

Balancing Authority of Northern California

Regular Meeting of the Commissioners of BANC

2:00 P.M.

Thursday, October 3, 2019

915 L Street, Suite 1480

Sacramento, CA 95814

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 **October 3, 2019 at 2:00 p.m.**, at **915 L Street, Suite 1480, Sacramento, CA 95814.**

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 and Strategic Planning Session held on August 23, 2019.
 - B. BANC Operator Report (August).
 - C. Compliance Officer Report (September).
 - D. PC Committee Chair Report (September).
 - E. General Manager’s Report and Strategic Initiatives Update.
- 5 Regular Agenda Items – Discussion and Possible Action.**
 - A. EIM Phase 2/EDAM Update
 - i. Consider and Possibly Approve Resolution 19-10-01 *Authorization of the General Manager to Execute the BANC EIM Phase 2 Implementation Agreement with the California Independent System Operator.*
 - B. PSPS Reciprocity Proposal.
 - i. Consider and Possibly Approve Resolution 19-10-04 *Approval to Proceed with Development of PSPS Protocols.*
 - C. SB-100 Approach.
 - D. Consider and Possibly Approve Resolution 19-10-02 *Approval of 2019 Annual Budget for BANC.*
 - E. Consider and Possibly Approve Resolution 19-10-03 *Approval of Amended Management Services Agreement Between BANC and Adirondack Power Consulting, LLC.*
- 6 Closed Session:** Conference with legal counsel in anticipation of litigation pursuant to subdivision (c) of Cal. Gov’t Code § 54956.9; one case.
- 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, 915 L Street, Suite 1480, Sacramento, CA 95814 or to kirkegaard@braunlegal.com.

Balancing Authority of Northern California

Consent Agenda Items

- A. Minutes of the August 21, 2019 BANC Regular Meeting and Strategic Planning Session.**
- B. BANC Operator Reports (August).**
- C. Compliance Officer Reports (September).**
- D. PC Committee Chair Reports (September).**
- E. General Manager Report and Strategic Initiatives Update.**

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

August 21, 2019

On this date, a Regular Meeting and Strategic Planning Session of the Commissioners of the Balancing Authority of Northern California (BANC) was held in the Tower Room at Scott's Seafood on the River, 4800 Riverside Blvd, Sacramento, CA 95822.

Representatives Present:

Member Agency	Commissioner
Modesto Irrigation District	Greg Salyer
City of Redding	Dan Beans, Chair
City of Roseville	Michelle Bertolino
Sacramento Municipal Utility District	Paul Lau
City of Shasta Lake	Absent
Trinity Public Utilities District	Paul Hauser

Agency	Liaison
Western Area Power Administration	Sonja Anderson, John Butler, Arun Sethi

1. Call to Order: Chair Beans called the meeting to order at 1:02 p.m.
2. Introduction and Logistics: Mr. Shetler welcomed the group.
3. Matters Subsequent to Posting the Agenda: None.
4. Public Comment: Chair Beans invited comments from the public and none were given.
5. Consent Agenda: Mr. Salyer moved, Mr. Lau seconded, and the participating Commissioners unanimously approved the Consent Agenda items comprised of: (A) Minutes of the Regular Commission Meeting held on July 24, 2019. (B) BANC Operator Report for July; (C) Compliance Officer Report for August; (D) PC Committee Chair Report for August; and (E) General Manager's Report and Strategic Initiatives Update.
6. BANC Strategic Planning Session – "Balancing Reliability, Markets, and Policy":
 - A. Mr. Salyer moved, Ms. Bertolino seconded, and a roll call vote was taken. The City of Shasta Lake was absent, Trinity Public Utilities District (TPUD) abstained, and all other Commissioners voted in favor of Resolution 19-08-13 *Approval of First Amended and Restated EIM Participation Agreement, Phase 2 Participation Percentages, and Phase 2 Model*.
 - B. Ms. Bertolino moved, Mr. Salyer seconded, and a roll call vote was taken. The City of Shasta Lake was absent, TPUD abstained, and all other Commissioners voted in favor

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

of Resolution 19-08-09 *Acceptance of Proposed EIM Phase 2 Implementation Budget Estimate*.

- C. Mr. Salyer moved, Ms. Bertolino seconded, and a roll call vote was taken. The City of Shasta Lake was absent, and all other Commissioners voted in favor of Resolution 19-08-10 *Approval of Revised 2019 Annual Budget for BANC*.
 - D. Mr. Hauser moved, Mr. Salyer seconded, and a roll call vote was taken. The City of Shasta Lake was absent, and all other Commissioners voted in favor of Resolution 19-08-14 *Authorization of the General Manager to Enter into Negotiations for a BANC EIM Phase 2 Implementation Agreement with the California Independent System Operator*.
 - E. Ms. Bertolino moved, Mr. Salyer seconded, and a roll call vote was taken. The City of Shasta Lake was absent, TPUD abstained, and all other Commissioners voted in favor of Resolution 19-08-11 *Authorization of Amendment to Utilicast Contract for Services Related to Phase 2 of Energy Imbalance Market to Include Task 3*.
 - F. Mr. Salyer moved, Ms. Bertolino seconded, and a roll call vote was taken. The City of Shasta Lake was absent, TPUD abstained, and all other Commissioners voted in favor of Consider and Possibly Approve Resolution 19-08-12 *Authorization of Additional Amendments to Exhibit C of the Energy Imbalance Market Phase 2 BANC Cost Sharing Agreement with WAPA-SNR*.
6. Closed Session:
- A. The Commission retired to closed session for conference with legal counsel in anticipation of litigation pursuant to subdivision (c) of Cal. Gov't Code § 54956.9; one case. Performance evaluation of a public employee: General Manager pursuant to subdivision € of Cal. Gov't Code § 54957.

After returning to open session, Mr. Braun reported that no action was taken in closed session.

The meeting was adjourned at 4:10 p.m.

Minutes approved on October 3, 2019.

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 August 2019

Operations:

- BA Operations: Normal
- Significant BA Issues: None
- NWPP Reserve Energy Activations
 - 1 contingency requiring activation of NWPP
 - 240 MW average generation lost
 - 240 MW maximum generation lost
 - Generating unit(s) and date(s) affected: Sutter, 8/5/19
 - All recoveries within 6 minutes
- USF
 - 3 of 31 days with instances of USF mitigation procedure utilized
 - 1 day on Path 66
 - No operational impact on BANC
- BAAL Operation:
 - Data under evaluation

Monthly Notes:

-

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

September 2019

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.
- BANC is currently being audited by WECC on the NERC CIP and O&P standards applicable to the BA (Balancing Authority) and PC (Planning Coordinator) functions. This Audit will be completed on September 13, 2019.
- BANC's Q3, 2019 self-log will be submitted to WECC by 10/31/19. At present, there are no potential instances of non-compliance to report.

BANC MCRC:

- The next BANC MCRC teleconference is scheduled to be held at 10:00 AM on Monday, September 23, 2019.

PC Committee Chair Report

BANC Commission Meeting

September 2019

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 Audit Results:

- WECC preliminary report for this year's BANC and SMUD Combo Audit showed no findings for following all audited PC-related NERC reliability standards for BANC/SMUD:
 - MOD-032, Data for Power System Modeling & Analysis, R2
 - MOD-033, Steady State and Dynamic System Model Validation, R1
 - PRC-023, Transmission Relay Loadability, R6
 - PRC-026, Relay Performance During Stable Power Swings, R1
 - TPL-001, Transmission System Planning Performance Requirements, R2
- Audit Recommendation for "TPL-001, Transmission System Planning Performance Requirements, R2" - The Redding Electric Utility (REU) and the Modesto Irrigation District (MID) short circuit study results should include summary tables that compare the fault duty at each bus expressed as a percentage of the rating of the interrupting devices at each bus.

BANC PC Committee Issues:

- SMUD staff continues to work toward demonstrating compliance with PC-related NERC reliability standards.
 - TPL-001-4 (TPL) – A final version of the report was completed on September 20th, 2019. The finalized report incorporated the WECC auditor's recommendation on the short circuit study results. The Report will be sent out to neighboring utilities after it is accepted by BANC commissioners. The TP reports for City of Redding and Roseville Electric will be sent out on September 27th, 2019.
 - FAC-002-2 – Staff decided to perform the system impact study for the new Franklin 230 kV substation in the SMUD area although the Franklin 230 kV Substation Project has been included in the SMUD annual assessment since year 2008. The FAC-002 study report for the Franklin 230 kV substation has been finalized on September 20th, 2019, and the Report will be posted at the BANC website along with the Campbell Soup Power Plant Upgrade Project Report.
 - PRC-023-3 Transmission Relay Loadability – The report has been finalized on September 25th, 2019.

- PRC-026-1 Relay Performance During Stable Power Swings – Staff started to perform the study, which is due by the end of year.
- MOD-033-1 Staff will start steady state analysis the week of September 23rd.

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

	PC Standard	Estimated % Complete	Notes
1	FAC-002-2 Interconnection Studies	95%	Campbell Soup Power Plant Upgrade Project and Franklin 230 kV Substation Project Reports were finalized. Write RSAW at end of year.
2	FAC-010-3 SOL Methodology for Planning Horizon	95%	Write RSAW at end of year.
3	FAC-013-2 Transfer Capability for Near-Term Planning Horizon	95%	Final Report was sent out on 5/10/2019. Write RSAW at end of year.
4	FAC-014-2 Establish and Communicate SOLs	95%	Final Report was sent out on 8/1/2019. Write RSAW at end of year.
5	IRO-017-1 Outage Coordination	0%	Email TPL-001-4 Report.
6	MOD-031-2 Demand and Energy Data	0%	2020 cycle starts in November.
7	MOD-032-1 Data for Power System Modeling & Analysis	90%	Ongoing activity. Write RSAW at end of year.
8	MOD-033-1 System Model Validation	80%	BANC system validated for 7/01/2019 deadline for R1.2. R1.1 due 10/01/2019.
9	PRC-006-2 Underfrequency Load Shedding	85%	Support WECC study. Write RSAW at end of year.
10	PRC-010-2 Undervoltage Load Shedding	85%	Study/draft report will be done by end of year.
11	PRC-023-3 Transmission Relay Loadability	95%	Final Report on 9/25/2019. Write RSAW at the end of year.
12	PRC-026-1 Relay Performance During Stable Power Swings	20%	Started study.
13	TPL-001-4 Transmission System Planning Performance	95%	Final Report on 9/20/2019. Write RSAW at the end of year.
14	TPL-007-1 GMD Transmission Performance	95%	Write RSAW at end of year.

GM Report

BANC Commission Meeting

September 18, 2019

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 that we will all need to sign for EIM operations, 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. In addition we have worked with the other three entities to agree upon the joint funding of BBSW to monitor CAISO interfaces for us.

POU Western Markets Initiative

BANC continues to participate in this effort, which is being coordinated by APPA. The group continues to evaluate how best to represent the POUs in the ever-changing power markets in the West. An update call was held on July 29, 2019. The calls are mainly used for updates on market developments and we also discussed possible comments on the CAISO governance review process. A face-to-face meeting was held on September 9, 2019, in Sacramento. APPA has suggested that this will be the last in-person meeting and any future needed updates will be by conference call.

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. SMUD provided a benefits update from their first quarter of operations at the July Commission meeting. We are working with SMUD to provide the benefits update presentation to a broader audience of BANC members.

The BANC EIM Phase 2 effort is now official with the Commission's approvals on August 21, 2019. The Phase 2 participants have obtained their necessary internal approvals and the EIM Phase 2 Participation Agreement is being executed. BANC staff met with the CAISO the first week of September to discuss the BANC Phase 2 EIM Implementation Agreement. It is expected that developing the Phase 2 Implementation Agreement should require minimal changes to the Phase 1 agreement. Staff intends to bring the Phase 2 EIM Implementation Agreement to the September Commission meeting for approval. Staff is coordinating with the Phase 2 participants and Utilicast to move forward with Phase 2 implementation and not waiting for approval of the implementation agreement.

EDAM Participation

The EDAM Feasibility Assessment is essentially complete. The EIM entities and CAISO have initiated outreach to stakeholders in the West. The CAISO intends to inform its Board at its September meeting that it will initiate a public stakeholder process for developing the detailed design of the EDAM. It is expected that the CAISO will use late-2019 to mid-2020 to conduct the formal stakeholder process followed by tariff filings at FERC. An EDAM go-live, if there is sufficient interest by EIM entities to participate, is currently estimated to be early 2022 timeframe. In accordance with the BANC plan for this effort, we have executed contracts with the consultants for some additional BANC/SMUD focused work on the feasibility assessment.

WAPA:

Market Engagement

We have included WAPA-SNR in our EIM Phase 2 planning efforts. WAPA-SNR did announce its intent to join EIM as part of the BANC EIM and has executed the BANC EIM Participation Agreement.

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. There is a possibility that the DWR may also consider bringing some of the State Water Project in to the BANC through participation in the SLTP. We are participating in follow-up meetings with WAPA-SNR, DWR, and the State Water Contractors on this project. In December the State Water Contractors board voted to recommend that DWR participate in the SLTP with at least a 50 MW share. A follow-up meeting was held in mid-March. In addition, the SLTP developers (DATC) have completed the open season on the additional capacity for the project. It is our understanding that DATC is in discussions with interested parties regarding participation in the SLTP. We will keep the Commission informed as more information becomes available.

Peak Reliability:

RC Services Alternatives

BANC provided its certification of readiness for commencement of RC West operations and RC West went live for the CA footprint successfully on July 1, 2019. The next phase is the BC Hydro RC go-live, which was completed on September 3, 2019. RC West is in the shadow operations for its Phase 2 transition for the rest of its RC customers in early November. SPP is scheduled to go live as an RC for its western customers in early December.

Based upon the current RC transition schedule, it is anticipated that Peak will cease operations as a registered RC on or about December 4, 2019. It is anticipated that full closure of Peak will be completed during the first half of 2020.

Peak MAC and Board Meetings

The next Peak MAC and Board meetings are scheduled for September 17 as a webinar. It is currently anticipated that the last Peak meetings will be held on November 12, 2019, again as a webinar.

WECC:

Electricity/Natural Gas Reliability Interface

WECC initiated its natural gas/electricity interface study in September 2017. WECC continues its outreach on this effort and is planning some next steps on industry coordination regarding follow-up actions.

WECC Board Meetings

The last WECC MAC and Board meetings were on September 10-11 in Seattle, which was also the WECC Annual Meeting. I attended as the BANC representative.

RC Services for the West

WECC and NERC are focused on the RC transition in the West and view it as a major reliability issue for the coming year. WECC/NERC are gearing up for the certification effort for the new RCs. They have determined that Peak will not require a formal recertification on each of the four RC transitions in 2019. WECC has posted a map on its website that shows the basic boundaries of the future four RC's in the Western Interconnection in 2019. WECC also held an RC Forum webinar on July 26, which was supported by the RC Transition Coordination Group and will hold another RC Forum on September 18, 2019. The generation-only RC (GridForce) has announced plans for RC West (CAISO) to provide initial RC services for them starting this fall. They are still evaluating whether to become a separate RC at a later date.

BANC/SMUD NERC/WECC Audit

Our triennial audit for NERC standards' compliance was held from 9/3-13/19. BANC worked with SMUD to coordinate this effort. Preliminary results of the audit will be provided, to the extent available, at the September Commission meeting.

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 recent announcement that the project will be downsized from two to one tunnel, CDWR announced that it will be withdrawing the current applications and submitting revised environmental documentation. We expect at least a 2-3 year delay in any start to the project.

SB100 Implementation

As part of SB100, the CPUC, CEC, and CARB are required to collaborate with the California BAs to develop a quadrennial report on the status of achieving the goals of SB100. The three agencies held a kick-off meeting on September 5, 2019, to launch the effort to develop the first report that is due January 1, 2021. Noticeably absent from the kick-off meeting was any mention regarding how the three agencies would be collaborating with the BAs. This was recognized at the meeting and a commitment was made to develop a collaboration process. CMUA is working with the four POU BAs to coordinate positions and responses. In addition, we have done outreach to the CAISO to determine if there is benefit to all five BAs coordinating on this effort.

Strategic Initiatives:

An update of the 2018/2019 Strategic Initiatives is attached to this report.

BANC 2018/2019 Strategic Plan - Routine Initiatives - September 2019 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	4th Qtr. 2019	
3 Low		Organizational Issues: ~ Develop BANC procedures & processes as appropriate	Jim Shetler/BBSW	4th Qtr. 2019	This will be undertaken as part of EIM Phase 2
4 Medium	OUTREACH	Engage in industry forums (WECC, Peak, NWPPA, etc.)	Jim Shetler	Ongoing	Continue attending Peak & WECC Board mtgs, WEIL, & NWPP Exec. Forum
5 Medium		Coordinate with other POU BAs (Ca and regionally)	Jim Shetler	Ongoing	Coordinating with SCL, SRP, LADWP, & TID on EIM
6 Medium		Outreach to regulatory and legislative bodies on key issues	Jim Shetler/BBSW	Ongoing as Necessary	Attend CREPC/WIRAB Mtg 4/17-18/19
7 Medium	ASSETS	Evaluate joint dispatch options	Resource Committee	4th Qtr. 2019	Based upon current EIM Phase 2 this has been put on hold.
8 Low	MEMBER SERVICES	Identify and outreach to potential new BANC members	Jim Shetler	Ongoing	Follow-on discussions with TID suspended Holding discussions with WAPA-SNR

BANC 2018/2019 Strategic Plan - Routine Initiatives - September 2019 Update

No./Priority	Focus Area	Initiative	Responsibility	Target Due Date	Status	
9 High	INDEPENDENCE	Manage implementation of EIM Phase 1 participation effort	Jim Shetler/SMUD	4/3/19	COMPLETE Go-live 4/3/19	
10 High		Planning efforts for possible EIM Phase 2 ~ Gap analysis by Utilicast ~ Develop BANC processes ~ Finalize Phase 2 processes ~ Phase 2 EIM Impl. Agrmt.	Jim Shetler Jim Shetler/BBSW Jim S./BBSW/Mark W. Jim Shetler/BBSW	10/1/19 7/1/19 10/1/19 12/31/18 10/1/19	Initiated Phase 2 Effort 8/21/19 Decision Approved Reports finalized Processes in Phase 2 Finalized w/ ISO/Entities Final and being executed	
11 High		EDAM Phase 1 evaluation ~ Feasibility Assessment ~ CAISO Stakeholder Process	Jim Shetler/BBSW Jim Shetler/BBSW	2nd Qtr. 2019 4th Qtr. 2019	FA effort complete Outreach initiated	
12 Medium		OUTREACH	Evaluate opportunities to engage other entities in market development	Jim Shetler	4th Qtr. 2017	~ Continue coordination w/ LA, SCL, SRP ~TID discussions on hold
13 Medium	Regional Policy Issues: Monitor/weigh-in where appropriate		Jim Shetler/Commission	Ongoing	Engaged in EIM GRC issue	
14 High	Regionalization: ~Monitor CAISO governance ~EDAM discussions		Jim Shetler/BBSW Jim Shetler/BBSW	Ongoing	Reviewing EIM Gov. Prop. Active participation	
15 High	Transition of RC Services ~Transfer from Peak to CAISO ~Coordinate Peak Wind Down to support transition		Jim Shetler Jim Shetler	7/1/19 12/31/19	COMPLETE 7/1/19 Participating in RCTCG	
16 Medium	ASSETS	2018 IRP Review Issues ~SMUD UARP Capabilities ~WAPA/BOR CVP Capabilities ~Coordination w/ CAISO/TID ~Discuss DWR capabilities ~Coordinate on next IRPs	Jim S./Res. Com./SMUD Jim S./Res. Com./WAPA Jim S./Res. Com. Jim S./Res. Com. Jim S./Res. Com.	12/31/19 12/31/19 12/31/19 12/31/19 12/31/19	Discussions initiated Discussions initiated	
17 Medium		MEMBER SERVICES	Evaluate TP services for Redding & Roseville	Jim Shetler/J. Gillette	12/31/18	Direct between SMUD and Redding/Roseville

Balancing Authority of Northern California

Agenda Item 5A

1. **Resolution 19-10-01 Authorization of the General Manager to Execute the BANC EIM Phase 2 Implementation Agreement with the California Independent System Operator.**
2. **Energy Imbalance Market Implementation Agreement.**

Braun Blaising Smith Wynne, P.C.

Attorneys at Law

9/24/2019

To: BANC Commission
From: BANC Counsel
RE: Authorization of the General Manager to Execute the BANC EIM Phase 2 Implementation Agreement with the California Independent System Operator

On February 22, 2017, the Commission approved the Phase 1 Energy Imbalance Market (“EIM”) Implementation Agreement (“IA”) between the Balancing Authority of Northern California (“BANC”) and the California Independent System Operator (“CAISO”) by Resolution 17-02-02 for BANC EIM Phase 1 – wherein the Sacramento Municipal Utility District was the sole BANC EIM participant. This agreement was subsequently approved by the Federal Energy Regulatory Commission (“FERC”)¹ and formed the basis for the BANC Phase 1 EIM implementation project.

On August 21, 2019, the Commission approved BANC to proceed to EIM Phase 2, with expanded EIM participation within the BANC footprint to also include the Cities of Redding and Roseville, along with the Modesto Irrigation District and the Western Area Power Administration – Sierra Nevada Region. In furtherance of Phase 2, the Commission also authorized the General Manager to negotiate a new, BANC EIM Phase 2 IA with the CAISO. This new IA, as was the case with the existing, BANC EIM Phase 1 IA, will be filed by the CAISO for approval by FERC, since it is not a pro forma agreement.

The Phase 2 EIM IA describes the implementation project scope, milestones and costs associated with proceeding with the second phase of EIM within the BANC footprint.² The implementation plan scope and milestones are found in Exhibit A of the IA and are provided as “Attachment 1” to this memorandum for your convenience. For Phase 1, which was paid exclusively by SMUD, the implementation cost assessed by the CAISO was \$350,000, and was based upon a formula which looks at the overall fixed costs the CAISO incurred to establish the EIM infrastructure (around \$19 million), divided by the reported load of all of the EIM-eligible Balancing Authorities in the Western Electricity Coordinating Council (“WECC”). That load-based determinant is multiplied against the peak load reported to WECC by the EIM Entity to come up with an entity-specific charge. That same formula was applied for BANC EIM Phase 2 participants and is \$205,000.

We respectfully request that the Commission authorize the General Manager to execute the BANC EIM Phase 2 IA in substantially final form to that provided to the Commission.

¹ *California Independent System Operator Corp.*, FERC Docket No. ER18-2360-000, approved by Letter Order, October 18, 2018.

² When we speak of costs, these are the costs incurred by the CAISO in creating, expanding and managing the CAISO EIM platform to accommodate BANC and other EIM Entities.

Attachment 1

EXHIBIT A: PROJECT SCOPE AND SCHEDULE

The Project Phase 2 consists of the activities and delivery dates identified in this Exhibit A, implemented in accordance with the Agreement. The Parties have included a schedule for the Implementation Date to coordinate their efforts required for completion of the Project Phase 2 on a milestone track.

The Parties understand that input received from stakeholders during the course of implementing the Project Phase 2, conditions imposed or questions raised in the regulatory approval process, and the activities of the Parties in implementing the Project Phase 2 may cause the Parties to determine that changes in the Project Phase 2 are necessary or desirable. Accordingly, this Exhibit A may be modified in accordance with Section 3(c) of the Agreement.

Each Party is responsible for performing a variety of tasks necessary to achieve the milestones on the scheduled dates specified in the table below (“Project Phase 2 Delivery Dates”) and shall plan accordingly. The Parties shall communicate and coordinate as provided in the Agreement to support the planning and execution to complete the Project Phase 2.

Project Phase 2 Scope and Milestones	Project Phase 2 Delivery Dates supporting April 2021
Detailed Project Phase 2 Management Plan – The Parties will develop and initiate a final project management plan that describes specific project tasks each Party must perform, delivery dates, project team members, meeting requirements, and a process for approving changes to support completion of the Project Phase 2.	October-November 2019
<ul style="list-style-type: none">• Milestone 1 – This milestone is completed when the Agreement has been made effective in accordance with Section 1 of the Agreement.	December 2019
Full Network Model Expansion – Full Network Model expansion for BANC and EMS/SCADA, including, proof of concept of export/import of EMS data; complete model into the ISO test environment; complete validation for all SCADA points from BANC; testing of the new market model; and validation of the Outage and State Estimator applications.	July 2020

<ul style="list-style-type: none"> • Milestone 2 - This milestone is completed upon modeling BANC into the ISO Full Network Model through the EMS which will be deployed into a non-production test environment using the ISO's network and resource modeling process. 	July 2020
<p>System Implementation and Connectivity Testing – System requirements and software design, the execution of necessary software vendor contracts, development of Market network model including BANC, allow BANC to connect to a non-production test system.</p>	August 2020
<ul style="list-style-type: none"> • Milestone 3 - ISO to promote market network model including BANC area to non-production system and allow BANC to connect and exchange data in advance of Market Simulation. 	August 2020
<p>Construction, Testing and Training in Preparation for Market Simulation - This task includes IT infrastructure upgrades, security testing, training, Day-in-life simulation, and functional testing.</p>	August-December 2020
<ul style="list-style-type: none"> • Milestone 4a – Start of Connectivity to ISO Testing. 	August 2020
<ul style="list-style-type: none"> • Milestone 4b – Interface testing with minimum data requirements and functional integration testing. ISO will make the test environment available for BANC connectivity testing prior to the delivery date assuming BANC has provided all requisite data and non-production system availability does not conflict with ISO production system Spring Release schedule. 	September 2020
<ul style="list-style-type: none"> • Milestone 4c –Begin ‘Day in the Life’ scenario testing 	October 2020
<ul style="list-style-type: none"> • Milestone 4d – Begin Structured Market simulation 	December 2020
<p>Activate Parallel Operations - Beginning February 1, 2021, the ISO will activate a parallel operation environment to practice production grade systems integration as well as market processes and operating procedures in anticipation of the impending BANC activation as an EIM Entity and to confirm compliance with the EIM readiness criteria set forth in the ISO tariff.</p>	February 2021

<ul style="list-style-type: none"> • Milestone 5 – Start of parallel operations 	<p>February 1, 2021</p>
<p>System Deployment and Go Live – Implementing the Project Phase 2 and going live will include resource registration, operating procedures and updates, execution of service agreements, completion of necessary OATT revisions, applicable management approvals, the presentation and acceptance of service agreements and tariff changes by applicable governing boards, and completion and filing of a readiness criteria certification in accordance with the ISO tariff.</p>	<p>March 2021</p>
<ul style="list-style-type: none"> • Milestone 6 – This milestone is complete upon the first production BANC energy imbalance market trade date. 	<p>April 1, 2021</p>

**Balancing Authority of Northern California
Resolution 19-10-01**

**AUTHORIZATION OF THE GENERAL MANAGER TO EXECUTE THE BANC EIM PHASE 2
IMPLEMENTATION AGREEMENT WITH THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR**

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, BANC, its members, the Western Area Power Administration – Sierra Nevada Region (“WAPA-SNR”), and contracted consultants evaluated participation in the California Independent System Operator (“CAISO”) Energy Imbalance Market (“EIM”); and

WHEREAS, based upon this evaluation, BANC and its members and WAPA-SNR, have concluded that the EIM does support meeting BANC’s strategic principles with an indicative net benefit for BANC overall and individually for those entities that were evaluated; and

WHEREAS, these BANC members located in the WAPA-SNR sub-area – namely the Modesto Irrigation District (“Modesto ID”), the City of Redding and the City of Roseville, along with WAPA-SNR, have determined to join in Phase 2; and

WHEREAS, in order to effectuate Phase 2, BANC must enter into an EIM Implementation Agreement (“IA”) with the CAISO to set forth the implementation project scope, milestones and costs associated with proceeding with the second phase of EIM within the BANC footprint; and

WHEREAS, on August 21, 2019, by BANC Resolution 19-08-14, the Commission authorized the General Manager to enter into negotiations with the CAISO to develop a BANC EIM Phase 2 IA; and

WHEREAS, BANC and the CAISO have completed said negotiations and have mutually agreed upon a BANC EIM Phase 2 IA, as provided to the Commission in substantially final form;

NOW, THEREFORE, BE IT RESOLVED that the Commissioners of the Balancing Authority of Northern California hereby authorize the General Manager to execute the BANC EIM Phase 2 IA with the CAISO in furtherance of Phase 2 implementation, in substantially final form.

**Balancing Authority of Northern California
Resolution 19-10-01**

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 3rd day of October 2019, by the following vote:

		Aye	No	Abstain	Absent
Modesto ID	Greg Salyer				
City of Redding	Dan Beans				
City of Roseville	Michelle Bertolino				
City of Shasta Lake	James Takahara				
SMUD	Arlen Orchard				
TPUD	Paul Hauser				

Dan Beans
Chair

Attest by: C. Anthony Braun
Secretary

ENERGY IMBALANCE MARKET IMPLEMENTATION AGREEMENT

This Implementation Agreement (“Agreement”) is entered into as of October 4, 2019, by and between the Balancing Authority of Northern California, a joint powers authority established pursuant to the laws of the State of California (“BANC”), and the California Independent System Operator Corporation, a California nonprofit public benefit corporation (“ISO”). BANC and the ISO are sometimes referred to in the Agreement individually as a “Party” and, collectively, as the “Parties.”

RECITALS

- A. WHEREAS, BANC has determined there is an opportunity to secure benefits for additional BANC members and the Western Area Power Administration – Sierra Nevada Region (“WAPA”) through improved dispatch and operation of the generation and through the efficient use and continued reliable operation of existing and future transmission facilities within its balancing authority area and desires to expand its participation in the energy imbalance market operated by the ISO (“EIM”);
- B. WHEREAS, the ISO has determined there are benefits to ISO market participants through greater access to energy imbalance resources in real-time and through the efficient use and reliable operation of the transmission facilities and markets operated by the ISO, and desires to expand operation of the EIM to include additional members of BANC;
- C. WHEREAS, BANC acknowledges that the ISO’s rules and procedures governing the EIM are set forth in the provisions of the ISO tariff as filed with the Federal Energy Regulatory Commission (“FERC”) and that its expanded participation in the EIM may require corresponding revisions to the Open Access Transmission Tariffs (“OATT”) of participating transmission service provider(s) located in the BANC balancing authority area and the execution of associated service agreements;
- D. WHEREAS, the ISO acknowledges that BANC, its members, and WAPA, located within the BANC balancing authority area footprint, are all non-jurisdictional entities described in section 201(f) of the Federal Power Act, 16 U.S.C. 824(f) and respects BANC’s interest in remaining so;
- E. WHEREAS, the Sacramento Municipal Utility District (“SMUD”) located within the BANC balancing authority area began participating in the EIM on April 3, 2019, pursuant to what was referred to as “Project Phase 1” in the EIM Implementation Agreement between BANC and the ISO, dated February 24, 2017;
- F. WHEREAS, BANC has reached an agreement with those of its members capable of directly participating in EIM, namely, the Modesto Irrigation District and the cities of Redding and Roseville, and WAPA, concerning expanded implementation of

the EIM in the BANC balancing authority area, hereafter referred to as “Project Phase 2”;

G. WHEREAS, the ISO acknowledges that the Project Phase 2 implementation of the EIM in the BANC balancing authority area will require the filing of an amendment to the non-conforming EIM Entity Agreement to account for the expanded participation in the BANC balancing authority area, and that the ISO is committed to addressing implementation elements necessary for the Project Phase 2 to be successful; and

H. WHEREAS, the Parties are entering into this Agreement to set forth the terms upon which the ISO will timely configure its systems for Project Phase 2 to expand BANC’s participation in the EIM on or before April 1, 2021 (“Implementation Date”); and

NOW THEREFORE, in consideration of the mutual covenants contained herein, and of other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

AGREEMENT

1. Effective Date, Term and Non-Jurisdictional Status.

(a) This Agreement shall become effective upon the date the Agreement is accepted, approved or otherwise permitted to take effect by FERC, without condition or modification unsatisfactory to either Party (“Effective Date”).

(b) In the event FERC requires any modification to the Agreement or imposes any other condition upon its acceptance or approval of the Agreement, each Party shall have fifteen (15) days to notify the other Party that any such modification or condition is unacceptable to that Party. If no Party provides such notice, then the Agreement, as modified or conditioned by FERC, shall take effect as of the date determined under Section 1(a). If either Party provides such notice to the other Party, the Parties shall take any one or more of the following actions: (i) meet and confer and to determine whether BANC will voluntarily agree to accept any modifications or conditions imposed by such FERC order; (ii) jointly seek further administrative or legal remedies with respect to such FERC order, including a request for rehearing or clarification; or (iii) enter into negotiations with respect to accommodation of such FERC order, provided however, if the Parties have not agreed to such an accommodation within thirty (30) days after the date on which such FERC order becomes a final and non-appealable order, such order shall be deemed an adverse order and the Parties shall have no further rights and obligations under the Agreement.

(c) The term of the Agreement (“Term”) shall commence on the Effective Date and shall terminate upon the earliest to occur of (1) the date that all necessary approvals for participation by the participating transmission service provider(s) located in the BANC balancing authority area are to take effect and the date FERC permits all necessary revisions to the EIM Entity Agreement necessary for the commencement of BANC’s expanded participation in the EIM have taken effect; (2) termination in

accordance with Section 2 of this Agreement; or (3) such other date as mutually agreed to by the Parties (“Termination Date”).

(d) This Agreement shall automatically terminate on the Termination Date and shall have no further force or effect, provided that the rights and obligations set forth in Recital E and Sections 5 and 6 shall survive the termination of this Agreement and remain in full force and effect as provided therein.

(e) The ISO acknowledges that BANC, its members and WAPA are each non-jurisdictional entities as described in section 201(f) of the Federal Power Act, 16 U.S.C. 824(f) and respects BANC and its members’ interest in remaining so and nothing in this Agreement is intended to create additional FERC jurisdiction for BANC or its members, nor shall it be construed or interpreted in a manner that creates additional FERC jurisdiction for BANC or its members. The ISO will at all times make commercially reasonable efforts to avoid actions that would cause BANC to become subject to FERC jurisdiction that does not already exist with respect to BANC or its members’ non-jurisdictional status or its operations or assets.

2. Termination.

(a) The Parties may mutually agree to terminate this Agreement in writing at any time. In addition, either Party may terminate this Agreement in its sole discretion after conclusion of the negotiation period in Section 2(b) or as provided in Section 2(d) or 2(e) as applicable.

(b) If either the ISO or BANC seeks to unilaterally terminate this Agreement, it must first notify the other Party in writing of its intent to do so (“Notice of Intent to Terminate”) and engage in thirty (30) days of good faith negotiations in an effort to resolve its concerns. If the Parties successfully resolve the concerns of the Party issuing the Notice of Intent to Terminate, the Party that issued such notice shall notify the other Party in writing of the withdrawal of such Notice (“Notice of Resolution”).

(c) At the time the Notice of Intent to Terminate is provided, or any time thereafter unless a Notice of Resolution is issued, BANC may provide written notice directing the ISO to suspend performance on any or all work on the Project Phase 2 for a specified period of time (“Notice to Suspend Work”). Upon receipt of a Notice to Suspend Work, the ISO shall: (1) discontinue work on the Project Phase 2; (2) place no further orders with subcontractors related to the Project Phase 2; (3) take commercially reasonable actions to suspend all orders and subcontracts; (4) protect and maintain the work on the Project Phase 2; and (5) otherwise mitigate BANC’s costs and liabilities for the areas of work suspended. The ISO will not invoice BANC pursuant to Section 4(c) of this Agreement for any milestone payment following the issuance of a Notice to Suspend Work. To the extent a Notice of Resolution is issued pursuant to Section 2(b), the Notice to Suspend Work in effect at the time shall be deemed withdrawn and the ISO shall be entitled to invoice BANC for any milestone completed as specified in Section 4(c) of this Agreement and BANC shall pay such invoice pursuant to Section 4.

(d) Any time after thirty (30) days from the date of the Notice of Intent to Terminate under Section 2(b), issued by either Party, and prior to the date of a Notice of Resolution, the ISO may terminate this Agreement by providing written notice to BANC that it is terminating this Agreement (“Termination Notice”) effective immediately. The ISO may terminate this Agreement under the terms of this Section 2(d) at its sole discretion for any reason.

(e) Any time after 30 days from the date of the Notice of Intent to Terminate under Section 2(b), issued by either Party, and prior to the date of a Notice of Resolution, BANC may terminate this Agreement by providing written notice to the ISO that it is terminating this Agreement (“Termination Notice”) effective immediately. BANC may terminate this Agreement under the terms of this Section 2(e) at its sole discretion for any reason and without further regulatory review or approval.

(f) In the event this Agreement is terminated by either or both of the Parties pursuant to its terms, this Agreement will become wholly void and of no further force and effect, without further action by either Party, and the liabilities and obligations of the Parties hereunder will terminate, and each Party shall be fully released and discharged from any liability or obligation under or resulting from this Agreement as of the date of the Termination Notice provided in Section 2(d) or 2(e), as applicable, notwithstanding the requirement for the ISO to submit the filing specified in Section 2(g). Notwithstanding the foregoing, the rights and obligations set forth in Sections 5 and 6 shall survive the termination of this Agreement and remain in full force and effect as specified in Sections 5 and 6, and any milestone payment obligation pursuant to Section 4(c) that arose prior to the Termination Notice in accordance with Section 2(d) or 2(e) shall survive until satisfied or resolved in accordance with Section 11.

(g) The Parties acknowledge that the ISO is required to file a timely notice of termination with FERC.

3. Implementation Scope and Schedule.

(a) The Parties shall complete the Project Phase 2 as described in Exhibit A, subject to modification only as described in Section 4(e) below.

(b) The Parties shall undertake the activities described in Exhibit A with the objective of completing the Project Phase 2 and implementing the EIM no later than the Implementation Date, including all milestones listed under Exhibit A for the Implementation Date, subject to modification only as described in Section 3(c) below.

(c) Either Party may propose a change in Exhibit A or the Implementation Date to the other Party. If a Party proposes a change in Exhibit A or the Implementation Date, the Parties shall negotiate in good faith to attempt to reach agreement on the proposal and any necessary changes in Exhibit A and any other affected provision of this Agreement, provided that any change in Exhibit A, or any change to the Implementation Date, must be mutually agreed to by the Parties. The agreement of the Parties to a change in Exhibit A, or a change to the Implementation Date, shall be

memorialized in a revision to Exhibit A, which will then be binding on the Parties and shall be posted on the internet web sites of the ISO and BANC, without the need for execution of an amendment to this Agreement. Changes that require revision of any provision of this Agreement other than Exhibit A shall be reflected in an executed amendment to this Agreement and may be filed by the ISO with FERC for acceptance with respect to the ISO.

(d) At least once per calendar month during the Term, the Parties' Designated Executives, or their designees, will meet telephonically or in person (at a mutually agreed to location) to discuss the status of the performance of the tasks necessary to achieve the milestones in Exhibit A and the continued appropriateness of Exhibit A to ensure that the Project Phase 2 can meet the Implementation Date. For purposes of this section, "Designated Executive" shall mean the individual identified in Section 8(g), or her or his designee or successor.

4. Implementation Charges, Invoicing and Milestone Payments.

(a) As itemized in Section 4(c) below, BANC shall pay the ISO a fixed fee of \$205,000 for costs incurred by the ISO to implement the Project Phase 2 ("Implementation Fee"), subject to completion of the milestones specified in Section 4(c) and subject to adjustment only as described in Section 4(b).

(b) The ISO will provide prompt written notice to BANC if the sum of its actual costs through the date of such notice and its projected costs to accomplish the balance of the Project Phase 2 exceed the Implementation Fee. The Implementation Fee shall be subject to adjustment only by mutual agreement of the Parties if the Parties agree to a change in Exhibit A, or a change to the Implementation Date, in accordance with Section 3(c) and the Parties agree that an adjustment to the Implementation Fee is warranted in light of such change.

(c) Upon completion of the milestones identified in Exhibit A, the ISO shall invoice BANC for the Implementation Fee as follows:

- i. \$35,000 upon the Effective Date as further described in Section 1 of this Agreement and Exhibit A as Milestone 1;
- ii. \$35,000 upon deployment into the ISO test environment of the full network model database that includes the topology of the BANC system as further described in Exhibit A as Milestone 2;
- iii. \$35,000 upon ISO promotion of market network model including BANC area to non-production system with BANC connection and data exchange data in advance of market simulation as further described in Exhibit A as Milestone 3;
- iv. \$35,000 upon commencement of EIM market simulation as further described in Exhibit A as Milestone 4;

- v. \$35,000 upon start of parallel operations as further described in Exhibit A as Milestone 5; and
- vi. \$30,000 upon the Implementation Date as further described in Exhibit A as Milestone 6.

(d) Following the completion of each milestone identified in Section 4(c)(i) through (vi), the ISO will deliver to BANC an invoice which will show the amount due, together with reasonable documentation supporting the completion of the milestone being invoiced. BANC shall pay the invoice no later than forty-five (45) days after the date of receipt. Any milestone payment past due will accrue 12% interest, per annum.

(e) If a milestone has not been completed as described in Section 4(c)(i), (ii), (iii), (iv), (v) or (vi) and in Exhibit A, as Exhibit A may have been modified in accordance with Section 3(c), the Parties shall negotiate in good faith an agreed upon change to the Project Phase 2 Delivery Dates (as defined in Exhibit A) consistent with Section 3(c) such that the timing of milestone payments in Section 4(c) can be adjusted to correspond to the updated Exhibit A.

(f) If BANC disputes any portion of any amount specified in an invoice delivered by the ISO in accordance with Section 4(c), BANC shall pay its total amount of the invoice when due and identify the disputed amount and state that the disputed amount is being paid under protest. Any disputed amount shall be resolved pursuant to the provisions of Section 11. If it is determined pursuant to Section 11 that an overpayment or underpayment has been made by BANC or any amount on an invoice is incorrect, then (i) in the case of any overpayment, the ISO shall promptly return the amount of the overpayment (or credit the amount of the overpayment on the next invoice) to BANC; and (ii) in the case of an underpayment, BANC shall promptly pay the amount of the underpayment to the ISO. Any overpayment or underpayment shall include interest for the period from the date of overpayment, underpayment, or incorrect allocation, until such amount has been paid or credited against a future invoice calculated in the manner prescribed for calculating interest in Section 4(d).

(g) All costs necessary to implement the Project Phase 2 not provided for in this Agreement shall be borne separately by each Party, which in the case of the ISO will be recovered through rates as may be authorized by its regulatory authorities.

(h) All milestone payments required to be made under the terms of this Agreement shall be made to the account or accounts designated by the Party which the milestone payment is owed, by wire transfer (in immediately available funds in the lawful currency of the United States).

5. Confidentiality.

(a) All written or oral information received from the other Party in connection with this Agreement (but not this Agreement after the ISO files it with FERC) necessary to complete the Project Phase 2 and marked or otherwise identified at the time of communication by such Party as containing information that Party considers

commercially sensitive or confidential shall constitute “Confidential Information” subject to the terms and conditions herein.

(b) If BANC publicly releases BANC’s Confidential Information in connection with a public process or a regulatory filing, or if the ISO publicly releases the ISO’s Confidential Information in connection with a public process or a regulatory filing, then the information released shall no longer constitute Confidential Information; provided, however, that Confidential Information disclosed under seal (or in such other manner as to be treated confidentially) in connection with a regulatory filing shall retain its status as Confidential Information under this Agreement. In addition, Confidential Information does not include information that (i) is or becomes generally available to the public other than as a result of disclosure by either Party, its officers, directors, employees, agents, or representatives; (ii) is or becomes available to such Party on a non-confidential basis from other sources or their agents or representatives when such sources are not known by such Party to be prohibited from making the disclosure; (iii) is already known to such Party or has been independently acquired or developed by such Party without violating any of such Party’s obligations under this Section 5; (iv) is the subject of a mutual written agreement between the Parties, including an agreement evidenced through an exchange of electronic or other communications, with regard to information for discussion at any stakeholder meetings or during the stakeholder process or with any regulatory authority; or (v) is the subject of a mutual written agreement between the Parties, including an agreement evidenced through an exchange of electronic or other communications, to allow for such disclosure and designation as non-confidential or public information on a case-by-case basis in accordance with Section 10 of this Agreement. ISO acknowledges that BANC and its members are subject to the California Public Records Act, Cal. Gov’t Code Sections 6250, *et seq.*, and WAPA is subject to the Freedom of Information Act, 5 U.S.C. Section 552, as amended by Public Law no. 104-231, 110 Stat. 348.

(c) The Confidential Information will be kept confidential by each Party and each Party agrees to protect the Confidential Information using the same degree of care, but no less than a reasonable degree of care, as a Party uses to protect its own confidential information of a like nature. Notwithstanding the preceding sentence, a Party may disclose the Confidential Information or portions thereof to those of such Party’s officers, employees, partners, representatives, attorneys, contractors, advisors, or agents who need to know such information for the purpose of analyzing or performing an obligation related to the Project Phase 2. Notwithstanding the foregoing, a Party is not authorized to disclose such Confidential Information to any officers, employees, partners, representatives, attorneys, contractors, advisors, or agents without (i) informing such officer, employee, partner, representative, attorney, contractor, advisor, or agent of the confidential nature of the Confidential Information and (ii) ensuring that such officer, employee, partner, representative, attorney, contractor, advisor, or agent is subject to confidentiality duties or obligations to the applicable Party that are no less restrictive than the terms and conditions of this Agreement. Each Party agrees to be responsible for any breach of this Section 5 by such Party or a Party’s officers, employees, partners, representatives, attorneys, contractors, advisors or agents, subject to the limitations set forth in Section 6 below.

(d) In the event that a Party is required by a court of competent jurisdiction or regulatory authority (by law, rule, regulation, order, deposition, interrogatory, request for documents, data request issued by a regulatory authority, subpoena, civil investigative demand or similar request or process) to disclose any of the Confidential Information, such Party shall (to the extent legally permitted) provide the other Party with prompt written notice of such requirement so that the other Party may seek a protective order or other appropriate remedy and/or waive compliance with the terms of this Section 5. In the event that such protective order or other remedy is not obtained, the disclosing Party hereby waives compliance with the provisions hereof with respect to such Confidential Information. In such event, the Party compelled to disclose shall (i) furnish only that portion of the Confidential Information which, in accordance with the advice of its own counsel (which may include internal counsel), is legally required to be furnished, and (ii) unless otherwise prevented by law, exercise reasonable efforts to obtain assurances that confidential treatment will be accorded the Confidential Information so furnished.

(e) Notwithstanding the foregoing, the Parties acknowledge that they are required by law or regulation to report certain information that could embody Confidential Information from time to time and may do so from time to time without providing prior notice to the other Party. Such reports may include models, filings, and reports of costs, general rate case filings, cost adjustment mechanisms, any applicable FERC-required reporting, investigations, annual state reports that include resources and loads, integrated resource planning reports, reports to entities such as FERC, the North American Electric Reliability Corporation (“NERC”), Western Electricity Coordinating Council (“WECC”), or similar or successor organizations, or similar or successor forms, filings, or reports, the specific names of which may vary by jurisdiction, along with supporting documentation. Additionally, in regulatory proceedings or investigations in all state and federal jurisdictions in which they may do business, the Parties will from time to time be required to produce Confidential Information, and may do so without prior notice using its business judgment in compliance with all of the foregoing and including the appropriate level of confidentiality for such disclosures in the normal course of business.

(f) Each Party is entitled to seek equitable relief, by injunction or otherwise, to enforce its rights under this Section 5 to prevent the release of Confidential Information without bond or proof of damages and may seek other remedies available at law or in equity for breach of this provision, subject to the limitations set forth in Section 6 below.

(g) Unless otherwise prevented by law, upon written request by a Party, the other Party shall promptly return to the requesting Party or destroy all Confidential Information it received, including all copies of its analyses, compilations, studies or other documents prepared by or for it, that contain the Confidential Information in a manner that would allow its extraction or that would allow the identification of the requesting Party as the source of the Confidential Information or inputs to the analysis. Notwithstanding the foregoing, neither Party shall be required to destroy or alter any computer archival and backup tapes or archival and backup files (collectively,

“Computer Tapes”), provided that such Computer Tapes shall be kept confidential in accordance with the terms of this Agreement.

(h) Nothing in this Agreement shall be deemed to restrict either Party from engaging with third parties with respect to any matter and for any reason, specifically including the EIM, provided Confidential Information is treated in accordance with this Section 5.

(i) This Section 5, Confidentiality, applies for two years (24 months) after the Termination Date or the date of any expiration or termination of this Agreement.

6. Limitation of Liability; Indemnity.

(a) The Parties acknowledge and agree that, except as otherwise specified in Section 4(f) of this Agreement, neither Party shall be liable to the other Party for any claim, loss, cost, liability, damage or expense, including any direct damage or any special, indirect, exemplary, punitive, incidental or consequential loss or damage (including any loss of revenue, income, profits or investment opportunities or claims of third party customers), arising out of or directly or indirectly related to such other Party’s decision to enter into this Agreement, such other Party’s performance under this Agreement, or any other decision by such Party with respect to the Project Phase 2.

(b) To the maximum extent allowed by law, each Party shall indemnify, defend and hold harmless each of the other Party and its officers, directors, employees, agents, contractors and sub-contractors, from and against all third-party claims, judgments, losses, liabilities, costs, expenses (including reasonable attorneys’ fees) and damages for personal injury, death or property damage, to the extent caused by the negligence, willful misconduct, or breach of this Agreement of the indemnifying Party, its officers, directors, agents, employees, contractors or sub-contractors related to this Agreement; provided, that this indemnification shall be only to the extent such personal injury, death or property damage is not attributable to the negligence or willful misconduct related to this Agreement or breach of this Agreement of the Party seeking indemnification, its officers, directors, agents, employees, contractors or sub-contractors. The indemnified Party shall give the other Party prompt notice of any such claim. The indemnifying Party, in consultation with the indemnified Party, shall have the right to choose competent counsel, control the conduct of any litigation or other proceeding, and settle any claim, subject to the reasonable approval of the indemnified Party. The indemnified Party shall provide all documents and assistance reasonably requested by the indemnifying Party.

(c) The rights and obligations under this Section 6 shall survive the Termination Date and any expiration or termination of this Agreement.

7. Representation and Warranties.

(a) Representations and Warranties of BANC. BANC represents and warrants to the ISO as of the Effective Date as follows:

(1) It is duly formed, validly existing and in good standing under the laws of the jurisdiction of its formation.

(2) It has all requisite statutory and governance authorizations to own its assets and carry on its business as now being conducted or as proposed to be conducted under this Agreement.

(3) It has all necessary statutory and governance authorizations to execute and deliver this Agreement and to perform its obligations under this Agreement, and the execution and delivery of this Agreement and the performance by it of this Agreement have been duly authorized by all necessary corporate action on its part.

(4) The execution and delivery of this Agreement and the performance by it of this Agreement do not: (i) violate its organizational documents; (ii) violate any governmental requirements applicable to it; or (iii) result in a breach of or constitute a default of any material agreement to which it is a party.

(5) This Agreement has been duly and validly executed and delivered by it and constitutes its legal, valid and binding obligation enforceable against it in accordance with its terms, except as the same may be limited by bankruptcy, insolvency or other similar laws affecting creditors' rights generally and by principles of equity regardless of whether such principles are considered in a proceeding at law or in equity.

(6) All material governmental authorizations in connection with the due execution and delivery of this Agreement, have been duly obtained or made prior to the date hereof and are in full force and effect.

(b) Representations and Warranties of the ISO. ISO represents and warrants to BANC as of the Effective Date as follows:

(1) It is duly formed, validly existing and in good standing under the laws of the jurisdiction of its formation.

(2) It has all requisite corporate power necessary to own its assets and carry on its business as now being conducted or as proposed to be conducted under this Agreement.

(3) It has all necessary corporate power and authority to execute and deliver this Agreement and to perform its obligations under this Agreement, and the execution and delivery of this Agreement and the performance by it of this Agreement have been duly authorized by all necessary corporate action on its part.

(4) The execution and delivery of this Agreement and the performance by it of this Agreement do not: (i) violate its organizational documents; (ii) violate any governmental requirements applicable to it; or (iii) result in a breach of or constitute a default of any material agreement to which it is a party.

(5) This Agreement has been duly and validly executed and delivered by it and constitutes its legal, valid and binding obligation enforceable against it in accordance with its terms, except as the same may be limited by bankruptcy, insolvency, regulatory authority, or other similar laws affecting creditors' rights generally and by principles of equity regardless of whether such principles are considered in a proceeding at law or in equity.

(6) All material governmental authorizations in connection with the due execution and delivery of, and performance by it of its obligations under this Agreement, have been duly obtained or made prior to the date hereof and are in full force and effect.

8. General Provisions.

(a) This Agreement, including Exhibit A to this Agreement, constitutes the entire agreement between the Parties, and supersedes any prior written or oral agreements or understandings between the Parties, relating to the subject matter of this Agreement; provided, that nothing in this Agreement shall limit, repeal, or in any manner modify the existing legal rights, privileges, and duties of each of the Parties as provided by any other agreement between the Parties, or by any statute or any other law or applicable court or regulatory decision by which such Party is bound.

(b) This Agreement may not be amended except in writing hereafter signed by both Parties; provided, however, the Parties may mutually agree to changes in Exhibit A in accordance with Section 4(e).

(c) Any waiver by a Party to this Agreement of any provision or condition of this Agreement must be in writing signed by the Party to be bound by such waiver, shall be effective only to the extent specifically set forth in such writing and shall not limit or affect any rights with respect to any other or future circumstance.

(d) This Agreement is for the sole and exclusive benefit of the Parties and shall not create a contractual relationship with, or cause of action in favor of, any third party.

(e) Neither Party shall have the right to voluntarily assign its interest in this Agreement, including its rights, duties, and obligations hereunder, without the prior written consent of the other Party, which consent may be withheld by the other Party in its sole and absolute discretion. Any assignment made in violation of the terms of this Section 8(e) shall be null and void and shall have no force and effect.

(f) In the event that any provision of this Agreement is determined to be invalid or unenforceable for any reason, in whole or part, the remaining provisions of this Agreement shall be unaffected thereby and shall remain in full force and effect to the fullest extent permitted by law, and such invalid or unenforceable provision shall be replaced by the Parties with a provision that is valid and enforceable and that comes closest to expressing the Parties' intention with respect to such invalid or unenforceable provision.

(g) Whenever this Agreement requires or provides that (i) a notice be given by a Party to the other Party or (ii) a Party's action requires the approval or consent of the other Party, such notice, consent or approval shall be given in writing and shall be given by personal delivery, by recognized overnight courier service, email or by certified mail (return receipt requested), postage prepaid, to the recipient thereof at the address given for such Party as set forth below, or to such other address as may be designated by notice given by any Party to the other Party in accordance with the provisions of this Section 8(g):

If to BANC:

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

Attention: James R. Shetler, General Manager
E-mail: jimshetler@thebanc.org

If to the ISO:

California Independent System Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Attention: Petar Ristanovic, Vice President, Technology
E-mail: PRistanovic@caiso.com

Each notice, consent or approval shall be conclusively deemed to have been given (i) on the day of the actual delivery thereof, if given by personal delivery, email sent by 5:00 p.m., or overnight delivery, or (ii) date of delivery shown on the receipt, if given by certified mail (return receipt requested). It is the responsibility of each Party to provide, in accordance with this Section, notice to the other Party of any necessary change in the contact or address information herein.

(h) This Agreement may be executed in one or more counterparts (including by facsimile or a scanned image), each of which when so executed shall be deemed to be an original, and all of which shall together constitute one and the same instrument.

(i) Nothing contained in this Agreement shall be construed as creating a corporation, company, partnership, association, joint venture or other entity with the other Party, nor shall anything contained in this Agreement be construed as creating or requiring any fiduciary relationship between the Parties. No Party shall be responsible hereunder for the acts or omissions of the other Party.

(j) The decision to execute an EIM service agreement and participate in the EIM remains within the sole discretion of BANC and the decision whether to continue to offer EIM services (subject to Sections 1(c) and 2) remains within the sole discretion of the ISO.

(k) Nothing in this Agreement shall preclude a Party from exercising any rights or taking any action (or having its affiliates take any action) with respect to any other project.

(l) Unless otherwise expressly provided, for purposes of this Agreement, the following rules of interpretation shall apply: (i) any reference in this Agreement to gender includes all genders, and the meaning of defined terms applies to both the singular and the plural of those terms; (ii) the insertion of headings are for convenience of reference only and do not affect, and will not be utilized in construing or interpreting, this Agreement; (iii) all references in this Agreement to any "Section" are to the corresponding Section of this Agreement unless otherwise specified; (iv) words such as "herein," "hereinafter," "hereof," and "hereunder" refer to this Agreement (including Exhibit A to this Agreement) as a whole and not merely to a subdivision in which such words appear, unless the context otherwise requires; (v) the word "including" or any variation thereof means "including, without limitation" and does not limit any general statement that it follows to the specific or similar items or matters immediately following it; and (vi) the Parties have participated jointly in the negotiation and drafting of this Agreement and, in the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as jointly drafted by the Parties and no presumption or burden of proof favoring or disfavoring any Party will exist or arise by virtue of the authorship of any provision of this Agreement.

9. Governing Law; Venue. This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of California without regard to its principles of conflicts of laws. Venue for any action hereunder shall be FERC, where subject to its jurisdiction, or otherwise the superior court of Sacramento County, California. No provision of this Agreement shall be deemed to waive the right of any Party to protest, or challenge in any manner, whether this Agreement, or any action or proceeding arising under or relating to this Agreement, is subject to the jurisdiction of FERC.

10. Communication. The Parties shall develop a communication protocol for the dissemination of material information associated with the Project Phase 2, which shall be approved by BANC and the ISO.

11. Dispute Resolution. Unless otherwise provided herein, each of the provisions of this Agreement shall be enforceable independently of any other provision of this Agreement and independent of any other claim or cause of action. In the event of any dispute arising under this Agreement, the Parties shall first attempt to resolve the matter through direct good faith negotiation between the Parties, including a full opportunity for escalation to executive management within the Parties' respective organizations. If the Parties are unable to resolve the issue within thirty (30) days after such escalation of the

dispute, then for matters subject to FERC jurisdiction either Party shall have the right to file a complaint under Section 206 of the Federal Power Act. For all other matters, the parties may pursue litigation in superior court of Sacramento County, California.

12. Third Party Agreements. The Parties may engage in discussions with third parties, either jointly or unilaterally, to facilitate the Project Phase 2. Each Party may adopt or modify tariffs or enter into or modify binding agreements between such Party and third parties to implement the approved terms and conditions of the Project Phase 2 or EIM as necessary and appropriate.

13. Compliance. Each Party shall comply with all federal, state, local or municipal governmental authority; any governmental, quasi-governmental, regulatory or administrative agency, commission, body or other authority exercising or entitled to exercise any administrative, executive, judicial, legislative, policy, regulatory or taxing authority or power, including FERC, NERC, WECC as applicable; or any court or governmental tribunal; in each case, having jurisdiction over either Party in connection with the execution, delivery and performance of its obligations under this Agreement. This Agreement is not intended to modify, change or otherwise amend the Parties' current functional responsibilities associated with compliance with WECC and NERC Reliability Standards; provided, however, the Parties may enter into separate mutually agreed to arrangements to clarify roles and responsibilities associated with compliance with WECC and NERC Reliability Standards in respect of this Agreement.

IN WITNESS WHEREOF, each of the Parties has caused its duly authorized officer to execute this Implementation Agreement as of the date first above written.

BALANCING AUTHORITY OF NORTHERN CALIFORNIA

By: _____
Name: James R. Shetler
Title: General Manager

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

By: _____
Name: Petar Ristanovic
Title: Vice President, Technology

EXHIBIT A: PROJECT SCOPE AND SCHEDULE

The Project Phase 2 consists of the activities and delivery dates identified in this Exhibit A, implemented in accordance with the Agreement. The Parties have included a schedule for the Implementation Date to coordinate their efforts required for completion of the Project Phase 2 on a milestone track.

The Parties understand that input received from stakeholders during the course of implementing the Project Phase 2, conditions imposed or questions raised in the regulatory approval process, and the activities of the Parties in implementing the Project Phase 2 may cause the Parties to determine that changes in the Project Phase 2 are necessary or desirable. Accordingly, this Exhibit A may be modified in accordance with Section 3(c) of the Agreement.

Each Party is responsible for performing a variety of tasks necessary to achieve the milestones on the scheduled dates specified in the table below (“Project Phase 2 Delivery Dates”) and shall plan accordingly. The Parties shall communicate and coordinate as provided in the Agreement to support the planning and execution to complete the Project Phase 2.

Project Phase 2 Scope and Milestones	Project Phase 2 Delivery Dates supporting April 2021
Detailed Project Phase 2 Management Plan – The Parties will develop and initiate a final project management plan that describes specific project tasks each Party must perform, delivery dates, project team members, meeting requirements, and a process for approving changes to support completion of the Project Phase 2.	October- November 2019
<ul style="list-style-type: none"> • Milestone 1 – This milestone is completed when the Agreement has been made effective in accordance with Section 1 of the Agreement. 	December 2019
Full Network Model Expansion – Full Network Model expansion for BANC and EMS/SCADA, including, proof of concept of export/import of EMS data; complete model into the ISO test environment; complete validation for all SCADA points from BANC; testing of the new market model; and validation of the Outage and State Estimator applications.	July 2020

<ul style="list-style-type: none"> • Milestone 2 - This milestone is completed upon modeling BANC into the ISO Full Network Model through the EMS which will be deployed into a non-production test environment using the ISO's network and resource modeling process. 	July 2020
<p>System Implementation and Connectivity Testing – System requirements and software design, the execution of necessary software vendor contracts, development of Market network model including BANC, allow BANC to connect to a non-production test system.</p>	August 2020
<ul style="list-style-type: none"> • Milestone 3 - ISO to promote market network model including BANC area to non-production system, and allow BANC to connect and exchange data in advance of Market Simulation. 	August 2020
<p>Construction, Testing and Training in Preparation for Market Simulation - This task includes IT infrastructure upgrades, security testing, training, Day-in-life simulation, and functional testing.</p>	August-December 2020
<ul style="list-style-type: none"> • Milestone 4a – Start of Connectivity to ISO Testing. 	August 2020
<ul style="list-style-type: none"> • Milestone 4b – Interface testing with minimum data requirements and functional integration testing. ISO will make the test environment available for BANC connectivity testing prior to the delivery date assuming BANC has provided all requisite data and non-production system availability does not conflict with ISO production system Spring Release schedule. 	September 2020
<ul style="list-style-type: none"> • Milestone 4c –Begin ‘Day in the Life’ scenario testing 	October 2020
<ul style="list-style-type: none"> • Milestone 4d – Begin Structured Market simulation 	December 2020
<p>Activate Parallel Operations - Beginning February 1, 2021, the ISO will activate a parallel operation environment to practice production grade systems integration as well as market processes and operating procedures in anticipation of the impending BANC activation as an EIM Entity and to confirm compliance with the EIM readiness criteria set forth in the ISO tariff.</p>	February 2021

<ul style="list-style-type: none"> • Milestone 5 – Start of parallel operations 	<p>February 1, 2021</p>
<p>System Deployment and Go Live – Implementing the Project Phase 2 and going live will include resource registration, operating procedures and updates, execution of service agreements, completion of necessary OATT revisions, applicable management approvals, the presentation and acceptance of service agreements and tariff changes by applicable governing boards, and completion and filing of a readiness criteria certification in accordance with the ISO tariff.</p>	<p>March 2021</p>
<ul style="list-style-type: none"> • Milestone 6 – This milestone is complete upon the first production BANC energy imbalance market trade date. 	<p>April 1, 2021</p>

Balancing Authority of Northern California

Agenda Item 5B

1. **Resolution 19-10-04 Approval to Proceed with Development of PSPS Protocols.**
2. **BANC WHITE PAPER: Public Safety Power Shutoff (PSPS) Reciprocity Proposal.**

Braun Blaising Smith Wynne, P.C.

Attorneys at Law

9/26/2019

To: BANC Commission
From: BANC Counsel
RE: Public Safety Power Shut off and Balancing Authority Protocols

PSPS policies have received considerable attention in policy and regulatory discussions, although mostly focused on distribution circuit de-energization. The impacts of de-energization of transmission facilities is part of that discussion, with lesser focus. Accordingly, Balancing Authority (“BA”) operators have begun discussion to understand procedures and protocols when transmission de-energization in one BA affects load serving capabilities in another BA.

Specifically, BANC has been assured by the California Independent System Operator that if Pacific Gas and Electric Company, for example, were to de-energize facilities that affected the ability to serve load within BANC, the CAISO would cover those shortfalls out of its market or, if necessary, shed CAISO BA load to allow BANC to continue uninterrupted firm load service.

BANC management believes as a matter of sound operational practice as well as equity, it is incumbent upon BANC to have a reciprocal policy to address when transmission de-energization in BANC may affect load serving in the CAISO.

Attached is a concept paper to build upon informal discussions that have been ongoing with the CAISO. Commission approval of this concept paper as a starting point for further discussions is requested. BANC management and counsel would then work with the CAISO and potentially others to develop protocols to address inter-BA impacts of transmission de-energization. We would then bring the final proposal back to the Commission for approval.

**Balancing Authority of Northern California
Resolution 19-10-04**

APPROVAL TO PROCEED WITH DEVELOPMENT OF PSPS PROTOCOLS

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, New provisions of Public Utilities Code Sections 8386-8387, enacted as part of Senate Bill 901 (2018) and Assembly Bill (“AB”) 1054, require all California electric utilities to prepare and submit wildfire mitigation plans that describe utilities’ plans to prevent, combat and respond to wildfires affecting their service territories; and

WHEREAS, Public Utilities Code Sections 8386-8387 specifically require that the wildfire mitigation plans contain protocols for de-energizing portions of the electrical system as well as procedures for notifying customers who may be impacted by the de-energizing of electrical lines; and

WHEREAS California Independent System Operator (“CAISO”) has stated that they will implement these events, referred to as Public Safety Power Shutoff (“PSPS”) events, as directed by the IOUs; and

WHEREAS, within the BANC BA footprint, the Sacramento Municipal Utility District (“SMUD”) has indicated through its wildfire mitigation plan that it may potentially utilize PSPS in anticipation of a wildfire threat. In addition, the Transmission Agency of Northern California (“TANC”) and Western Area Power Administration-Sierra Nevada Region have indicated that they too may be making use of PSPS in the future; and

WHEREAS, BANC staff developed a white paper to address the potential impact of such events on the BANC BA;

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

1. Approve the proposal set forth within the white paper.
2. Authorize the General Manager to proceed with the development of BANC Operating Procedures. A final proposal will be brought back to the Commission for review and approval.
3. Authorize the General Manager to engage in any necessary negotiations with the CAISO.

**Balancing Authority of Northern California
Resolution 19-10-04**

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 3rd day of October 2019, by the following vote:

		Aye	No	Abstain	Absent
Modesto ID	Greg Salyer				
City of Redding	Dan Beans				
City of Roseville	Michelle Bertolino				
City of Shasta Lake	James Takahara				
SMUD	Arlen Orchard				
TPUD	Paul Hauser				

Dan Beans
Chair

Attest by: C. Anthony Braun
Secretary

BANC WHITE PAPER

Public Safety Power Shutoff (PSPS) Reciprocity Proposal

Background

New provisions of Public Utilities Code Sections 8386-8387, enacted as part of Senate Bill 901 (2018) and Assembly Bill (AB) 1054, require all California electric utilities to prepare and submit wildfire mitigation plans that describe utilities' plans to prevent, combat and respond to wildfires affecting their service territories.¹ Public Utilities Code Sections 8386-8387 specifically require that the wildfire mitigation plans contain protocols for de-energizing portions of the electrical system as well as procedures for notifying customers who may be impacted by the de-energizing of electrical lines.² These preemptive de-energization events that are initiated during times of high fire threat conditions are referred to as Public Safety Power Shutoff (PSPS). Some of the investor owned utilities (IOUs) intend to be proactive in their use of PSPS, and have declared PSPS events.

The California Independent System Operator (CAISO) has stated that they will implement PSPS events, as directed by the IOUs. The CAISO has also stated that they intend to limit the impact of any PSPS within the initiating IOU, and then the CAISO Balancing Authority (BA) to other BAs to the extent possible. This includes shedding additional load within the CAISO BA to provide energy to adjacent BAs (e.g., BANC) to assist them in balancing their system.

Within the BANC BA footprint, the Sacramento Municipal Utility District (SMUD) has indicated through its wildfire mitigation plan that it may potentially utilize PSPS in anticipation of a wildfire threat. In addition, the Transmission Agency of Northern California (TANC) and Western Area Power Administration-Sierra Nevada Region (WAPA-SNR) have indicated that they too may be making use of PSPS in the future. As a result, BANC and the BANC Operator (SMUD) have proposed that BANC should

¹ California Public Utilities Commission (CPUC) Rulemaking 18-10-007 was initiated in October 2018 to implement the provisions of Senate Bill 901 related to investor-owned utility (IOU) wildfire mitigation plans. Six decisions issued in June 2019 approved the 2019 Wildfire Mitigation Plans.

² CPUC Rulemaking 18-12-005 is examining rules allowing electric utilities under the CPUC's jurisdiction to de-energize power lines in case of dangerous conditions that threaten life or property in California.

institute a reciprocal arrangement with the CAISO should a BANC participant's PSPS result in impacts to the CAISO BA.

Proposal

With the expectation that SMUD, TANC, and WAPA-SNR will be approving PSPS programs within the BANC footprint, BANC and the BANC Operator are proposing that BANC institute a program similar to that of the CAISO in order to limit impacts on the CAISO BA of any PSPS within the BANC BA, to the extent possible. This would mean that if a PSPS implemented by a BANC participant would impact import capabilities of the CAISO, BANC would order additional shedding of load in the BANC BA to help offset up to the expected load shed that the CAISO BA would need to impose to re-balance its system. It is expected that these events would be infrequent. The BANC General Manager is seeking approval of this proposal. The next step would be to formalize this proposal in BANC operating procedures and to engage in any necessary negotiations with the CAISO. The final proposal will be brought back to the Commission for review and approval.

DRAFT

Balancing Authority of Northern California

Agenda Item 5D

1. **Resolution 19-10-02 Approval of 2020 Annual Budget for *BANC*.**
2. **Attachment A to Resolution 19-10-02: DRAFT BANC 2020 Budget.**

**Balancing Authority of Northern California
Resolution 19-10-02**

APPROVAL OF 2020 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 on at least two occasions; 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 2020 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 with the first assessment occurring no sooner than February 1, 2020.

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 3rd day of October, 2019, by the following vote:

		Aye	No	Abstain	Absent
Modesto ID	Greg Salyer				
City of Redding	Dan Beans				
City of Roseville	Michelle Bertolino				
City of Shasta Lake	James Takehara				
SMUD	Arlen Orchard				
TPUD	Paul Hauser				

Dan Beans
Chair

Attest by: C. Anthony Braun
Secretary

DRAFT

BANC 2020 Budget

October 2019

1. Base Budget

- a. General Manager Expenses = **\$359,000**
 - i. Scope: General Manager retainer (@\$27,000/mo.)/bonus and expenses (@\$2,500/mo.)
 - ii. Assumptions: Increase in approved retainer based upon proposed contract amendment and reduced travel expenses
- b. Legal Services (BBMS) = **\$585,000**
 - i. Assumptions: No increase in base legal services from 2019, 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 = **\$150,000**
 - i. Scope: Potential follow-on consultant support for evaluating IRP recommendations and coordination with members. Also, potential consultant support for SB100 report development.
- e. Asset Valuation = **\$1,082,866**
 - i. Energy Management System
 - 1. Assumptions:
 - a. Amortized capital cost, excluding EIM module (BANC share) = \$593,924
 - b. Annual Siemens support cost (BANC share) = \$98,942
 - 2. Total = \$692,866
 - 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 75% = \$975,000
 - 2. BANC share of TOP/BA= 40% = \$390,000

Attachment A to Resolution 19-10-02

f. Sub-total = **\$2,276,866**

g. Contingency (~5%): **\$~115,000**

Total = **\$2,391,866**

Member Breakdown Comparison of 2019 vs. 2020 Base Budgets:

MEMBER ALLOCATION	2019	2020
SMUD (68.8%)	\$1,588,678.94	\$1,640,238.14
MID (16.5%)	\$380,549.36	\$392,899.76
ROSEVILLE (7.8%)	\$181,104.81	\$186,982.41
REDDING (5.0%)	\$114,623.30	\$118,343.30
SHASTA LAKE (1.2%)	\$27,509.59	\$28,402.39
Subtotal	\$2,292,466.00	\$2,366,866.00
TPUD (fixed)	\$25,000.00	\$25,000.00
SHASTA LAKE (fixed)	\$-	\$-
TOTAL	\$2,317,466.00	\$2,391,866.00

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

a. Assumptions:

- i. PA-1 effort started 7/1/16; 2017 is pilot year; Full compliance achieved 1/1/18
- ii. SMUD to provide contract PC services to BANC
- iii. Original Base Cost to BANC = \$250,000/year plus
 - 1. \$35,000 for overview assessment of full BANC footprint
 - 2. \$10,000 contingency to allow for SMUD to consider labor rate increase.
 - 3. In order to meet NERC Reliability Standard TPL-007-2 we will need to procure GE PSLF Geomagnetic Disturbance Tool. A one-time procurement cost of \$15,000 was incorporated in 2019 Budget. A \$3,000/year charge will be incurred each year thereafter, starting in 2020.
 - 4. Total cost for 2020 = \$298,000
- iv. WAPA-SNR does not participate, TPUD and Shasta lake embedded within WAPA-SNR; all other members participate
- v. 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%)	\$149,000.00
MID (30%)	\$89,400.00
REDDING (9.5%)	\$28,310.00
ROSEVILLE (10.5%)	\$31,290.00
TOTAL	\$298,000.00

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. BANC and other BANC Funding Parties paid Peak for RC services and wind down costs for entire year of 2019 and closure in 2020 all in 2019. RC West will provide RC services starting on 7/1/19 going forward with first invoice for 2019 and 2020 RC services being paid in January 2020.
- ii. RC West Funding
 - 1. BANC joins CAISO RC effective 7/1/19
 - 2. TPUD and Shasta Lake embedded within WAPA-SNR, which becomes a TOP Funding Party under CAISO tariff
 - 3. MID and SMUD become TOP Funding Parties under CAISO tariff
 - 4. BANC pays the remaining amount allocated to the BA footprint per CAISO tariff for Redding and Roseville
 - 5. RC West charge-out rates:
 - a. 7/1/19-10/31/19 = \$0.0134/MWH
 - b. 11/1/19-12/31/19 = \$0.0273/MWH
 - c. 1/1/20-12/31/120 = \$0.029/MWH
 - 6. 2017 NEL
 - a. Roseville = 1,249,280 MWH
 - b. Redding = 798,841 MWH

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

MEMBER	2019 ASSESSMENT	2020 ASSESSMENT	TOTAL
SMUD	\$-	\$-	
MID	\$-	\$-	
ROSEVILLE	\$11,264.34	\$36,229.12	\$47,493.46
REDDING	\$7,202.89	\$23,166.39	\$30,369.28
MEMBER TOTAL	\$18,467.23	\$59,395.51	\$77,862.74
WASN	\$-		
TOTAL	\$18,467.23	\$59,395.51	\$77,862.74

Attachment A to Resolution 19-10-02

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. SMUD is only Participating Resource
 - iii. EDAM program development, including initial cost/benefit analysis, finalized 3rd Qtr. 2019. Second cost/benefit analysis 3rd Qtr. 2020 after market design finalized.
 - iv. Formal CAISO stakeholder process initiated 3rd Qtr. 2019 – 2nd Qtr. 2020
 - v. CAISO tariff filings and market implementation mid-2020 - 2021
 - vi. EDAM “go-live” no earlier than Spring 2022
 - vii. Costs allocated to SMUD as the sole initial EDAM participant.
 - b. Estimated costs for EDAM evaluation under PA-4 are initial estimates based upon discussions among the EIM entities, CAISO, and BANC staff.

IMPLEMENTATION CATEGORY	COST ESTIMATE
Legal Support	\$120,000.00
Consultant Support	
~ Cost Eval. (Utilicast)	\$25,000.00
~ Update Ben. Anal.(Brattle)	\$40,000.00
~ Market Dev, Spt. (TBD)	\$50,000.00
~ Total	\$115,000.00
Total Estimate	\$235,000.00
Contingency (~20%)	\$45,000.00
TOTAL for 2018	\$280,000.00

Attachment A to Resolution 19-10-02

6. Participation Agreement #5 (PA-5) – EIM Participation (Phase 1)

- a. Assumptions
 - i. BANC participates as EIM Entity/Phase 1 starting 4/3/19
 - ii. SMUD only Participating Resource and cost allocation
- b. Cost estimates based on GridSME evaluation, EIM Services Agreement, and latest estimates.

IMPLEMENTATION CATEGORY	COST ESTIMATE
Personnel - EIM Desk (5)	\$1,587,138.00
Personnel - Settlements (0.5)	\$118,118.00
Personnel - Outage Mgmt (0.4)	\$126,971.00
Personnel - Netwk Model (1)	\$267,843.00
Personnel - Meter Data Mgmt (0.5)	\$39,648.00
Personnel - SME/Oversight (0.4)	\$171,179.00
Personnel - IT Support (0.25)	\$55,853.00
Personnel Total (8.15)	\$2,366,750.00
3% Labor Adjustment	\$71,002.50
Personnel Total	\$2,437,752.50
EIM Software Support	
- ITOA	\$20,000.00
- WebEIM	\$40,000.00
EIM Software Support Total	\$60,000.00
EMS EIM Module	
- Amortized Capital	\$52,978.00
- O&M Support	\$10,000.00
EMS EIM Module Total	\$62,978.00
Legal Support	\$30,000.00
EIM Stakeholder Support	\$150,000.00
CAISO Charges	
- Fees	\$250,000.00
- Uplifts	\$500,000.00
CAISO Charges Total	\$750,000.00
TOTAL for 2019	\$3,490,730.50

Attachment A to Resolution 19-10-02

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 decide to move forward by August 2019 as Participating Resources. BANC will be the EIM Entity.
- ii. Initiate EIM Phase 2 Implementation with CAISO starting in September 2019 with go-live April 2021.
- iii. Cost estimates are based upon GridSME report, EIM Phase 2 Gap Analyses, and current best estimates.

IMPLEMENTATION CATEGORY	COST ESTIMATE	MID	REDDING	ROSEVILLE	WAPA
Utilicast Support	\$936,000.00	\$259,082.00	\$78,831.00	\$123,087.00	\$475,000.00
Software Upgrades	\$700,000.00	\$275,800.00	\$84,000.00	\$131,600.00	\$208,600.00
SMUD PM Support	\$174,000.00	\$68,556.00	\$20,880.00	\$32,712.00	\$51,852.00
Legal Support	\$126,000.00	\$49,644.00	\$15,120.00	\$23,688.00	\$37,548.00
CAISO Implementation Fees	\$134,000.00	\$52,796.00	\$16,080.00	\$25,192.00	\$39,932.00
Total Estimate	\$2,070,000.00	\$705,878.00	\$214,911.00	\$336,279.00	\$812,932.00
Contingency @~10%	\$207,000.00	\$70,587.80	\$21,491.10	\$33,627.90	\$81,293.20
TOTAL for 2020	\$2,277,000.00	\$776,465.80	\$236,402.10	\$369,906.90	\$894,225.20

Attachment A to Resolution 19-10-02

9. 2020 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	MEMBER TOTAL
SMUD	\$1,640,238.14	\$149,000.00	\$-	\$280,000.00	\$3,490,730.50	\$-	\$5,559,968.64
MID	\$392,899.76	\$89,400.00	\$-	\$-	\$-	\$776,465.80	\$1,258,765.56
ROSEVILLE	\$186,982.41	\$31,290.00	\$47,493.46	\$-	\$-	\$369,906.90	\$635,672.77
REDDING	\$118,343.30	\$28,310.00	\$30,369.28	\$-	\$-	\$236,402.10	\$413,424.68
SHASTA LAKE	\$28,402.39	\$-	\$-	\$-	\$-	\$-	\$28,402.39
TPUD	\$25,000.00	\$-	\$-	\$-	\$-	\$-	\$25,000.00
BANC TOTAL	\$2,391,866.00	\$298,000.00	\$77,862.74	\$280,000.00	\$3,490,730.50	\$1,382,774.80	\$7,921,234.04
WASN	\$-	\$-	\$-	\$-	\$-	\$894,225.20	\$894,225.20
GRAND TOTAL	\$2,391,866.00	\$298,000.00	\$77,862.74	\$280,000.00	\$3,490,730.50	\$2,277,000.00	\$8,815,459.24

Balancing Authority of Northern California

Agenda Item 5E

1. **Resolution 19-10-03 Approval of Amended Management Services Agreement Between BANC and Adirondack Power Consulting, LLC.**
2. **Management Services Agreement Between the Balancing Authority of Northern California and Adirondack Power Consulting, LLC.**

Braun Blaising Smith Wynne, P.C.

Attorneys at Law

9/25/2019

To: BANC Commission
From: BANC Counsel
RE: Management Services Agreement

Attached hereto is an amended Management Services Agreement between BANC and Adirondack Power Consulting, LLC for the services of Jim Shetler to serve as the BANC General Manager.

In addition to the contract service fee increase and bonus provided in the amended Agreement, we have made other minor changes for the Commission's consideration. First, the scope of services has been amended to reflect the increased focus on the Energy Imbalance Market ("EIM") implementation and other EIM related activities. Second, as we did in a prior amendment, we propose to refine language to further ensure the engagement of Mr. Shetler will not be confused by an employment relationship.

We recommend adoption of these changes and approval of the amended Management Services Agreement.

**Balancing Authority of Northern California
Resolution 19-10-03**

**APPROVAL OF AMENDED MANAGEMENT SERVICES AGREEMENT BETWEEN BANC
AND ADIRONDACK POWER CONSULTING, LLC**

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, BANC JPA Section 11.4.4 authorizes the BANC Commission to hire or appoint officers, employees, and contractors, as it may deem necessary; and

WHEREAS, the BANC Commission has determined that its interests require chief executive services, independent of the members and of the other consulting professionals who furnish other expert services to BANC; and

WHEREAS, Mr. James Shetler, an employee of Adirondack Power Consulting, LLC, has been appointed as General Manager by the BANC Commission.

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

1. Approve the Amended Management Services Agreement between the Balancing Authority of Northern California and Adirondack Power Consulting, LLC.

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 3rd day of October, 2019, by the following vote:

		Aye	No	Abstain	Absent
Modesto ID	Greg Salyer				
City of Redding	Dan Beans				
City of Roseville	Michelle Bertolino				
City of Shasta Lake	James Takehara				
SMUD	Arlen Orchard				
TPUD	Paul Hauser				

Dan Beans
Chair

Attest by: C. Anthony Braun
Secretary

**MANAGEMENT SERVICES AGREEMENT BETWEEN THE
BALANCING AUTHORITY OF NORTHERN CALIFORNIA AND
ADIRONDACK POWER CONSULTING, LLC**

This Management Services Agreement (Agreement) is entered into on and effective as of December 1, 2019, by and between the Balancing Authority of Northern California (BANC) and Adirondack Power Consulting, LLC, and has been made with reference to the following facts, among others, which are stated in these:

RECITALS:

- A. BANC is a public agency, created pursuant to a joint powers agreement (“JPA”), as an entity that is separate and distinct from its member public entities.
- B. BANC relies on consultants for the provision of necessary administrative, financial, managerial, and expert services, not having desired to hire employees for such purposes.
- C. JPA Section 11.4.4 authorizes the BANC Commission to hire or appoint officers, employees, and contractors, as it may deem necessary.
- D. The BANC Commission has determined that its interests require contract chief executive services (hereinafter “Contract Executive”), independent of the members and of the other consulting professionals who furnish other expert services to BANC and wishes to extend the services provided by Mr. James Shetler, employee of Adirondack Power Consulting, LLC, for such purposes.

THEREFORE, in consideration of the premises, and the terms, conditions and covenants of this Agreement, BANC and Adirondack Power Consulting, LLC do hereby enter into this Agreement as follows:

Section 1. Services of the Contract Executive.

- a. The Contract Executive shall render to BANC the Services that are described in this Agreement and in the Commission-General Manager Authority Delegation Policy as it may be amended from time to time, attached hereto as Exhibit C.
- b. The Contract Executive shall determine in its sole discretion the method, details, and means of performing the Services for BANC.
- c. The Services to be rendered by the Contract Executive are the assumption of the appointment as General Manager and the accomplishment of the objectives as set forth by the BANC Commission strategic issues paper, and Scope of Work, attached hereto as Exhibit B.
- d. The Contract Executive's Services shall include the provision of leadership and communication services to assist BANC in completing its objectives.
- e. The Contract Executive, as General Manager, shall make recommendations to the BANC Commission to preserve and enhance BANC's position with regard to balancing authority matters and reliability in the electricity industry for the benefit of

BANC's members.

- f. In assuming the responsibilities of the General Manager, the Contract Executive shall remain an independent contractor and for no purpose shall the Contract Executive be deemed an employee of BANC.
- g. The Contract Executive shall act as a non-voting member of any standing committee that may be chartered from time to time by the BANC Commission. As determined by the BANC Commission, the Contract Executive may act as BANC's representative pursuant to the relative balancing authority agreements.
- h. The Contract Executive, as General Manager, shall also exercise the managerial authority in connection with the expert consulting professionals engaged by the BANC for accounting, auditing, financial, managerial, or other professional services. The Contract Executive shall manage the assignments of these expert consulting professionals engaged by BANC.

Section 2. Term

a. Appointment, Term, and Termination

BANC does hereby appoint the Contract Executive as its General Manager to serve for the term of this Agreement. The Contract Executive hereby accepts such appointment. This Agreement shall have a term that commences on its effective date of December 1, 2019~~8~~ and continue until terminated as provided in this Agreement. Upon termination, the Contract Executive shall surrender any office equipment, supplies, and documents in its possession or control that may have been purchased by or for BANC, except for any equipment or furniture purchased pursuant to Section 4.c, below.

b. Early Termination.

Either the BANC Commission or the Contract Executive may terminate this Agreement at any time, without any cause, at its pleasure or convenience, by providing one- hundred-eighty (180) days written notice to the other, such notice specifying the Effective Termination Date. If the BANC Commission terminates this Agreement, then BANC shall pay the Contract Executive a lump sum equal to the whole Monthly Fee payable for the month in which termination occurs, and any Reimbursable Costs and Office Expense and Support Component, not to exceed the amount budgeted by BANC for four succeeding months, if any obligation for such component was incurred by the Contract Executive.

c. Early Termination by the Contract Executive.

If the Contract Executive terminates this Agreement pursuant to Section 2.b, BANC will pay the Contract Executive for the work performed up to the Effective Termination Date. In no event shall BANC be obligated to pay for any services that are not provided, nor for any services provided or expenses incurred beyond the Effective Termination Date.

d. Mutual Termination.

This Agreement may be terminated by written mutual agreement of both Parties.

Termination under this provision may be immediate.

Section 3. Time Devoted to Service.

- a. The Contract Executive understands that while the General Manager position is generally expected to require part-time service, BANC expects that the position will require more than part-time service from time-to-time. The general expectation for time devoted to service is approximately 115 hours per month.
- b. BANC and the Contract Executive agree that the Contract Executive shall determine the hours and the days devoted to service under this Agreement, provided that if the Contract Executive determines that the demands of service exceed the general expectation in Section 3.a for an extended period, it will consult with the Commission on recommendations for reducing the demands, modifying this Agreement, or retaining another contract chief executive and terminating this Agreement as provided in Section 2.b, Early Termination by the Contract Executive.
- c. Personal leave of the Contract Executive's Designated Employee is anticipated by BANC.
- d. The Contract Executive's Designated Employee shall not serve any other person or entity in an executive or managerial capacity during the term of this Agreement. BANC acknowledges that the Contract Executive's Designated Employee may enter ~~limited~~ consulting assignments or may serve as a compensated director of a governing, policy, or advisory board, provided that such positions or assignments do not create unlawful conflicts of interest or would require a time commitment that would diminish the Contract Executive's ability to perform services under this Agreement. require, on average, more than five (5) days a month of service. Nothing in this Agreement is intended to prevent the Contract Executive's Designated Employee from participating in electricity industry academic and policy seminars for compensation.

Section 4. Fees and Costs.

a. Monthly Fees.

The BANC shall pay the Contract Executive a Monthly Fee of ~~\$275,500-000~~ during the term of this Agreement, by the last day of each month. BANC shall further pay the Contract Executive a one-time \$5,000 bonus payable on the first regular disbursement of the Monthly Fee as after execution of this Agreement. contemporaneous with payment of the first Monthly Fee payable in calendar year 2019. BANC shall have no liability for taxes, insurance, or other expenses except as specified in this section.

The BANC shall add Office Expenses to the base Monthly Fee when they are incurred, as provided in this Agreement. The Contract Executive shall be entirely responsible for its employees and subcontractors, and it shall, at its expense and in its name, provide disability, workers' compensation or other insurance, required of an employer.

b. Reimbursable Costs.

BANC shall reimburse the Contract Executive the costs of reasonable, necessary, and supported expenses incurred while on BANC business, including the costs of

airfare or air charter, lodging, meals, and other travel expenses while on BANC business.

c. Automobile Expense Reimbursement.

BANC shall reimburse the Contract Executive for all miles driven on BANC business at the current rate published by the Internal Revenue Service.

d. Performance Review

During the term of this Agreement, BANC shall conduct a performance review of the Contract Executive ~~no later than September 15 of~~ each year to consider a possible fee increase that would take effect no later than January 1 of the following year. This requirement to conduct a review does not obligate BANC to increase the fees at any time during the term of this Agreement.

Section 5. The Contract Executive's Assurances.

During the term of this Agreement, the Contract Executive shall maintain professional, property and comprehensive liability insurance, including automobile insurance. Attached as Exhibit A are the insurance requirements and coverage limits. BANC shall be included as a named insured on any policy providing such insurance coverage.

Section 6. BANC's Assurances.

BANC does hereby agree to defend, indemnify, and hold the Contract Executive harmless from and against, any and all claims of injury, damage, or death, including but not limited to, damages that are characterized as special, consequential, or exemplary, to the maximum extent permitted by law, arising out of or related to this Agreement, regardless of whether the claim was the result of a negligent act or omission of the Contract Executive, its employees, or subcontractors, both during the term of this Agreement and afterwards, in connection with Services rendered under this Agreement, except for any claim which is proven to have resulted from fraudulent or willful misconduct of the Contract Executive, taken or not taken with a conscious disregard of the consequences. In undertaking the defense of the Contract Executive, BANC may consult the Contract Executive on the selection of defense counsel. The Contract Executive shall cooperate with BANC in the defense of any claim. The obligation of this Section 6 shall survive the termination of this Agreement.

Section 7. BANC's Confidences and Records.

- a. The Contract Executive shall retain the papers and computer media the Designated Employee drafts, collects, or uses as General Manager and make them available for collection or copying by BANC at its expense at the termination of this Agreement. The Contract Executive shall not destroy or discard such papers or media, except in conformance with BANC's document retention policies, without the advance written consent of BANC's General Counsel.
- b. During the term of this Agreement, the Contract Executive will be made privy to confidential information regarding BANC's potential and pending litigation, its negotiations and its trade and proprietary business interests and property. The

Contract Executive or its Designated Employee shall not disclose any confidential information without the advance written approval of BANC's General Counsel. The Contract Executive acknowledges that a breach of this Agreement may not be remedied by an award of damages and that the BANC shall be able to enforce its confidentiality claims in law or in equity, or both.

c. The obligations of this Section 7 shall survive the termination of this Agreement.

Section 8. Financial and Conflict of Interest Laws.

The Contract Executive's Designated Employee, serving as General Manager, shall comply with BANC's Conflict of Interest Code and the laws of the State of California relating to public officials, which require the disclosure of certain financial interests and which prohibit participation in governmental decisions that may affect a personal financial interest.

Section 9. Integration of Agreement.

This Agreement contains the entire agreement between the Parties and supersedes all prior oral and written agreements, understandings, and commitments.

Section 10. Choice of Law.

The formation, construction, and performance of this Agreement shall be construed in accordance with the laws of California. This Agreement shall be enforced in California.

Section 11. Severability.

If any provision of this Agreement is held invalid or unenforceable, the remainder of this Agreement shall nevertheless remain in full force and effect. If any provision is held invalid or unenforceable with respect to particular circumstances, it shall nevertheless remain in full force and effect in all other circumstances.

Section 12. Notices.

Any notice to BANC shall be addressed to its Chair, with a copy to its General Counsel:

Presiding Chair, Balancing Authority of Northern California
c/o Braun Blaising Smith Wynne, P.C.
915 L Street, Suite 1480
Sacramento, CA 95814

General Counsel - Balancing Authority of Northern California
Braun Blaising Smith Wynne, P.C.
915 L Street, Suite 1480
Sacramento, CA 95814

Any notice to the Contract Executive shall be addressed to:

Adirondack Power Consulting, LLC
Attention: James R. Shetler 687

Summit Lakes Ct.
Galt, CA 95632

Notices may be delivered by facsimile, express mail, or delivery service. A party may change its address by notice.

Section 13. Independent Advice.

This Agreement is the product of discussion and it shall not be construed against BANC.

The Contract Executive has not looked to BANC or BANC's legal counsel for advice with regard to the form of this Agreement and he has had the opportunity to consult his own counsel regarding it.

Section 14. Arbitration.

Any controversy or claim arising out of or relating to this Agreement or the breach of the Agreement will be settled by arbitration in accordance with the rules of the American Arbitration Association. Judgment on the award rendered by the arbitrators may be entered in any court having jurisdiction over the award.

Section 15. Attorneys' Fees.

If any legal action, including an action for declaratory relief, is brought to enforce or interpret the provisions of this Agreement, the prevailing party will be entitled to reasonable attorney's fees, which may be set by the court in the same action or in a separate action brought for that purpose, in addition to any other relief to which that party may be entitled.

Section 16. Execution.

This Agreement, having been reviewed and duly approved by the parties, they each intending to be bound by it, in accordance with each and every term, and representing to each other that they have all requisite authority, they have subscribed this Agreement below, with the signatures of their duly authorized representatives.

BALANCING AUTHORITY OF NORTHERN CALIFORNIA

By _____

[Dan Beans](#)~~Greg Salyer~~, Chair

CONTRACT EXECUTIVE

By _____

James R. Shetler, Principal Adirondack Power Consulting, LLC

Exhibit A

Contract Executive agrees to procure insurance pursuant to the following minimum coverage amounts, for which Contract Executive will be recompensed by the BANC. The BANC shall be included as an additional insured:

Professional Liability Insurance	\$1,000,000 aggregate
General Commercial Liability	\$1,000,000 per occurrence
Damage to Premises	\$1,000,000 per occurrence
Medical Expenses	\$10,000, any one person
Personal Injury	\$1,000,000 aggregate
General Comprehensive	\$2,000,000 aggregate

Exhibit B

SCOPE OF WORK

General Manager

Contract Executive's Designated Employee: James Shetler

1. Management of BANC: Oversee the day-to-day management of the BANC organization, including:
 - a. Oversight of the BA contract operator (SMUD),
 - b. Oversight of the BA compliance function (SMUD),
 - c. Oversight of EIM operations function (SMUD)
 - ~~b.d.~~ Oversight of PC function (SMUD)
 - ~~e.e.~~ Oversight of the BANC legal contract (Braun Blasing Smith Wynne, P.C.),
 - ~~d.f.~~ Oversight of treasury, accounting, and other support services,
 - ~~e.g.~~ Coordination and development of BANC member relations.
2. Future Direction of BANC: Develop options, based upon BANC Commission direction, for:
 - a. BANC becoming a more "independent" BA operation,
 - b. BANC acquiring assets that support its BA mission.
3. Industry Relations: Serve as the "face" and "voice" of BANC in appropriate industry forums, including but not limited to:
 - a. CAISO, regarding BA agreements and operations, market issues, and other industry matters,
 - b. WECC, regarding standards development and enforcement and transmission coordination issues,
 - c. PEAK, or successor RCs, regarding coordination of BA operations with the RC and IA functions,
 - d. NERC, regarding standards development and enforcement that impacts BA operations,
 - e. NWPP, regarding power pool operations and related matters,
 - f. WAPA, regarding the interface and coordination of BA and market activities,
 - g. TANC, regarding the interface and coordination of BA activities,

[h.](#) FERC, regarding standards development and enforcement that impacts BA operations or EIM related activities.

[h.i.](#) NWPPA, CMUA, and WEIL regarding coordination of regional issues.