

Balancing Authority of Northern California

Regular Meeting of the Commissioners of BANC

2:00 P.M.

Wednesday, November 18, 2020

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 **November 18, 2020 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): 126 149 8724

WebEx Meeting Link:

<https://braunblaisingsmithwynne.my.webex.com/braunblaisingsmithwynne.my/j.php?MTID=m62edf566e98040a31f7a28d50f598358>

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 & Strategic Planning Session held on October 28, 2020.
 - B. BANC Operator Report (October).
 - C. Compliance Officer Report (November).
 - D. PC Committee Chair Report (November).
 - 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. Consider and Possibly Approve Resolution 20-11-11 *Approval of Balancing Authority of Northern California Energy Imbalance Market Resource Sufficiency Test Approach and Flex Ramp Grace Period.*
 - ii. EDAM Update.
 - iii. BANC Summer Assessment Update.
 - iv. Strategic Planning Issues.
 1. Status of Business Case for BANC OASIS.
 2. Draft 2020/2021 Strategic Initiatives.
 - B. 2020 Budget Updated Forecast.
 - C. Consider and Possibly Approve Resolution 20-11-12 *Approval of 2021 Annual Budget for BANC.*
 - D. Consider and Possibly Approve Resolution 20-11-10 *Resolution Setting the Regular Meeting Dates for 2021.*
- 6 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.

Balancing Authority of Northern California

Consent Agenda Items

- A. Minutes of the October 28, 2020 BANC Regular Meeting.**
- B. BANC Operator Report (October).**
- C. Compliance Officer Report (November).**
- D. PC Committee Chair Report (November).**
- 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)

October 28, 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:

Member Agency	Commissioner
Modesto Irrigation District (MID)	James McFall
City of Redding	Dan Beans, Chair
City of Roseville	Michelle Bertolino
Sacramento Municipal Utility District (SMUD)	Laura Lewis
City of Shasta Lake	Absent
Trinity Public Utilities District (TPUD)	Absent

Agency	Liaison(s)
Western Area Power Administration (WAPA)	Sonja Anderson 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 2:02 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 September 30, 2020; (B) BANC Operator Report for September; (C) Compliance Officer Report for October; (D) PC Committee Chair Report for October; and (E) General Manager's Report and Strategic Initiatives Update.
5. Regular Agenda Items – Discussion and Possible Action:
 - A. Mr. Shetler provided a brief update on the August and Labor Day heatwave. Follow-up discussions between BANC members and CAISO regarding the export curtailment process and BANC impacts have occurred. An overview of the CAISO export curtailment process was also presented at last week's Resource Committee meeting to further educate the members on the process and allow for additional discussion. One result of the CAISO root cause analysis of heatwave events is that the 2021 summer assessment process is being reassessed, and the current plan includes a *statewide* assessment. BANC is also reviewing its process for 2021 and will be working through the Operating

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

Committee, with a goal of performing the assessment earlier, aiming for an initial release in Q1 2021. Outreach is also in process to the CEC and other CA BAAs to better understand what they have planned.

Mr. Shetler also briefly touched on SB100 and its potential impacts relative to the heatwave and otherwise. A draft report from the Joint Agencies is pending and due to the legislature January 1st. BANC will continue to work through CMUA and intends to comment on the draft report once it is released. BANC also anticipates outreach with other POUs and Joint Agencies after the 1st of the year to determine how to move forward.

- B. Mr. Shetler reported that EIM Phase 1 operations are going well, with no major issues other than heatwave impacts. SMUD continues to see benefits from participation. BANC will go live with EIM Phase 2 on March 25, 2021 concurrent with TID. Three other entities will go live on April 1st. BANC is generally on track with all major activities including: deviation band & Resource Sufficiency, settlements allocation, EIM generator dispatch, EIM software updates, default energy bids/MMA, EIM software testing and EIM training.

BANC's primary remaining challenge is the Resource Sufficiency/Flex Ramp Test. Discussions are ongoing to try to balance the BANC principle that all parties come to the table fully resourced while also not forcing entities to pay for resources when no costs are incurred. A 6-month "grace period" concept has been developed and presented to the EIM Committee, with a goal of presenting a final proposal to the Commission for review and approval at the November meeting. Ms. Bertolino encouraged all Commissioners to ensure they are fully briefed on this issue prior to the next Commission meeting.

- i. Mr. Smith provided an overview of the Business Practices and development process. Ms. Lewis moved, Mr. McFall seconded, and the participating Commissioners voted unanimously in favor of Resolution 20-10-20 *Approval of Balancing Authority of Northern California Energy Imbalance Market Business Practices for BANC EIM Phase 2 Operations*.

Mr. Shetler also previewed future actions that will be requested from the Commission in Q4 2020 – Q1 2021: a settlement allocations manual, RS Test process and "grace period" proposal, a BANC metering policy, BANC risk policies, BANC /SMUD EIM Services Agreement amendments, and individual entity EIM Participation Agreements.

For EDAM, CAISO Bundle 1 Issue Paper comments are due on November 12, 2020. Bundle 1 includes Transmission, Resource Sufficiency, and Congestion Rents. Bundle 2 items include Greenhouse Gas, Ancillary Services, a Full Network Model for Phase 2, and an EDAM Administrative Fee. A Bundle 2 issue paper is not expected until Q1 2021 while CAISO focuses on the Day Ahead Market Enhancements initiative.

- C. Mr. Shetler introduced Ms. Janice Zewe, who provided an overview of the BANC PC Area 2020 Transmission Planning Assessment. Mr. Mc Fall moved, Ms. Bertolino seconded, and the participating Commissioners voted unanimously in favor of Resolution 20-10-21 *Acknowledgement and Acceptance of BANC PC Area 2020 Transmission Planning Assessment*.
- D. Mr. Shetler briefly touched on two strategic planning issues. With respect to the Draft Business Case for BANC OASIS, additional outreach with WAPA and Silicon Valley Power has occurred, and additional discussions were held at the October Resource

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BALANCING AUTHORITY OF NORTHERN CALIFORNIA (BANC)

Committee. A more detailed cost/benefit analysis is planned for Q4 2020; however, EIM Phase 2 and Summer Assessment issues are currently the top priorities. Draft 2021 Strategic Initiatives are expected to be presented for BANC Commission approval at the November meeting.

The Commission adjourned at 2:41 p.m.

Minutes approved on November 18, 2020.

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 October 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
 - 8 of 31 days with instances of USF mitigation procedure utilized
 - 6 days on Path 66
 - No operational impact on BANC
- BAAL Operation:
 - Maximum duration of BAAL exceedance: 15 Minutes
 - Number of BAAL exceedance >10 minutes: 1
 - BAAL violation (BAAL exceedance >30 minutes): None
- Frequency Response (FR) Performance – Quarterly Metric:
 - 2020 Frequency Response Obligation (FRO): -14.7 MW/0.1 Hz
 - Q2 Frequency Response Measure (FRM): -23.0 MW/0.1 Hz
 - Q2 Number of Under-Performed Events: 1 out of 4
 - Q1~Q2 Frequency Response Measure (FRM): -29.4 MW/0.1 Hz
 - Q1~Q2 Number of Under-Performed Events: 1 out of 8

Monthly Notes:

- No additional notes or impacts for October 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

November 2020

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.
- The next periodic self-log submittal deadline is January 31st.

BANC MCRC:

- The next BANC MCRC meeting is scheduled to be held at 10:00 AM on Monday, December 7, 2020 via webinar.

PC Committee Chair Report

BANC Commission Meeting

November 2020

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-002-2 Interconnection Studies – Staff are working on the FAC-002-2 report for the SMUD Rancho Seco II solar power plant, which is scheduled to be in service by the end of this year.
 - FAC-014-2 Establish and Communicate SOLs – Staff sent the final report to BANC PC participants on November 3, 2020.
 - PRC-012-2 Remedial Action Schemes – Staff are currently performing a technical evaluation of each RAS in SMUD and Roseville areas required by the NERC standard once every five full calendar years. The Effective Date of PRC-012-2 is January 1, 2021.
 - TPL-001-4 - Transmission System Planning Performance – BANC Commissioners accepted the final Report at the October BANC Commission meeting. The finalized report was sent out to adjacent Planning Coordinators, Transmission Planners and Reliability Coordinators on November 9, 2020 in compliance with NERC reliability standards for TPL-001-4, R8 and IRO-017-1.

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

	PC Standard	Estimated % Complete	Notes
1	FAC-002-2 Interconnection Studies	70%	There are 3 new and materially modifying transmission facilities projects at the BANC area this year with in-service dates of 12/2020, 5/2021 and 12/2021.
2	FAC-010-3 SOL Methodology for Planning Horizon	100%	The finalized version was sent to BANC PC Participants on 10/15/2020.

	PC Standard	Estimated % Complete	Notes
3	FAC-013-2 Transfer Capability for Near-Term Planning Horizon	100%	The finalized version was sent out to BANC PC Participants on 10/9/2020.
4	FAC-014-2 Establish and Communicate SOLs	100%	The finalized report was sent out to BANC PC Participants on 11/3/2020.
5	IRO-017-1 Outage Coordination	100%	Sent out 2020 BANC PC annual assessment report to RC West on 11/10/2020.
6	MOD-031-2 Demand and Energy Data	100%	2020 Loads and Resources supplement Data Request III sent to WECC at the end of March, 2020.
7	MOD-032-1 Data for Power System Modeling & Analysis		Ongoing activity.
8	MOD-033-1 System Model Validation		Data request received in August, 2020.
9	PRC-006-3 Underfrequency Load Shedding	100%	BANC PC Participant data was submitted to the WECC UFLSWG SILTP group. A revised study report from the latest study cycle is expected to be available soon from WECC UFLSWG.
10	PRC-010-2 Undervoltage Load Shedding	100%	Study has been completed. The report was finalized on 12/30/19.
11	PRC-012-2 Remedial Action Schemes	80%	New Standard to be effective on 1/1/2021. Study Plan was finalized on 4/10/2020. Working on performing studies for each RAS scheme.
12	PRC-023-4 Transmission Relay Loadability	100%	Finalized report was sent out to PC Participants on 7/31/2020.
13	PRC-026-1 Relay Performance During Stable Power Swings	95%	Report will be finalized after WECC issues the new 2020 WECC Underfrequency Load Shedding Program Assessment Report to be incorporated in the BANC 2020 PRC-026-1 report.
14	TPL-001-4 Transmission System Planning Performance	100%	The finalized report was sent out to adjacent entities on 11/9/2020.

	PC Standard	Estimated % Complete	Notes
15	TPL-007-4 R1 GMD	100%	<p>The draft Agreement sent to Members to review on 5/31/2020. Conference call on 6/4/2020 with the BANC PC participants to discuss the changes in Vulnerabilities Assessment Responsibilities Agreement for the new version of the TPL-007-4.</p> <p>The final TPL-007-4 R1 “the Vulnerabilities Assessment Responsibilities Agreement” has been approved and posted in the BANC PC Members Only website on 6/15/2020.</p>

GM Report

BANC Commission Meeting

November 18, 2020

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 on the same page 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. On April 1, 2020, both SRP and Seattle City Light went live with EIM. Feedback is that the transitions were smooth with no major issues. 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.

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 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 the Resource Committee.

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 3rd 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. The settlements allocation manual is in final review and editing and will be brought back to the EIM and Legal Committees for final review in November/December and to the Commission for approval in December.

The issue of how to handle the Resource Sufficiency test (Balance and Flex Ramp tests) for EIM Phase 2 is being discussed by Staff at the EIM Committee level. Staff is currently intending to bring a proposal to 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 20th. The CAISO also held a stakeholder meeting on July 27th & 29th, which BANC attended. Comments were originally due on September 10th but have been delayed twice due to both the COVID-19 impacts and as a result of the August heat wave issues. The current due date is now November 12. The EIM Entities have developed comments on the Bundle 1 straw proposal, to which BANC intends to sign 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. It is hoped that we will have some conclusions by the end of the year.

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 is now finalizing its proposal.

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. We will keep the Commission informed as more information becomes available.

WECC

WECC Board Meetings

The next MAC and Board meetings are scheduled for December 8-9, 2020, via webinar rather than in person due to COVID-19 concerns. I will attend as my calendar allows.

In discussions with WECC, they have stated that they are initiating an event assessment of the recent August heat wave and CAISO load shedding incidents, with an initial assessment report due in December 2020.

In addition, WECC has proposed a major change in its committee structure as a result of a process to improve stakeholder engagement. These changes include:

- Disbanding the current Operations and Market Interface Committees
- Create an Operations, Security, and Market Interface Committee and retain the Reliability Assessment Committee. These will now become the standing committees.
- Limit committee membership to those who want to actively participate
- Replace Joint Guidance Committee with Performance Review Committee staffed by the Board
- Disband all subgroups that are not involved in supporting a standing committee
- Develop metrics for committee project management and stakeholder engagement.

NWPP

Resource Adequacy Project

In light of the concerns raised last year 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 25th 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. We are now waiting on the draft report so that we can review and comment.

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.

Due to the retirement of the CAISO CEO and the departure of the BPA Administrator, WEIL found itself without leadership. BANC's General Manager was requested to provide interim coordination of the upcoming October meeting of WEIL, where a discussion of how to fill the leadership void was discussed. At this meeting the WEIL group requested the BANC General Manager along with the PGE CEO to continue on the WEIL steering committee for the next year. This included representing WEIL at the November 6, 2020, CREPC/WIRAB panel discussion on the WIRED issue.

Strategic Initiatives

An update of the 2019/2020 Strategic Initiatives, which is now considered complete, and a draft of the 2020/2021 Strategic Initiatives are attached to this report.

BANC 2019/2020 Strategic Plan - Routine Initiatives - November 2020 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		Develop long-term succession plan and traits for General Manager	Jim Shetler/Commission	Ongoing	Draft plan discussed with Commission. Finalized at Sept. Meeting
3 Medium		Organizational Issues: ~ Develop BANC procedures & processes as appropriate	Jim Shetler/BBSW	4th Qtr. 2020	Business practices approved. Ops Guidelines being drafted.
4 Medium	OUTREACH	Engage in industry forums (WECC, Peak, NWPPA, etc.)	Jim Shetler	Ongoing	Attend RC West, WECC Board, WEIL, & NWPP Exec. Forum meetings
5 Medium		Coordinate with other POU BAs (Ca and regionally)	Jim Shetler	Ongoing	Coordinating with SCL, SRP, LADWP, TP, & TID on EIM
6 Medium		Outreach to regulatory and legislative bodies on key issues	Jim Shetler/BBSW	Ongoing as Necessary	Participating in WEIL group outreach to West governors
7 Medium	ASSETS	Evaluate joint options for resource needs for BA	Resource Committee	4th Qtr. 2020	On hold for this year
8 Low	MEMBER SERVICES	Identify and outreach to potential new BANC members	Jim Shetler	Ongoing	Discussions with WAPA-SNR

BANC 2019/2020 Strategic Plan - Focused Initiatives - November 2020 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	Routine EIM Committee meetings being held
10 High		Manage EIM Phase 1	Jim Shetler/SMUD	Ongoing	3rd Qtr. CAISO benefits show BANC/SMUD = \$8.7M
11 High		EDAM evaluation effort ~ CAISO Stakeholder Process ~ CAISO Tariff Development	Jim Shetler/BBSW Jim Shetler/BBSW	3rd Qtr. 2020 1st Qtr. 2021	Coordinating with EDAM SC Delayed until 2022
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 group outreach to West governors
14 High		Regionalization: ~Monitor CAISO GRC effort	Jim Shetler/BBSW	3rd Qtr. 2020	Filed supporting comments on straw proposal
15 High		Coordinate with BAs on SB100 collaboration effort	Jim Shetler/BBSW	12/31/20	Participated in 9/2/20 work shop. Filed comments on 9/15/20. Waiting on draft report.
16 Medium	ASSETS	Evaluate resource criteria for BANC long-term needs	Jim S./Res. Com.	4th Qtr. 2020	Holding discussions at Resource Committee. On hold for this year.
17 Medium	MEMBER SERVICES	Evaluate possible support to participants for EIM	Jim S.	4th Qtr. 2020	Finalized software EIM procurement options

Balancing Authority of Northern California

Agenda Item 5A

1. **BANC Resource Sufficiency Test Approach.**
2. **Attachment A to BANC Resource Sufficiency Test Approach – BANC EIM Flex Ramp Grace Period.**
3. ***Resolution 20-11-11 Approval of Balancing Authority of Northern California Energy Imbalance Market Resource Sufficiency Test Approach and Flex Ramp Grace Period.***
4. **Draft 2020/2021 Strategic Initiatives.**

Braun Blaising Smith Wynne, P.C.

Attorneys at Law

11/11/2020

To: BANC Commission

From: BANC Counsel

RE: BANC Resource Sufficiency Test Approach and Flexible Ramping Sufficiency Test 6-month Grace Period Recommendation

Summary

Upon the deployment of Phase 2 of the Energy Imbalance Market (EIM) inside the Balancing Authority of Northern California (BANC) Balancing Authority Area (BAA), BANC staff and the BANC EIM Committee are recommending that the Commission adopt an initial approach to the California Independent System Operator's (CAISO) Resource Sufficiency (RS) test that BANC, as the EIM Entity, must pass to participate in the EIM.¹ Put simply, the RS test ensures that each EIM Entity BAA comes to the market fully resourced and that no EIM Entity BAA is leaning on the broader CAISO EIM footprint to serve its load, in addition to having sufficient flexible capacity that can be responsive to fluctuations due to forecast error and intermittent resource performance. There are two subparts to the RS test that BANC is addressing in the attached Resource Sufficiency Test Approach (RSTA). One subpart of the RS Test found in the RSTA is the BANC Balancing Test Approach, which requires an EIM Entity to come to the table with sufficient capacity to meet its forecasted load obligations (Balancing Test). This will be described in more detail below.

The second subpart of the overall RS test in the RSTA is the BANC Flex Ramp Test Approach, which includes a requirement that each EIM Entity also carry a CAISO-determined and allocated amount of Flexible (or "Flex") RS, which varies (interval-by-interval) depending on the CAISO's projected need for fast-ramping resources to address intermittent resource fluctuations and CAISO forecast error (Flex Test).² That is, the Flex Test addresses the *real time* need for those entities participating in EIM to either move up generation during times of higher than expected loads or move generation down during periods of over-generation. Because the Flex requirement varies significantly and cannot always be fully predicted, it can present a problem for some utilities, including some within BANC, with less flexibility in their resource portfolios, particularly during certain periods of the year. To address this concern in BANC, we are proposing a "grace period" of six (6) months with respect to direct allocations of BANC-imposed costs related to the CAISO's Flex Test. We are therefore seeking approval of the

¹ The RS test occurs at the EIM Entity/BAA level; however, it requires all of the internal BANC EIM Participants to individually meet their obligations to avoid a cumulative failure. Failure of RS can result in BANC's EIM transfers being limited for the failed intervals, potentially resulting in lost opportunities for non-failing EIM Participants (i.e., one EIM Participant's failure can impact all of BANC).

² The full name is the Flexible Ramping Sufficiency Test.

RSTA, which includes both the Balancing Test and Flex Test approaches, and an initial Grace Period for certain Flex costs while we gain more market performance insight. The BANC EIM Flex Ramp Grace Period (Grace Period) document has been made an attachment (Attachment A) to the RTSA.

Discussion

As noted above, the RS tests are applied to each EIM Entity BAA to ensure that no participating BAA is leaning on the market to supply its load serving needs and that each EIM Entity has enough flexibility in its portfolio to address forecast and resource uncertainty. More specifically, the RS test requires that, for each EIM fifteen (15)-minute market interval in each hour, participants are fully resourced and not using the market to supply their basic obligations to reliably serve their customers. Once the EIM Entity passes these tests, it becomes eligible for having its imbalance energy needs met through EIM transfers and may also be more economically re-dispatched. The BANC RSTA addresses both the BANC Balancing Test approach, which is found in Part 1 of the RSTA, and its approach to the Flex Test in Part 2. Both tests are critical for BANC EIM participation, and failure can result in either financial penalties in the case of the Balancing Test or being limited in market participation in the case of failing the Flex Test.

The Balancing Test is focused on ensuring each EIM Participant³ meets its obligation to come into every hour of the EIM fully balanced. Failure of the Balancing Test can lead to under or over-scheduling penalties being imposed on the EIM Entity (i.e., BANC). The Balancing Test measurement period begins eighty (80) minutes prior to the operating hour, or “T-80,” where each EIM Participant is expected to be fully balanced to the CAISO’s current EIM Load Forecast. Between this time and T-40, the EIM Entity/BANC will work with EIM Participants to provide resource base schedules that come within 1% of its load forecast. If BANC’s total base schedules are not within 1 percent of its load forecast, then Underscheduling/Overscheduling-Charges may be assessed to the extent that BANC’s overall metered load deviates from the load base schedule by more than 5 percent. EIM Participants, led by the Sacramento Municipal Utility District, are currently working on an EIM Balancing Product to be available within BANC by go-live. This product is described in Part 1 of the RSTA.

The Flex Test, which is a subset of the RS test performed by the CAISO at operating intervals time (T) minus (-) 75, T-55, and T-40 minutes prior to start of the next trading hour, independently evaluates flexible ramping sufficiency for each BAA within the EIM Area for each 15-minute interval of that trading hour. The Flex requirement is based on the historical CAISO load forecast error and the CAISO variable energy resource forecast.⁴

The cause for concern within BANC (or within any EIM Entity BAA) is due to the fact that a failure of the Flex Test can result in the entire EIM Entity being limited with respect to market participation for any of the intervals it fails. While this may not always carry a

³ For purposes of this memo and all BANC documents, “EIM Participant” refers to an entity which has entered into an EIM Participation Agreement with BANC.

⁴ The Flex test assesses whether there is sufficient ramping capability among all resources in the EIM Entity BAA to meet the forecasted demand change across intervals plus a high/low percentile of the historical uncertainty.

significant economic consequence, in some EIM intervals it could.⁵ In working through some of the implementation challenges of BANC EIM Phase 2, concerns have arisen that during some seasonal periods of time, not all EIM Participants will individually be able to meet this Flex requirement, and this could lead to a collective failure of BANC to pass the Flex Test in some intervals or hours. The Grace Period proposal, which is provided as Attachment A to the RSTA, calls these entities “Flex Poor.” Other participants, which are less likely to fail this requirement, are referred to a “Flex Rich.”

While this potential shortcoming of those within BANC identified as Flex Poor may be of consequence, the magnitude is unclear. Thus, it is proposed that, for an initial 6-month period, BANC observes and attempts to quantify this impact. Therefore, in accordance with the Grace Period proposal, “[n]o BANC imposed Flex Ramp failure costs will be distributed directly to an Energy Imbalance Market (EIM) Participant during first six (6) months (i.e., March 25, 2021 to September 30, 2021) of Balancing Authority of Northern California (BANC) EIM Phase 2 operations.”

The EIM Entity staff and EIM Committee will provide ongoing monitoring and assessment of the Flex impacts and BANC performance upon BANC EIM Phase 2 start up. During the Grace Period, EIM Participants will work together to seek solutions and potentially develop products to address this need.⁶ Termination of the Grace Period will require that an alternative proposal be in place, and any subsequent proposal will require Commission action.

We therefore recommend that the Commission approve the RSTA, along with the 6-month Grace Period (Attachment A to the RTSA), as set forth in the attached proposal and BANC resolution.

⁵ Such economic consequences might be hard to quantify, such as lost opportunity costs. For example, a failure may prevent the other EIM Participants from buying or selling during an economically advantageous interval or intervals.

⁶ In fact, the EIM Committee is already exploring some products within BANC that might be supported by the Flex Rich Entities.

BANC Resource Sufficiency Test Approach

This document describes the agreed-upon methodologies for the Balancing Authority of Northern California (BANC) Resource Sufficiency Test Approach (RSTA), both with respect to the BANC Balancing Test (Part 1) and the BANC Flex Ramp Test (Part 2).

Part 1 - BANC Balancing Test Approach:

Each EIM Participant will make all reasonable efforts to achieve a balanced EIM position prior to T-55 minutes before the target hour. EIM Participants may bilaterally trade balancing capacity to aid themselves in achieving that goal.

1. All EIM Participants will participate in the EIM by making resources available to the EIM as fully as possible. After making all reasonable efforts, no EIM Participants will withhold EIM Resource Sufficiency (RS) Capacity.
2. EIM Participants must have an EIM balanced resource *plan* in EIM Day Ahead (DA) timeframe (by DA at 10:00am).
3. EIM Participants will enter each hour (prior to T-80) balanced¹ to the most current hourly EIM Load Forecast.
4. Ideally, prior to T-80², EIM Participants without Generator Base Schedules or without adequate EIM balancing capability for the target hour will execute bilateral balancing capacity trades with another EIM Participant for the target hour.
5. For CAISO EIM Load Forecast changes at T-80 and T-60, EIM Participants will re-achieve a balanced EIM position by either:
 - a. Adjusting their own EIM Generator Base Schedules or executing energy bilateral trades (which are successfully e-Tagged by T-57).
 - b. Exercising their previously executed bilateral EIM Balancing product trade which results in the seller of the capacity adjusting their EIM Generator Base Schedules to compensate for the buyer's unbalanced position.
6. At T-55, if the BANC/EIM Entity BA is not balanced to within 1% of its Load forecast, then the BANC EIM Operator will work to bring the BA within 1%. The BANC/EIM Entity BA will use the following process:
 - a. After T-55 (and before T-40), if the BANC/EIM Entity BA is greater than 1% unbalanced, then:
 - i. BANC EIM Operator identifies the EIM Participant that is most unbalanced (using the Operator's OATI system). BANC Operator requests a MW Base Schedule change from that EIM Participant which will bring the BANC/EIM Entity BA within 1% of balanced.
 - ii. The EIM Participant responds in one of two ways:
 1. Tells the EIM Operator the EIM Generator Base Schedule change that should be made to bring the EIM Participant into balance.

¹ EIM Participants with Interconnected Operating Agreements or "IOAs" with WAPA will also consider their Deviation Band capacity in making balanced resource plans.

² Carrying a known unbalanced position past T-80 without capability to achieve balance puts the BANC/EIM Entity BA and its EIM Participants at greater risk of failing the EIM Balancing Test (and at extreme imposes a Reliability issue on the BANC/EIM Entity BA). An EIM Participant which fails to obtain EIM balancing capacity prior to T-80 repeatedly will be brought to the attention of the EIM Committee for further action.

2. Tells the EIM Operator that they are unable to respond, thus accepting their unbalanced position will become binding. Time permitting, the EIM Operator will begin the process with the next most unbalanced EIM Participant.
 - b. Go to a. if BANC/EIM Entity BA remains more than 1% unbalanced.

Binding Unbalanced Position Settlement Implications

The process outlined above recognizes that BANC/EIM Entity BA may be unbalanced greater than 1% in some circumstances. In these cases, to receive an Over- or Under-Scheduling charge, the BANC/EIM Entity BA must also end the hour with its total Load Base Schedule more than 5% different from the total BANC/EIM Entity BA Metered Load. When BANC Load Imbalance is greater than 5% of total BANC Metered Load, then all EIM Participants on the 'harm' side of the Imbalance MWs will receive a portion of the BANC charge in proportion to their Imbalance MWs. [Participants on the "helping" side of Imbalance receive no charge or credit.]

BANC weighed an option of utilizing a BANC balancing Provider of Last Resort (POLR). This POLR Participant could stand ready to provide up to some limit of BA balancing MW capacity in all hours. However, the cost of these POLR MWs appeared to exceed the expected penalty charges EIM Participants may receive. A POLR would need to be compensated for 24X7 Balancing capacity. This capacity charge must be paid by all EIM Participants, whether or not the capacity is required. Also, EIM Participants would need to determine in advance the maximum Balancing capacity MWs. The POLR would not provide more than that MW capacity to support balancing in any hour. Therefore, POLR would not be an absolute guarantee against the Over- / Under-Scheduling charge in all cases.

BANC will track EIM RS Balancing Test failures, and which EIM Participant(s) caused each failure. Any EIM Participant creating a large number of failures in a given month may be required to arrange balancing capacity with another EIM Participant to lower the risk of failures.

EIM Balancing Product:

It is understood that certain EIM Participants are planning to develop an EIM Balancing Product which will allow any two EIM Participants to exchange their unbalanced positions; is simpler to implement than an energy trade in the short time frames; and one that recognizes that Energy may not be required to resolve the unbalanced position.

The product should have certain characteristics:

- Should have an 'up to' capacity limit.
- Available in all periodicities:
 - Single hour –
 - Multiple hours, week, month, etc.
- Require minimal actions by either party to enact each hour.
- Should leverage the balancing transparency that BANC BAA is attempting to enable.
- Should have a known price per capacity MW at the time the deal is struck.
- Does not require BANC Settlement Allocation – must be settled as a bilateral trade between the two parties.

Here is an example of how a product which meets these requirements could work:

1. Party A has no generator Base Schedules available for adjusting to balance in the target hour. Party B has excess capacity for balancing.
2. Party A agrees to pay party B \$XX.XX per MW for up to +/- 10 MWs of balancing capacity in the target hour.
3. Party B monitors the BANC BAA Balance view³ for Party A's unbalanced position. Party B adjusts its Gen Base Schedules to accommodate its imbalance, plus Party A's imbalance.
 - a. Party B will over/under balance by up to 10 MWs to offset Party A's imbalance.
 - b. Party B continues to maintain Party A's imbalance until the T-55 deadline.
4. Party A monitors the BANC BAA Balance view to ensure Party B is responding to its imbalance position.

The example demonstrates how a single hour deal could be enacted. The same approach could be struck for multiple hours or longer (a week, a month, etc.).

Part 2 - BANC Flex Ramp Test Approach:

Each BANC Participant will make all reasonable efforts to supply adequate Flex Ramp capacity in every EIM Market hour. After the fact, BANC will determine each BANC Participant's Flex Ramp requirement, and Flex Ramp capacity. Any participant with a Flex Ramp requirement greater than its Flex Ramp capacity will be deemed to have purchased the shortfall capacity from a BANC Participant with excess Flex Ramp capacity. However, in the first -months of BANC EIM Phase 2 operations, commencing on March 25, 2021, no EIM Participant will be assigned BANC-imposed Flex Ramp failure costs consistent with Attachment A to this RSTA, which sets forth the "BANC EIM Flex Ramp Grace Period" (Grace Period), agreed upon by the EIM Participants and approved by the Commission[≥]

BANC Participant Flex Ramp Capacity:

BANC will take advantage of an CAISO CMRI System report to determine each EIM Participant's Flex Up/Down Capacity MWs in each hour. The after the fact report presents each EIM Generator's Upward and Downward capacity for each 15-min interval of a given hour. The report can be found on the following path (CMRI System access required):

- CAISO Market Portal >> CMRI >> Real-Time [Tab] >> Resource Ramp Capacity [Report]

For each hour, each BANC EIM Participant's Flex Up/Down capacity will be determined from this report.

- The report presents Up and Down ramp capacities separately. BANC will calculate each EIM Participant's Flex Up and Down Capacities separately – using the separately reported up/down ramp capacity values.
- BANC will use the T-40 (binding) report output for each hour.
- BANC will use the 4th 15-min interval's values. The report presents values for each 15-min interval of the target hour. BANC RS Work Group agreed that the 4th interval would be an appropriate proxy for the hourly ramp capacity since it would be the capacity provided over the greatest period of time for the hour.

³ OATI supplied view which has been delivered and in testing. This view shows each BANC Member's EIM balance position for the target hour starting at T-80 minutes.

- BANC will sum the 4th interval ramp capacities for across each of the EIM Participant’s generators to determine each Participant’s Flex Up/Down Capacity for the hour.

Therefore, the BANC EIM Flex Up/Down Capacity Calculations are:

$$BEP_FLX_DOWN_CAP_{HOURL, BEP} = \sum_{BEP's\ Gens} RAMP\ UP\ CAPACITY_{Interval\ 4}$$

$$BEP_FLX_UP_CAP_{HOURL, BEP} = \sum_{BEP's\ Gens} RAMP\ DOWN\ CAPACITY_{Interval\ 4}$$

Where:

RAMP_UP_CAPACITY_{Interval 4} = An EIM PR Generator’s Ramp Up Capacity from the ISO CMRI “Resource Ramp Capacity” Report.

RAMP_DOWN_CAPACITY_{Interval 4} = An EIM PR Generator’s Ramp DOWN Capacity from the ISO CMRI “Resource Ramp Capacity” Report.

NOTE: “BEP” = BANC EIM Participant; and “HOURL” is the target hour; “Interval 4” refers to the 4th 15-min interval.

EIM Participant Flex Ramp Requirement

After the CAISO’s T-40 minutes RS Flex Ramp Up/Down Test is executed, the CAISO publishes the binding BANC Flex Up/Down Requirement MWs in the CMRI Report: Flexible Ramp Requirements Inputs. The BANC seeks to use those BANC Flex Ramp Up/Down Requirement values as inputs for determining each BANC EIM Participant’s Flex Ramp Up/Down Requirement MWs in a look-back report process.

In an after the fact calculation, BANC will create a ratio for each EIM Participant of its EIM Load Forecast over the sum of all EIM Participant’s Load Forecasts. Thus, each EIM Participant will have a ratio which can be applied to the CAISO’s Flex Ramp Up/Down Requirement for the BANC/EIM Entity BAA to determine each Participant’s Requirement.

To calculate each EIM Participant’s Flex Up/Down Requirement MW:

1. Calculate each EIM Participant’s Hourly EIM Flex Ramp requirement load forecast ratio as:

$$BEP_FLX_REQ_RATIO_{HOURL, BEP} = BEP_LOAD_FORECAST_{HOURL, BEP} / BANC_LOAD_FORECAST_{HOURL}$$

WHERE:

BEP_LOAD_FORECAST_{HOURL, BEP} = The BEP’s ISO EIM Load Forecast which is in effect at T-40.

BANC_LOAD_FORECAST_{HOURL} = SUM [BEP_LOAD_FORECAST_{HOURL, BEP}]

NOTE: “BEP” = BANC EIM PARTICIPANT; and “HOURL” is the target hour.

2. Use each EIM Participant’s Hourly EIM Flex Ramp requirement load forecast ratio to allocate the CAISO’s total BANC Flex Up and Flex Down Requirement MWs for each hour.

$$BEP_FLX_UP_REQ_{HOURL, BEP} = [BEP_FLX_REQ_RATIO_{HOURL, BEP} * BANC_FLX_UP_REQ_{HOURL}]$$

$$BEP_FLX_DOWN_REQ_{HOURL, BEP} = BEP_FLX_REQ_RATIO_{HOURL, BEP} * BANC_FLX_DOWN_REQ_{HOURL}$$

WHERE:

BANC_FLX_UP_REQ_{HOURL} = The ISO’s BANC EIM Flex Ramp Up Requirement for hour at T-40 test as reported in the ISO CMRI Report: Flexible Ramp Requirements Inputs.

BANC_FLX_DOWN_REQ_{HOURL} = The ISO’s BANC EIM Flex Ramp Down Requirement for hour at T-40 test as reported in the ISO CMRI Report: Flexible Ramp Requirements Inputs.

After the fact EIM Participant Flex Ramp Supplier(s)

In each hour, any EIM Participant with excess Flex Ramp capacity will be deemed a BANC Flex Ramp “supplier” (Supplier) for the hour. After the fact, when there is an EIM Participant shown to be deficient Flex Ramp capacity, then all BANC Flex Ramp suppliers will be deemed to have sold a portion of their excess to the deficient EIM Participant.

Each Supplier’s excess Flex Ramp capacity will be divided by the total of all Suppliers’ excess Flex Ramp capacity to create a ratio for each Supplier.

Each Supplier will be deemed to have supplied their ratio of Flex Ramp Capacity MWs to the EIM Participants which were short of Flex Ramp capacity.

During the Grace Period, the BANC Flex Ramp capacity price will be tracked based on two indices set equal to the same-hour three-year average day-ahead price of [Regulation \(Up/Down\) and Spin](#) for the current month using prices published in [CAISO day-ahead market clearing price](#). During the Grace Period, the indices will be assessed for alignment to cost-causation principles and reviewed by the BANC EIM Committee, with the goal of having a recommendation for Commission approval by the end of the fourth month.

BANC Will Not Support Settlement of Pre-Purchase of BANC Flex Ramp Capacity

BANC has decided it will not formally support the Settlement of pre-purchased Flex Ramp Capacity. This does not preclude the EIM Participants from developing a bilaterally settled BANC Flex Ramp capacity product. BANC recognizes that the complexity and cost of tracking and settling pre-purchased BANC Flex Ramp capacity will be greater than the benefit of providing this service.

Attachment A

BANC EIM Flex Ramp Grace Period

This document provides an agreed-upon six-month “Grace Period” from the imposition of its own internal Flex Ramp costs on EIM Participants by the Balancing Authority of Northern California (BANC). This document serves as an attachment to the BANC Resource Sufficiency Test Approach or “RSTA” and is intended to be entirely consistent with that document. Any inconsistencies between this Attachment A and the RSTA shall be construed in favor of the RSTA.

Grace Period

No BANC-imposed Flex Ramp failure costs will be distributed directly to an Energy Imbalance Market (EIM) Participant during first six (6) months (i.e., March 25, 2021 to September 30, 2021), which will be the BANC EIM Phase 2 operations Grace Period, in accordance with the following:

1. Unless otherwise defined in this document, any terms of art used herein shall have the same meanings as used in the BANC EIM Business Practices (BP) and associated attachments, BANC EIM Participation Agreement, and the California Independent System Operator (CAISO)/Market Operator Tariff.
2. EIM Participants will make all reasonable efforts to provide maximum Flex Ramp capacity megawatts (MWs) for each hour.
3. EIM Participants will participate in after the fact analysis sessions; and support reasonable lessons learned process enhancements.
4. EIM Charges related to Flex Ramp assessed by the CAISO to the EIM Entity will be allocated to EIM Participants as defined in Attachment A to the BP (BANC EIM Settlement Allocation Manual).
5. The EIM Entity will monitor Flex Ramp outcomes and Resource Sufficiency (RS) issues daily via the CAISO-supported daily review sessions, and as-needed additional conference calls. Information will be disseminated to EIM Participants and/or EIM Committee in accordance with the following:
 - a. Reports to EIM Participants.

Report format will be defined prior to market start which will support this analysis and review.
 - b. Monitor for individual impacts.

Any EIM Participant may raise concerns to the EIM Committee regarding an issue that they believe has material impact on their utility

- c. Monitor for operational/reliability issues.

Bring impact issues or operational/reliability issues to the attention of the EIM Committee.

- i. A moving seven-day Flex Up Ramp Test or Flex Down Ramp Test pass rate of less than ninety-nine (99) percent shall trigger immediate notification of the EIM Committee.
- ii. A material impact that is brought to the attention of the EIM Committee will be evaluated to determine if there is a need to modify the Grace Period procedure. Any decision to modify the procedure will require a majority vote of the EIM Committee, with a requirement that the majority vote must include at least one “Flex Rich” entity and at least one “Flex Poor” entity.¹ Any EIM Participant may appeal a decision to the Commission by requesting that the General Manager bring the issue forward to the Commission for discussion and possible action.

- 6. Consistent with the RSTA, the EIM Committee shall:

- a. Monitor Flex Ramp results on a regular basis (at a minimum, formally at each monthly committee meeting):
 - i. Summary reports will be defined prior to market start, which EIM Committee members can receive via email on regular basis.
 - ii. The EIM Committee will be prepared to address RS issues coming from daily analysis/review.
- b. Meet, as needed, and develop the methodology to allocate Flex Ramp failure costs before such costs are distributed to the EIM Participants and prior to the end of the Grace Period. This allocation methodology will be approved by the Commission.

- 7. The Grace Period can be *terminated* by a recommendation of the EIM Committee to the BANC Commission, which will make the final decision on termination, when extraordinary impacts or operational/reliability issues are persistent; however, the EIM Committee must approve an alternative proposal prior to termination of the existing Grace Period procedure.

- a. Any recommendation to the Commission to terminate the Grace Period and to recommend an alternative will require a *majority vote* of the EIM Committee, with a requirement that the majority vote must include at least one Flex Rich entity and at least one Flex Poor entity.

¹ For purposes of this document, “Flex Rich” entities are defined as the Modesto Irrigation District and the Sacramento Municipal Utility District; “Flex Poor” entities are defined as the Cities of Redding and Roseville.

EIM Participants will continue to support on-going development of Flex Ramp capacity sources, strategies, products, or cost assessments during the six (6)-month Grace Period in accordance with this document and the RSTA.

APPROVAL DRAFT

**Balancing Authority of Northern California
Resolution 20-11-11**

**APPROVAL OF BALANCING AUTHORITY OF NORTHERN CALIFORNIA ENERGY
IMBALANCE MARKET RESOURCE SUFFICIENCY TEST APPROACH AND FLEX RAMP GRACE
PERIOD**

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, BANC serves as the Energy Imbalance Market (“EIM”) Entity for the BANC EIM footprint; and

WHEREAS, BANC EIM Phase 1 successfully commenced operating in April of 2019 with the Sacramento Municipal Utility District (“SMUD”) as the initial EIM participant within the BANC Balancing Authority Area; and

WHEREAS, subsequent to the operation of BANC EIM Phase 1, the Modesto Irrigation District, the City of Redding, the City of Roseville and the Western Area Power Administration – Sierra Nevada Region (“WAPA”) determined that they desired to participate in EIM along with SMUD, referred to as “BANC EIM Phase 2,” or “Phase 2”; and

WHEREAS, participation in the EIM, operated by the California Independent System Operator (CAISO), requires that BANC, as the EIM Entity, must pass certain hourly and sub-hourly Resource Sufficiency (“RS”) tests (“RS Tests”) conducted by the CAISO to ensure that participating Balancing Authority Areas do not lean on the EIM to serve their underlying load serving obligations; and

WHEREAS the RS Tests include, among them, a RS “Balancing Test” to ensure sufficient capacity to meet load and a RS flexibility test, or “Flex Test” to ensure sufficient upward and downward ramping capability by each EIM Entity to address forecast and resource variability, in the real time market; and

WHEREAS, the Balancing Test and the Flex Test have been incorporated into the “BANC Resource Sufficiency Test Approach” (“RSTA”) provided to the Commission; and

WHEREAS, failure of RS Tests can have economic consequences for EIM Participants which cannot be fully understood prior to actual EIM Phase 2 operations; and

WHEREAS, certain EIM Participants may have challenges meeting the RS Test, and particularly the Flex Test, under certain seasonal conditions; and

WHEREAS, the participating members of BANC and WAPA have collaborated via the EIM Committee to develop a proposed approach to meeting the CAISO’s EIM RS Tests, both as they relate to the Balancing Test and the Flex Test to address potential deficiencies; and

WHEREAS, as part of the Flex Test, the EIM Committee has developed the BANC EIM Flex Ramp Grace Period (“Grace Period”) proposal, which is incorporated as “Attachment A” to the RSTA, which provides that there will be no distribution of Flex Ramp failure costs for a 6-month period; and

WHEREAS, this Grace Period proposal has been developed to provide an interim solution while ongoing development of Flex capacity sources, strategies, products, and cost assessments are performed and a long-term solution is developed.

**Balancing Authority of Northern California
Resolution 20-11-11**

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

1. Approve the BANC Resource Sufficiency Test Approach and incorporated BANC EIM Flex Ramp Grace Period proposal; and
2. Direct the BANC General Manager to develop the methodology to allocate Flex Ramp failure costs before such costs are distributed to the EIM Participants and prior to the end of the Grace Period; and
3. Direct the BANC General Manager to bring this Flex Ramp failure cost allocation methodology back to the Commission for their approval.

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 18th day of November 2020, 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				

Dan Beans
Chair

Attest by: C. Anthony Braun
Secretary

BANC 2020/2021 Strategic Plan - Routine Initiatives DRAFT

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	
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 DRAFT

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	
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	
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	
14 High		Regionalization: ~Monitor CAISO GRC effort	Jim Shetler/BBSW	4th Qtr. 2021	
15 High		Coordinate with CA BAs on SB100 effort	Jim Shetler/BBSW	12/31/21	
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	

Balancing Authority of Northern California

Agenda Item 5C

1. **Resolution 20-11-12 Approval of 2021 Annual Budget for BANC.**
2. **Attachment A to Resolution 20-11-12 2021 BANC Budget – November 2020 DRAFT.**

**Balancing Authority of Northern California
Resolution 20-11-12**

APPROVAL OF 2021 ANNUAL BUDGET FOR BANC

WHEREAS, the Balancing Authority of Northern California (“BANC”) Joint Powers Agreement (“JPA”) Section 11.4 describes both the responsibilities and the non-delegable duties of the BANC Commission which include approving an annual budget and approving assessments to each Member; and

WHEREAS, JPA Section 12 provides that the BANC Commission may assess each Member for its respective Participation Percentage share of funds required to carry out BANC’s purposes as specified in the annual budget; and

WHEREAS, BANC Resolution 12-02-03 established a process whereby Member assessments shall be required no less than two times per year; and

WHEREAS, the General Manager worked together with staff to develop a draft budget that has been presented for Commission review during prior Commission meetings; and

WHEREAS, based on input and direction from the Commission, the General Manager has prepared a final version for consideration and possible adoption by the Commission.

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

1. Approve the 2021 Annual Budget for BANC in the form attached hereto as Attachment A.
2. Directs the BANC Treasurer to assess each BANC Member in accordance with Resolution 12-02-03.

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 18th day of November, 2020, 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				

Dan Beans
Chair

Attest by: C. Anthony Braun
Secretary

BANC 2021 Budget

November 2020 - DRAFT

1. Base Budget

- a. General Manager Expenses = **\$339,000**
 - i. Scope: General Manager retainer (@\$27,000/mo.) and expenses (@\$1,250/mo.)
 - ii. Assumptions: No increase in retainer from 2020 and maintain reduced travel expenses
- b. Legal Services (BBMS) = **\$540,000**
 - i. Assumptions: No increase in base legal services from 2020 revision, with the notation that additional legal services may be required based on the level of activity in Market Engagement
- c. NWPP Membership Payments = **\$100,000**
 - i. Scope: Covers NWPP charges to BANC as an NWPP member, including RSG, FRSG, and Executive Forum
- d. Resource Committee Support = **\$100,000**
 - i. Scope: Potential ongoing engagement in NWPP Resource Adequacy Project, potential consultant support for evaluating IRP recommendations and coordination with members, and potential consultant support for SB100 report engagement.
- e. Asset Valuation = **\$1,025,708**
 - i. Energy Management System
 - 1. Assumptions:
 - a. Amortized capital cost, excluding EIM module (BANC share) = \$517,238
 - b. Annual Siemens support cost (BANC share) = \$113,470
 - c. Revised to reflect latest capitalization amount for Siemens EMS upgrade (\$5,508,835) and annual support services (\$263,883) both excluding EIM module. Assumes capital investment is amortized over 5 years @ 3%/year. BANC share of EMS capital and support services costs is 43%.
 - 2. Total = \$630,708
 - ii. Energy Management Center/Backup Control Center
 - 1. Assumptions:

- a. Total estimated amount for EMC+BCC= \$~1,300,000/year
 - b. TOP/BA share is 76% = \$988,000
2. BANC share of TOP/BA= 40% = \$395,200

- f. Administrative Expenses = **\$9,400**
 - i. Annual Audit Fees = \$8,500
 - ii. Bank Charges = \$900

g. Sub-total = **\$2,114,308**

h. Contingency: **\$100,000**

Total = **\$2,214,308**

Member Breakdown Comparison of 2021 vs. 2020 Base Budgets (based upon 2019 NEL):

MEMBER ALLOCATION	2021	2020 - R2	2020 Original
SMUD (70.1%)	\$ 1,534,704.91	\$ 1,446,198.14	\$ 1,640,238.14
MID (16.2%)	\$ 354,667.90	\$ 346,419.76	\$ 392,899.76
ROSEVILLE (7.6%)	\$ 166,387.41	\$ 164,862.41	\$ 186,982.41
REDDING (4.8%)	\$ 105,086.78	\$ 104,343.30	\$ 118,343.30
SHASTA LAKE (1.3%)	\$ 28,461.00	\$ 25,042.39	\$ 28,402.39
Subtotal	\$ 2,189,308.00	\$ 2,086,866.00	\$ 2,366,866.00
TPUD (fixed)	\$ 25,000.00	\$ 25,000.00	\$ 25,000.00
TOTAL	\$ 2,214,308.00	\$ 2,111,866.00	\$ 2,391,866.00

2. Participation Agreement #1 (PA-1) – PC Services

a. Assumptions:

- i. SMUD to provide contract PC services to BANC
- ii. Total Base Cost to BANC = \$399,400
 - 1. Main PC evaluation labor = \$250,000
 - 2. \$35,000 for labor to perform an overview assessment of full BANC footprint
 - 3. Labor rate adjustment of 4.0% = \$11,400
 - 4. A \$3,000/year charge for GE PSLF Geomagnetic Disturbance (GMD) Tool.
 - 5. Cost of GMD monitor installed at one substation in accordance with NERC Standard TPL-007-2 for a one-time estimated charge of \$100,000.
- iii. WAPA-SNR does not participate, TPUD and Shasta Lake embedded within WAPA-SNR; all other members participate
- iv. Cost to be allocated based upon 50% to SMUD and 50% to remaining members prorated by share of generation/60kV and above buses among the remaining members:
 - 1. SMUD = (50%)
 - 2. MID = (30%)
 - 3. Redding = (9.5%)
 - 4. Roseville = (10.5%)

b. Estimated costs by member:

MEMBER	PA-1 ASSESMENT
SMUD (50%)	\$ 199,700.00
MID (30%)	\$ 119,820.00
REDDING (9.5%)	\$ 37,943.00
ROSEVILLE (10.5%)	\$ 41,937.00
TOTAL	\$ 399,400.00

3. Participation Agreement #2 (PA-2) – RC Funding

a. Assumptions

- i. BANC transitioned from Peak RC to RC West (CAISO) for RC services on 7/1/19 and will provide RC services going forward.
- ii. RC West Funding
 - 1. TPUD and Shasta Lake embedded within WAPA-SNR, which becomes a TOP Funding Party under CAISO RC West tariff
 - 2. MID and SMUD become TOP Funding Parties under CAISO tariff
 - 3. BANC pays the remaining amount allocated to the BA footprint per CAISO tariff for Redding and Roseville
 - 4. RC West 2021 charge-out rates = \$0.0267/MWH
 - 5. 2019 NEL for remaining BANC footprint:
 - a. Roseville = 1,182,626 MWH
 - b. Redding = 748,983 MWH

b. Estimated costs under PA-2 based upon RC West proposed rates for Roseville and Redding:

MEMBER	2019 NEL - MWH	2021 ASSESSMENT
ROSEVILLE	1,182,626	\$ 31,576.11
REDDING	748,983	\$ 19,997.85
TOTAL	1,931,609	\$ 51,573.96

4. Participation Agreement #3 (PA-3) – EIM Implementation (Phase 1) - **CLOSED**
5. Participation Agreement #4 (PA-4) – Extended Day-Ahead Market (EDAM) Evaluation
- a. Assumptions
 - i. BANC participates in the EDAM as an EIM/EDAM Entity
 - ii. All Participating Resources (SMUD, MID, WAPA-SNR, Roseville, and Redding) participate in effort. (NOTE: Shasta Lake loads assumed part of Redding load for this allocation). Cost allocation based upon 3-year rolling average as follows:
 1. SMUD – 64.3%
 2. MID – 14.6%
 3. WAPA-SNR – 8.6%
 4. Roseville – 6.9%
 5. Redding – 5.6%
 - iii. Formal CAISO stakeholder process completed by end of 2021
 - iv. CAISO tariff filings, FERC review process, and market implementation mid-2022 – late 2023
 - v. EDAM “go-live” no earlier than Spring 2024
 - b. Estimated costs for EDAM evaluation under PA-4 are initial estimates based upon discussions among the EIM entities, CAISO, and BANC staff, including BBSW support at fixed monthly fee of \$15,500/month and consultant support as noted.

IMPLEMENTATION CATEGORY	COST ESTIMATE	SMUD	MID	WAPA-SNR	ROSEVILLE	REDDING
Legal Support	\$ 186,000.00	\$ 119,598.00	\$ 27,156.00	\$ 15,996.00	\$ 12,834.00	\$ 10,416.00
Consultant Support						
~ Cost Eval. (Utilicast)	\$ 25,000.00	\$ 16,075.00	\$ 3,650.00	\$ 2,150.00	\$ 1,725.00	\$ 1,400.00
~ Update Ben. Anal.(Brattle)	\$ 20,000.00	\$ 12,860.00	\$ 2,920.00	\$ 1,720.00	\$ 1,380.00	\$ 1,120.00
~ Market Dev, Spt. (CES)	\$ 31,250.00	\$ 20,093.75	\$ 4,562.50	\$ 2,687.50	\$ 2,156.25	\$ 1,750.00
~ Total	\$ 76,250.00	\$ 49,028.75	\$ 11,132.50	\$ 6,557.50	\$ 5,261.25	\$ 4,270.00
Total Estimate	\$ 262,250.00	\$ 168,626.75	\$ 38,288.50	\$ 22,553.50	\$ 18,095.25	\$ 14,686.00
Contingency (~20%)	\$ 45,000.00	\$ 28,935.00	\$ 6,570.00	\$ 3,870.00	\$ 3,105.00	\$ 2,520.00
TOTAL for 2021	\$ 307,250.00	\$ 197,561.75	\$ 44,858.50	\$ 26,423.50	\$ 21,200.25	\$ 17,206.00

6. Participation Agreement #5 (PA-5) – EIM Participation
- a. Assumptions
 - i. Phase 1 (BANC/SMUD only) 1/1/2021 – 3/31/2021
 - ii. Phase 2 (BANC/SMUD/MID/Roseville/Redding/WAPA-SNR) 4/1/2021 – 12/31/2021
 - iii. Phase 1 costs allocated to SMUD only; Phase 2 costs allocated in accordance with 3-year rolling average NEL for all five participants as follows:
 - 1. SMUD – 64.3%
 - 2. MID – 14.6%
 - 3. WAPA-SNR – 8.6%
 - 4. Roseville – 6.9%
 - 5. Redding – 5.6%
 - b. Cost estimates based on EIM Services Agreement, and latest estimates, including winddown support from Utilicast from 5/1/2021 – 9/30/2021, software charges per contracts, and CES contract for support on CAISO EIM processes. Includes 3.5% adjustment for SMUD labor.
 - c. Allocation of TPUD load settlement charges assigned to SMUD/MID/Redding/Roseville per original agreement. Load based settlement charges assumed at \$25,000 for 9 months of EIM operation in 2021.

IMPLEMENTATION CATEGORY	TOTAL ESTIMATE	PHASE 1: 1/1-3/31	PHASE 2: 4/1-12/31	Participant Cost Allocations				
				SMUD	MID	WAPA-SNR	ROSEVILLE	REDDING
Personnel - EIM Desk (5)	\$1,691,969.00	\$ 422,992.25	\$ 1,268,976.75					
Personnel - Settlements (1.5)	\$ 629,396.00	\$ 157,349.00	\$ 472,047.00					
Personnel - Outage Mgmt (0.4)	\$ 135,358.00	\$ 33,839.50	\$ 101,518.50					
Personnel - Netwk Model (1)	\$ 285,534.00	\$ 71,383.50	\$ 214,150.50					
Personnel - Meter Data Mgmt (0.5)	\$ 42,267.00	\$ 10,566.75	\$ 31,700.25					
Personnel - SME/Oversight (0.4)	\$ 182,486.00	\$ 45,621.50	\$ 136,864.50					
Personnel - IT Support (0.25)	\$ 59,542.00	\$ 14,885.50	\$ 44,656.50					
Personnel Total (9.05)	\$3,026,552.00	\$ 756,638.00	\$ 2,269,914.00					
EIM Software Support								
- OATI	\$ 90,000.00	\$ -	\$ 90,000.00					
- Power Settlements	\$ 542,900.00	\$ -	\$ 442,900.00		\$ 50,000.00			\$ 50,000.00
- ITOA	\$ 20,000.00	\$ 5,000.00	\$ 15,000.00					
- WebEIM	\$ 40,000.00	\$ 10,000.00	\$ 30,000.00					
EIM Software Support Total	\$ 692,900.00	\$ 15,000.00	\$ 577,900.00					
EMS EIM Module								
- Amortized Capital	\$ 52,978.00	\$ 13,244.50	\$ 39,733.50					
- O&M Support	\$ 10,000.00	\$ 2,500.00	\$ 7,500.00					
EMS EIM Module Total	\$ 62,978.00	\$ 15,744.50	\$ 47,233.50					
EIM OPERATOR TOTAL	\$3,782,430.00	\$ 787,382.50	\$ 2,895,047.50	\$2,648,898.04	\$472,676.94	\$248,974.09	\$199,758.28	\$212,122.66
Miscellaneous Support								
- Legal Support	\$ 30,000.00	\$ 7,500.00	\$ 22,500.00					
- EIM Stakeholder Support (CES)	\$ 18,750.00	\$ -	\$ 18,750.00					
- Utilicast Ramp Down	\$ 140,000.00	\$ -	\$ 140,000.00					
Miscellaneous Support Total	\$ 188,750.00	\$ 7,500.00	\$ 181,250.00					
CAISO Charges								
- Fees	\$ 250,000.00	\$ 62,500.00	\$ 187,500.00					
- Uplifts	\$ 500,000.00	\$ 125,000.00	\$ 375,000.00					
CAISO Charges Total	\$ 750,000.00	\$ 187,500.00	\$ 562,500.00					
TOTAL EIM Operations for 2021	\$4,721,180.00	\$ 982,382.50	\$ 3,638,797.50	\$3,322,129.29	\$581,264.44	\$312,936.59	\$251,077.03	\$253,772.66
TPUD Load Charges	\$ 25,000.00	\$ -	\$ 25,000.00	\$ 17,600.000	\$ 4,000.000	\$ -	\$ 1,900.000	\$ 1,500.000
TOTAL EIM FOR 2021	\$4,746,180.00	\$ 982,382.50	\$ 3,663,797.50	\$3,339,729.29	\$585,264.44	\$312,936.59	\$252,977.03	\$255,272.66

7. Participation Agreement #6 (PA-6) – EIM Phase 2 Preparation (Revision 1 – 5/15/19) – **CLOSED**

8. Participation Agreement # 7 (PA-7) – EIM Phase 2 Implementation

a. Assumptions:

- i. MID, Redding, Roseville, and WAPA-SNR/Reclamation are Phase 2 BANC EIM Participants as Participating Resources. BANC will be the EIM Entity. Shasta Lake loads within Redding.
- ii. EIM Phase 2 Implementation with CAISO will complete with go-live no later than April 1, 2021.
- iii. Cost estimates are based upon GridSME report, EIM Phase 2 Gap Analyses, and current best estimates. Includes Utilicast costs, SMUD PM support, senior settlements position, final software estimates, and final CAISO implementation fee. Contingency at 5%.
- iv. Costs will be shared among the four participants based upon a 3-year rolling average NEL as follows:
 1. MID: 41.0%
 2. WAPA-SNR: 24.1%
 3. Roseville: 19.4%
 4. Redding: 15.5%

IMPLEMENTATION CATEGORY	COST ESTIMATE	MID	REDDING	ROSE.	WAPA
Utilicast Support	\$ 174,280.00	\$ 71,454.80	\$ 27,013.40	\$ 33,810.32	\$ 42,001.48
Software Upgrades	\$ 260,000.00	\$ 106,600.00	\$ 40,300.00	\$ 50,440.00	\$ 62,660.00
SMUD PM & Settle. Support	\$ 200,200.00	\$ 82,082.00	\$ 31,031.00	\$ 38,838.80	\$ 48,248.20
Legal Support	\$ 33,000.00	\$ 13,530.00	\$ 5,115.00	\$ 6,402.00	\$ 7,953.00
CAISO Implementation Fees	\$ 35,000.00	\$ 14,350.00	\$ 5,425.00	\$ 6,790.00	\$ 8,435.00
Total Estimate	\$ 702,480.00	\$ 288,016.80	\$ 108,884.40	\$ 136,281.12	\$ 169,297.68
Contingency @~5%	\$ 35,124.00	\$ 14,400.84	\$ 5,444.22	\$ 6,814.06	\$ 8,464.88
TOTAL for 2021	\$ 737,604.00	\$ 302,417.64	\$ 114,328.62	\$ 143,095.18	\$ 177,762.56

9. 2021 BANC Member Assessments

MEMBER	BASE BUDGET	PA-1: PA/PC	PA-2: RC West	PA-4: EDAM	PA-5: EIM Part.	PA-7: EIM P2 Imp	2021 TOTAL	2020R2 TOTAL
SMUD	\$1,534,704.91	\$199,700.00	\$ -	\$197,561.75	\$3,339,729.29	\$ -	\$5,271,695.95	\$5,162,623.64
MID	\$ 354,667.90	\$119,820.00	\$ -	\$ 44,858.50	\$ 585,264.44	\$ 302,417.64	\$1,407,028.48	\$1,469,199.13
ROSEVILLE	\$ 166,387.41	\$ 41,937.00	\$ 31,576.11	\$ 21,200.25	\$ 252,977.03	\$ 143,095.18	\$ 657,172.98	\$ 735,044.60
REDDING	\$ 105,086.78	\$ 37,943.00	\$ 19,997.85	\$ 17,206.00	\$ 255,272.66	\$ 114,328.62	\$ 549,834.91	\$ 476,573.39
SHASTA LAKE	\$ 28,461.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,461.00	\$ 25,042.39
TPUD	\$ 25,000.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000.00	\$ 25,000.00
BANC TOTAL	\$2,214,308.00	\$399,400.00	\$ 51,573.96	\$280,826.50	\$4,433,243.42	\$ 559,841.44	\$7,939,193.32	\$7,893,483.15
WASN	\$ -	\$ -	\$ -	\$ 26,423.50	\$ 312,936.59	\$ 177,762.56	\$ 517,122.65	\$ 781,622.31
GRAND TOTAL	\$2,214,308.00	\$399,400.00	\$ 51,573.96	\$307,250.00	\$4,746,180.01	\$ 737,604.00	\$8,456,315.97	\$8,675,105.46

Balancing Authority of Northern California

Agenda Item 5D

1. **Resolution 20-11-10 *Resolution Setting the Regular Meeting Dates for 2021.***
2. **Attachment A to Resolution 20-11-10 - *Time and Place of Regular Meetings for 2021.***

**Balancing Authority of Northern California
Resolution 20-11-10**

RESOLUTION SETTING THE REGULAR MEETING DATES FOR 2021

WHEREAS, 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, JPA Section 11.2 provides that the BANC Commission may provide for the holding of regular meetings at intervals more frequently than annually; and

WHEREAS, JPA Section 11.2 requires that the date, hour, and place of each regular meeting shall be fixed by resolution of the Commission.

NOW, THEREFORE, BE IT RESOLVED that the Commissioners of the Balancing Authority of Northern California hereby approve the 2021 Regular Meeting Schedule, attached hereto as Attachment A.

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 18th day of November, 2020, 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				

Dan Beans
Chair

Attest by: C. Anthony Braun
Secretary

Time and Place of Regular Meetings for 2021

Unless shown otherwise, the Regular Commission meetings shall occur on the fourth Wednesday of each month, at 2:00 p.m.

As shall be specified in a notice issued pursuant to the Ralph M. Brown Act of the California Government Code, the meetings listed below will be held in Sacramento, California at 555 Capitol Mall, 3rd Floor Board Room.*

1. January 27
2. February 24
3. March 24
4. April 28
5. May 26
6. June 23
7. July 28
8. August 25
9. October 27
10. December 15

The meetings on the dates listed below will be held in Folsom, California at 35 Iron Point Circle, Suite 225.*

1. September 22
2. November 17

The Commission Secretary shall have discretion to adjourn and to modify time and location of Commission meetings consistent with posting requirements of the Ralph M. Brown Act of the California Government Code.

* Until further notice, all meetings will be conducted as telephonic/remote meetings in accordance with State of CA Executive Orders related to COVID-19, including Executive Order N-29-20, which provides specific guidance related to public meetings.