BANC) Commission (Commission) is the Local Regulatory Authority (LRA) for the Energy Imbalance Market (EIM) Entity and shall approve, by resolution, metering standards developed by the EIM Services Provider upon review and recommendation by the Operating Committee, for its use as the EIM Entity Scheduling Coordinator Metered Entity. The LRA may concurrently approve and thereby “certify” any meters utilized by the EIM Services Provider in support of the EIM Entity which meet the approved metering standards; provided however that such meters have first been reviewed by the Operating Committee.

1.2 Each EIM Participant, on behalf of its EIM Participating Resource Scheduling Coordinator Metered Entity, whether itself or a third party, is responsible to obtain approval of its metering standards from its own LRA. Prior to obtaining such LRA approval, the metering standards shall be reviewed by the Operating Committee. The LRA may concurrently approve and thereby “certify” any meters utilized by the EIM Participant in support of the EIM Participating Resource Scheduling Coordinator Metered Entity which meet the approved metering standards; provided however that such meters have first been reviewed by the Operating Committee.

1.3 The EIM Entity and the EIM Participant acknowledge that the CAISO retains the right under the CAISO Tariff to seek proof of LRA certification of any meters used for EIM purposes by an EIM Entity or EIM Participating Resource Scheduling Coordinator.

1.4 The EIM Services Provider may, upon request, assist in the development of metering standards for any EIM Participant; however, such assistance may require additional compensation from that EIM Participant. The EIM Service Provider and the EIM Participant may agree on the amount of compensation and establish a separate funding mechanism either directly or through BANC. Such metering standards and certification(s) are to be approved and adopted by the relevant LRA in accordance with the same procedures applied to an EIM Participant herein.

**Balancing Authority of Northern California  
Resolution 21-01-21**

**APPROVAL OF BANC EIM PHASE 2 ENERGY IMBALANCE MARKET METER STANDARDS AND  
SPECIFIED DELEGATION TO THE GENERAL MANAGER**

WHEREAS, members of the Balancing Authority of Northern California ("BANC") was created by a Joint Powers Agreement ("JPA") to, among other things, acquire, construct, maintain, operate, and finance Projects; and

WHEREAS, BANC is a participant as an EIM Entity in the Energy Imbalance Market ("EIM") operated by the California Independent System Operator Corporation ("CAISO"); and

WHEREAS, as part of its role as an EIM Entity, BANC is a CAISO Scheduling Coordinator ("SC") for EIM transactions; and

WHEREAS, the CAISO Tariff requires Scheduling Coordinators to ensure that revenue meters and related Metering Facilities of SC Metered Entities are certified in accordance with any certification criteria prescribed by the relevant Local Regulatory Authority ("LRA"); and

WHEREAS, the LRA of the BANC EIM Entity is the Commission; and

WHEREAS, the Commission, as the LRA, has the authority to both prescribe and approve the certification criteria for any revenue meters and metering facilities used by the BANC EIM Entity; and

WHEREAS, BANC staff and EIM Participants have developed Phase 2 metering standards relating to the BANC EIM Entity footprint; and these metering standards, referred to as "BANC EIM Existing and Upgrade Meter Standards," have been reviewed by and accepted by the EIM Committee and the Operating Committee ("OC") in accordance with BANC's adopted procedures; and

WHEREAS, given the technical nature of these standards and the potential need to make adaptive changes in the future, the Commission recognizes that the General Manager, in consultation with the EIM Services Provider, needs such flexibility.

NOW THEREFORE, BE IT RESOLVED that the Commissioners of the Balancing Authority of Northern California hereby:

1. Approve the BANC EIM Existing and Upgrade Meter Standards, as attached; and
2. Delegate specified authority to the General Manager to make any future changes to the BANC EIM Existing and Upgrade Meter Standards deemed necessary, as requested by the EIM Service Provider and reviewed by the EIM Committee and OC, with the exception that any substantial changes made to the metering configuration and associated procedures and protocols due to the expansion of the BANC EIM Entity footprint would require Commission approval.

**Balancing Authority of Northern California  
Resolution 21-01-21**

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 27<sup>th</sup> day of January 2021, by the following vote:

		Aye	No	Abstain	Absent
Modesto ID	James McFall				
City of Redding	Dan Beans				
City of Roseville	Michelle Bertolino				
City of Shasta Lake	James Takehara				
SMUD	Paul Lau				
TPUD	Paul Hauser				

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Greg Salyer  
Chair

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Attest by: C. Anthony Braun  
Secretary



## BALANCING AUTHORITY OF NORTHERN CALIFORNIA

### BANC EIM Phase 2 Existing and Upgrade Meter Standards

#### 1.0 Purpose and Scope

This document sets forth and describes the Meter Standards (Standards) for the Balancing Authority of Northern California (BANC), which serves as the Energy Imbalance Market (EIM) Entity for the BANC EIM footprint. These Standards reflect two distinct subsets of meters: 1) those Settlement Quality Meter Data (SQMD) meters which are in place and approved upon the commencement of BANC EIM Phase 2 operations (Existing Meter Standards); and 2) guidance for any future replacement SQMD meters which are proposed and installed subsequent to BANC EIM Phase 2 operations (Upgrade Meter Standards) – i.e., meters purchased and installed subsequent to March 25, 2021. Put simply, the Existing Standards provide minimum threshold guidance for EIM Participants to meet upon the commencement of BANC EIM Phase 2 operations on March 25, 2021. Subsequent changes and upgrades in meters by EIM Participants, however, will be informed by making reasonable business efforts to meet the Upgrade Meter Standards expressed herein. To the extent an EIM Participant cannot meet the Upgrade Meter Standards, the Commission, which serves as the local regulatory authority (LRA) for the EIM Entity, may waive this requirement.

These Standards do not bind EIM Participants to install one specific meter manufacturer to meet the Upgrade Meter Standards, nor is it required that all of the capabilities exist in the meter. There are many more variables for each project to ensure that not only these Standards are met, but that other environmental, physical, and logical requirements are met.

#### 2.0 Changes to Standard(s)

Unless otherwise required by the EIM Market Operator, needed technical changes and/or corrections to these Standards require a super majority approval (i.e., greater than 50 percent) of the EIM Committee. Non-technical substantive changes to the policies expressed to these Standards, in addition to any waiver of Upgrade Meter Standards will be approved by the Commission unless the Commission delegates such authority to the General Manager.

#### 3.0 Existing Meter Standards

##### 3.1 Testing

BANC requires that each SQMD meter device is tested no less frequently than every other year, commencing on or before March 25, 2021 (any SQMD meters in place at the commencement of BANC EIM Phase 2 operations shall be deemed tested and approved upon the Phase 2 go-live date of March 25, 2021). Additional testing may occur at any time as deemed necessary by the EIM Committee. Notwithstanding the foregoing, the EIM Entity may require testing from time-to-time either as it reasonably determines or if ordered by the Market Operator, in which case the EIM Participant shall make reasonable efforts to comply as soon as practicable.

### **3.2 Accuracy and ANSI Standards**

- ANSI C12.20:1997 Accuracy; class 0.2, CL2 and CL10/CL20

### **3.3 Auxiliary Power**

(Nothing for Existing Meter Standard)

### **3.4 Current Classes**

(Nothing for Existing Meter Standard)

### **3.5 Size and Weight**

(Nothing for Existing Meter Standard)

### **3.6 Operating Temperature**

- IEC 60068-2-2:1993:  $-40^{\circ}$  to  $+85^{\circ}\text{C}$  ( $-40^{\circ}$  to  $+185^{\circ}\text{F}$ )
- LCD:  $-20^{\circ}$  to  $+70^{\circ}\text{C}$  ( $-4^{\circ}$  to  $+158^{\circ}\text{F}$ )

### **3.7 Integrated Quantities**

(Nothing for Existing Meter Standard)

### **3.8 Instantaneous Quantities**

- Watts and VARs delivered, received, or bidirectional per-phase, polyphase

### **3.9 Load Profile**

- Intervals may be configured to be 5, 15, or 60 minutes in length
- Min 6 Channels
- Capable of measuring per Phase and Polyphase of the following:
  1. Wh Del
  2. Wh Rec
  3. VARh Del
  4. VARh Rec
  5. Q
  6. Qhr

### **3.10 Test Outputs**

- Type IR LED test pulse output provided

### **3.11 Communication Protocols**

- Modbus, DNP3 serial & TCP/IP; or
- Analog; or
- Cellular

## 4.0 Upgrade Meter Standards

The following includes primary Upgrade Meter Standards sections. New requirements are set forth in *Italics*. EIM Participants will use reasonable efforts to meet these Upgrade Meter Standards upon replacement of SQMD meters falling under Existing Meter Standards. Deviations or waivers may be obtained through Commission approval or through the General Manager, to the extent the Commission has delegated authority for such approvals.

### 4.1 Testing (No Change from section 3)

- BANC requires that each SQMD meter device is tested no less frequently than every other year, commencing on or before March 25, 2021 (any SQMD meters in place at the commencement of BANC EIM Phase 2 operations shall be deemed tested and approved upon the Phase 2 go-live date of March 25, 2021). Additional testing may occur at any time as deemed necessary by the EIM Committee. Notwithstanding the foregoing, the EIM Entity may require testing from time-to-time either as it reasonably determines or if ordered by the Market Operator, in which case the EIM Participant shall make reasonable efforts to comply as soon as practicable.

### 4.2 Accuracy and ANSI Standards

- ANSI C12.20:1997 Accuracy; class 0.2, CL2 and CL10/CL20
- *Minimum Rating: 55 VL-N, 95 VL-L*

### 4.3 Auxiliary Power

- *Requirement Range: 55 – 530 Volts AC (60 Hz)*

### 4.4 Current Classes

- *10 Amp (.01 – 10A)*
- *20 Amp (.01 – 20A)*

### 4.5 Size and Weight

- *S base: 5.5 pounds max*
- *Switchboard: 11.5 pounds max*

### 4.6 Operating Temperature (No Change)

- IEC 60068-2-2:1993:  $-40^{\circ}$  to  $+85^{\circ}\text{C}$  ( $-40^{\circ}$  to  $+185^{\circ}\text{F}$ )
- LCD:  $-20^{\circ}$  to  $+70^{\circ}\text{C}$  ( $-4^{\circ}$  to  $+158^{\circ}\text{F}$ )

### 4.7 Integrated Quantities

- *Wathours delivered/received, per-phase, polyphase total*
- *VARhours delivered/received, per-phase, polyphase total*
- *VAhours delivered/received, per-phase, polyphase total*

- *Amphours, per-phase (up to 3 phases), polyphase total*
- *Qhours delivered/received, per-phase, polyphase total*

#### 4.8 Instantaneous Quantities

- *Watts and VARs delivered, received, or bidirectional per-phase, polyphase*
- *VA delivered, received, or bidirectional per-phase, polyphase*
- *Q delivered, received, or bidirectional per-phase, polyphase*
- *Volts and Volts2 per-phase (up to 3 phases)*
- *Amps per-phase, polyphase*
- *PF per-phase, polyphase*
- *Frequency*
- *Volts THD per-phase*
- *Amps THD per-phase*

#### 4.9 Load Profile

- Intervals shall be configured to be 5 minutes in length
- Min 6 Channels
- Per Phase and Polyphase
  1. Wh Del
  2. Wh Rec
  3. VARh Del
  4. VARh Rec
  5. VAh Del
  6. VAh Rec
  7. VARh per quadrant
  8. Ah
  9. Qh Del
  10. Qh Rec
  11. Avg. W Del
  12. Avg. W Rec
  13. Avg. VAR Del
  14. Avg. VAR Rec
  15. Avg. VAR per quadrant
  16. VA, Volts
  17. Amps
  18. Power Factor
  19. Hertz
  20. Volts-THD
  21. Amps-THD
  22. Pulses
  23. Status
  24. A2
  25. V2
  26. A2h
  27. V2h
  28. Q
  29. Qhr

#### 4.10 Test Outputs (No Change)

- Type IR LED test pulse output provided through the optical port transmitter; emits bidirectional (delivered or received energy) Wh pulse when meter is in Normal mode, test pulse based on displayed register when in Test mode.

#### **4.11 Communication Protocols**

- Modbus, DNP3 serial & TCP/IP
- *Minimum 2 Form A contact outputs*
- *Minimum 3 Analog Outputs*
- *Option for Ethernet port*
- *Option for Modem*
- *Option for minimum 2 serial RS-232/485*
- *Option for cellular communication*

APPROVAL DRAFT

# BANC WHITE PAPER – Version 01

## Cost/Benefit Discussion BANC OATT/OASIS

### INTRODUCTION

During the August 2020 BANC Strategic Planning session, the members discussed a proposal by the Sacramento Municipal Utility District (SMUD) regarding moving the Open Access Same-Time System (OASIS) services for the California-Oregon Transmission Project (COTP) from the Transmission Agency of Northern California (TANC) to the Balancing Authority of Northern California (BANC). SMUD believed there were potential savings in doing so and that housing the OASIS function, along with a BANC Open Access Transmission Tariff (OATT), at BANC for the members' COTP rights would better align transmission usage with the market focus that BANC is assuming for its members. This proposal was focused on the BANC members, but it was agreed that BANC should also consider an option to allow non-BANC members to include their COTP rights on the BANC OASIS. Though the original concept did not necessarily mean the non-BANC members would participate under a common BANC OATT, it is believed that using a common BANC OATT for all participants would be the most cost effective. The purpose of this white paper is to provide an initial discussion of the cost and benefits for BANC members to move to a BANC OATT/OASIS concept and to provide an option for non-BANC members to participate in the BANC OATT/OASIS.

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### COST DISCUSSION

BANC staff worked with SMUD, as the current OASIS provider for TANC as well as the BANC Operator, and BBSW, as regulatory/legal support, to develop an initial estimate of both the implementation and ongoing operating costs for a BANC OATT/OASIS. The assumptions used in this analysis include:

1. Implementation effort would initiate in September 2021 and require an estimated two (2) years, making "go live" in the fall of 2023, in alignment with a CAISO's proposed Extended Day Ahead Market (EDAM) schedule. Should EDAM not proceed, it would still provide a potential benefit in the CAISO Western Energy Imbalance Market (EIM), given Bonneville Power Administration's expected participation in EIM commencing in the Spring of 2022.
2. All BANC members with COTP rights will join the BANC OASIS (i.e. – Modesto, Redding, Roseville, and SMUD).
3. As an option, non-BANC members with COTP rights (i.e. – Turlock Irrigation District [TID] and Silicon Valley Power [SVP]) would be allowed to participate as well.
4. SMUD costs to provide the OASIS administrator service will be based upon fully loaded labor costs and estimated vendor support costs.

5. Costs will be allocated on an entitlement rights share basis (see Attachment A: [BANC Members Only](#); Attachment A-1: [BANC and Non-BANC Members](#)).
6. SMUD will be terminating OASIS administrator service to TANC in the future regardless of whether the other members participate in a BANC OATT/OASIS option. If this proceeds, SMUD will continue to provide the services to TANC until the transition over to BANC. If BANC members choose not to proceed, SMUD will work with TANC to establish a reasonable transition period to change OASIS administration vendors.
7. For purposes of this initial evaluation, no contingency has been added to the estimates. The following summarizes the estimates.

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#### Implementation Costs

The estimated costs for implementation of the BANC OATT/OASIS are as follows:

- SMUD Grid Operations support for OASIS software and business information upgrades
  - 1 FTE for 2 years = \$500,000
- Settlements group support = \$50,000-75,000
- OATI vendor support = \$100,000 – 200,000
- BBSW legal support for OATT development and OASIS setup
  - 150-200 labor hours = \$60,000 – 80,000
- Total implementation costs = \$710,000 – 855,000

Attachment B provides a draft member cost allocation breakdown for the implementation costs [and Attachment B-1 for the option with both member and non-member participation](#).

#### On-going Costs

The estimated ongoing costs of operation for the OATT/OASIS function are as follows:

- SMUD operations staff (3 FTEs) = \$500,000 – 600,000
- Settlements group support = \$85,000-100,000
- BANC OASIS annual Share OATI on-going costs = \$150,000-\$200,000
- OATI vendor annual change order costs = \$15,000 – 40,000
- BBSW legal support (100 hours) = \$40,000
- Total ongoing costs = \$790,000 – 980,000/year

Attachment C provides a draft member cost allocation breakdown for the on-going costs [and Attachment C-1 for the option with both member and non-member participation](#).

## BENEFITS DISCUSSION

In looking at the benefits of moving forward with creation of a BANC OATT/OASIS, we considered both quantitative and qualitative issues. The following summarizes this evaluation.

#### Qualitative Improvements

1. As BANC moves toward expansion into EIM and the potential creation of the EDAM, it is expected that COTP transmission rights will be used to support transactions in these markets. Having BANC, as the EIM/EDAM Entity, be the OASIS administrator and OATT

holder for COTP transmission that would be used in these markets would align BANC with other EIM/EDAM Entities and better integrate our market participation efforts.

2. It is anticipated that the members as a whole will be able to reap better value in COTP transmission sales and market participation with consolidation under a single OATT structure. This assumes that the OATT Administrator is given the flexibility to adjust and set prices in response to market conditions, with policies that are established by the BANC participants.

### Quantitative Cost Savings

Evaluating what true dollar savings might be gained from this move is complicated by the following considerations:

1. BANC does not have detailed knowledge on how all TANC OASIS costs (i.e. consultant, legal, management) are allocated to the TANC participants.
2. The current SMUD charges for OASIS administrator services to TANC are not sustainable and are based upon charges that are below SMUD's fully loaded labor costs and do not include any vendor related software charges to provide the service. Thus, in establishing the costs for BANC to provide the OATT/OASIS service at fully loaded labor costs and accounting for vendor support, the result is an increase in the overall costs compared to the current charges for the OASIS Administrator services. Having said that, if SMUD were to continue providing the service for TANC (or should any other vendor provide these services), it would eventually have to be at the full cost level. Therefore, for this evaluation, we are assuming that this is a wash between the two options.

Areas for potential cost savings include:

1. The 2021 TANC Budget shows ~\$350,000 in TANC OASIS Administrator/Consultant/Legal support which would not be needed for the BANC option. In addition, the WestTrans OATI costs may be able to be saved through consolidation with SMUD's and TANC's charges into a single Transmission Service Provider (TSP) registration.
2. Members not participating through a BANC option, means that the share of OASIS costs that SMUD would be picking up for OATT/OASIS services would have to be borne by the other participants. Likewise, if the other members elect not to participate through a BANC OATT/OASIS, SMUD would continue with covering the full costs for maintaining its OATT/OASIS on their own.
3. Consolidation of compliance reporting work may also result in savings compared to separate SMUD and TANC TSP audits. It is not clear if the TANC TSP compliance costs are included in the TANC OASIS budget item noted above.

### OTHER CONSIDERATIONS

Since TANC is considering issuing an RFP for OASIS services early next year, [a question has been raised as to whether BANC should bid in response. It is staff's position that this would not be](#)

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[consistent with our goals of focusing market activities within BANC and therefore do not recommend BANC submit a bid.](#) It is also expected that the members will want to see the results of the TANC OASIS solicitation before making a final decision on the choice of OASIS administrator service supplier.

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## CONCLUSIONS

As we evaluated this option, it is expected that whether TANC PA5 participants go with SMUD charging at full cost recovery or go to a new third party supplier, the cost for OASIS administrator services is likely to increase significantly. It is also expected that as a group [the participants](#) would be better off sharing these costs together rather than splitting off separately.

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From a non-cost perspective, we do believe that this BANC OATT/OASIS approach provides better alignment with the BANC's longer-term market engagement strategies, which will provide both OASIS Administration costs efficiencies and improved market results. The benefit of improved market results could be substantially more than the benefit of costs [savings but](#) are not evaluated herein. Should the Commission wish to proceed with this proposal, further analysis can be developed.

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## Attachment A – BANC Member Only COTP Entitlement Rights (MW)

<u>PARTICIPANT</u>	TANC ENTITLEMENT RIGHTS	NON-TANC ENTITLEMENT RIGHTS	TOTAL ENTITLEMENT RIGHTS	% SHARE
MID	326.6827	0	326.6827	31.5
REDDING	116.8948	25.3696	142.2644	13.8
ROSEVILLE	29.3482	0	29.3482	2.8
SMUD	535.7297	2	537.7297	51.9
TOTAL	1008.6554	27.3696	1036.0250	100.0

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## Attachment B – BANC Member Only Implementation Cost Allocation

<u>PARTICIPANT</u>	% SHARE	FORECAST ALLOCATION
MID	31.5	\$223,650-269,325
REDDING	13.8	\$97,980-117,990
ROSEVILLE	2.8	\$19,880-23,940
SMUD	51.9	\$368,490-443,745
TOTAL	100.0	\$710,000-855,000

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## Attachment C – BANC Member Only On-going Cost Allocation

<u>PARTICIPANT</u>	% SHARE	FORECAST COST ALLOCATION
MID	31.5	\$248,850-308,700
REDDING	13.8	\$109,020-135,240
ROSEVILLE	2.8	\$22,120-27,440
SMUD	51.9	\$410,010-508,620
TOTAL	100.0	\$790,000-980,000

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