

Balancing Authority of Northern California

Regular Meeting of the Commissioners of BANC

2:00 P.M.

Wednesday, February 19, 2020

35 Iron Point Circle, Suite 225

Folsom, CA 95630

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 **February 19, 2020 at 2:00 p.m.**, at **35 Iron Point Circle, Suite 225, Folsom, CA 95630.**

AGENDA

- 1 Call to Order.**
- 2 Matters subsequent to posting the Agenda.**
- 3 Public Comment** – any member of the public may address the Commissioners concerning any matter on the agenda.
- 4 Consent Agenda.**
 - A. Minutes of the Regular Commission Meeting held on January 22, 2020.
 - B. BANC Operator Report (January).
 - C. Compliance Officer Report (February).
 - D. PC Committee Chair Report (February).
 - E. General Manager's Report and Strategic Initiatives Update.
- 5 Regular Agenda Items – Discussion and Possible Action.**
 - A. EIM Phase 2/EDAM Update.
 - B. SB100 Effort Update.
 - C. Sutter Energy Center Update.
 - i. Consider and Possibly Approve Resolution 20-02-12 *Authorization to Negotiate Sutter Energy Center Term Sheet.*
 - D. PSPS Reciprocity Proposal Discussion.
 - E. GM Transition Plan Discussion/Review.
- 6 Adjournment.**

Balancing Authority of Northern California

Consent Agenda Items

- A. Minutes of the January 22, 2020 BANC Regular Meeting.**
- B. BANC Operator Report (January).**
- C. Compliance Officer Report (February).**
- D. PC Committee Chair Report (February).**
- E. General Manager Report and Strategic Initiatives Update.**

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

January 22, 2020

On this date, a Regular Meeting of the Commissioners of the Balancing Authority of Northern California (BANC) was held at 555 Capitol Mall, 3rd Floor Board Room, Sacramento, CA 95814.

Representatives Present:

Member Agency	Commissioner
Modesto Irrigation District	James McFall, Acting Chair
City of Redding	Nick Zettel
City of Roseville	Michelle Bertolino
Sacramento Municipal Utility District	Paul Lau
City of Shasta Lake	James Takehara
Trinity Public Utilities District	Paul Hauser

Agency	Liaison
Western Area Power Administration	Absent

1. Call to Order: Acting Chair McFall called the meeting to order at 2:00 p.m.
2. Matters Subsequent to Posting the Agenda: None.
3. Public Comment: Acting Chair McFall invited comments from the public and none were given.
4. Consent Agenda: Ms. Bertolino moved, Mr. Hauser seconded, and the participating Commissioners unanimously approved the Consent Agenda items comprised of: (A) Minutes of the Regular Commission Meeting held on October 23, 2019; (B) BANC Operator Reports for October, November & December; (C) Compliance Officer Reports for November, December, & January; (D) PC Committee Chair Reports for November, December, & January; and (E) General Manager’s Report and Strategic Initiatives Update.
5. Regular Agenda Items – Discussion and Possible Action:
 - A. Mr. Shetler introduced a resolution to thank Greg Salyer for his service as a BANC Commissioner following his December retirement. Mr. Lau moved, Mr. Hauser seconded, and the participating Commissioners unanimously approved Resolution 20-01-14 *Resolution Commending and Thanking Greg Salyer for His Service to the Balancing Authority of Northern California*.
 - B. Mr. Shetler provided an update on EIM Phase 2 and EDAM. With respect to EDAM, CAISO is planning to hold the first workshops on February 11-12th, covering two primary tranches: first, Transmission/Resource Sufficiency (RS)/Convergence Bidding; and second, Greenhouse Gas/Price Formation/Grid Management Charge. The EIM Entities

MINUTES OF THE REGULAR MEETING OF THE COMMISSIONERS OF THE
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are engaging with other involved entities through outreach efforts and continuing routine EDAM Steering Committee meetings.

Mr. Shetler reminded the Commission that the 2020 budget included provisions for an EDAM evaluation that included assistance with monitoring EDAM developments and providing real-time assessments as well as evaluating the impacts to BANC members from specific EDAM market designs. In support of these efforts, proposals were solicited from consultants. The evaluated costs included both fixed retainer and variable hourly support. There are approved dollars in the current budget plus contingency and dollars for other consultant support; as a result, no change to the current approved budget is requested at this time. The Commission is being asked to authorize the General Manager to enter into a contract with Customized Energy Solutions (CES) starting February 1, 2020.

Mr. Zettel asked whether CES had production cost modeling capability, and Mr. Shetler indicated that they would be reviewing a specific proposal around RS and evaluating its impacts to BANC, not performing a full quantitative analysis at this time. Mr. Shetler clarified that Brattle had been engaged for that purpose, but he was not recommending pursuing further analysis from Brattle until the full market design was better defined. The expectation is that Brattle will do a shared cost analysis for all EIM entities, including BANC.

Ms. Bertolino moved, Mr. Lau seconded, and a roll call vote was taken. All Commissioners voted in favor of Resolution 20-01-15 *Authorization of Contract for Services Related to EDAM Market Support*.

- C. Mr. Shetler reviewed BANC's SB 100 approach with the Commission. He stated that BANC supports the aspirational goals of SB100 and the position that the near-term goal has to be net zero (while revisiting that goal on a periodic basis.) BANC's approach is similar to that of other BAs. The implementation plan must respect the goals of safety, reliability, and affordability. In addition, a well thought out transition plan that does not abandon existing dispatchable resources until viable alternatives are proven and in place is important. The next SB100 workshop in February will deal with assumptions and inputs. BANC will coordinate its efforts through the Resources Committee (RC.)
- D. Mr. Shetler reviewed the ongoing Sutter Energy Center (SEC) effort. SMUD has contracted with SEC through 2023 and has brought forward a proposal where BANC might become the contracting agent for SEC on behalf of its members in the 2024-30 timeframe. The Resource Committee meeting on February 6th will focus on taking a closer look at this proposal. Mr. Shetler noted that Resource Committee participants were asked what capacity/energy needs members may have in this timeframe to get a sense for the potential broader interest. Assuming there is interest, authority may be sought from Commission to seek further dialogue on this topic. Mr. Smith clarified that member participation would not occur until the 2024 and beyond timeframe.
- E. Mr. Shetler introduced Mr. James Leigh-Kendall, the BANC Compliance Officer, who reviewed the results of the 2019 NERC/WECC BANC Audit with the Commission. The Internal Controls Evaluation (ICE) was conducted by a separate team from WECC. Going forward, WECC plans on integrating the ICE effort into the audit process itself. BANC/SMUD's ICE participation resulted in a recommendation to reduce future compliance oversight within two BANC-applicable reliability standard areas. Overall, the 2019 audit focused on a narrower scope with a much deeper dive into the standards

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reviewed. BANC's results were very positive, with zero findings of potential noncompliance.

- F. Mr. Braun provided a BANC general counsel report and discussed the applicability of AB5 to BANC, among other general topics.
- 6. Closed Session: 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. After returning to open session, Mr. Braun reported that no action was taken in closed session.

The meeting was adjourned at 3:19 p.m.

Minutes approved on February 19, 2020.

C. Anthony Braun, Secretary



BALANCING AUTHORITY OF NORTHERN CALIFORNIA

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

TO: BANC Commission

RE: BANC Operator Report for January 2020

Operations:

- BA Operations: Normal
- Significant BA Issues: None
- NWPP Reserve Energy Activations
 - 0 contingency requiring activation of NWPP
 - 0 MW average generation lost
 - 0 MW maximum generation lost
 - Generating unit(s) and date(s) affected: None
 - All recoveries within 0 minutes
- USF
 - 0 of 31 days with instances of USF mitigation procedure utilized
 - 0 days on Path 66
 - No operational impact on BANC
- BAAL Operation:
 - Maximum duration of BAAL exceedance: 3 minutes
 - Number of BAAL exceedance >10 minutes: 0
 - BAAL violation (BAAL exceedance >30 minutes): None
- Frequency Response (FR) Performance – Quarterly Metric:
 - 2020 Frequency Response Obligation (FRO): -14.7 MW/0.1 Hz

Monthly Notes:

- No additional notes or impacts for January 2020

A JOINT POWERS AUTHORITY AMONG

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

City of Shasta Lake, and Sacramento Municipal Utility District

Compliance Officer Report

BANC Commission Meeting

February 2020

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

BA Compliance Issues:

- No significant operational Balancing Authority compliance events occurred.
- All required BA compliance reports and operating data were submitted to WECC.
- BANC is in the process of reviewing compliance with 47 BA and/or PC applicable NERC Reliability Standards requirements (13 related to Critical Infrastructure Protection and 29 related to Operations/Planning) in preparation for the 2019 Self-Certification submittal to WECC. Self-certification statements are due prior to March 1, 2020. At present, there are no identified areas of concern.

BANC MCRC:

- The next BANC MCRC teleconference is scheduled to be held at 10:00 AM on Monday, February 24, 2020.

PC Committee Chair Report

BANC Commission Meeting

February 2020

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

BANC PC Committee Issues:

- SMUD staff work toward demonstrating compliance with PC-related NERC reliability standards.
 - MOD-031-2 – Demand and Energy Data - Staff initiated the process of collecting Loads and Resources (LAR) data for the BANC PC participants and WAPA (Sierra Nevada Region). LAR data - Part 1 were submitted to WECC on January 31st, 2020. The due date set by WECC for LAR data - Part 2 will be February 29, 2020. However, Staff sent the email out and requested BANC PC participants to submit data to us by February 21st, 2020.
 - PRC-012-2 - Remedial Action Schemes - The effective date of this new PRC-012-2 standard will be January 1st, 2021. Staff will send a notification out to the BANC PC participants requesting RAS from each entity sometime the week of February 10th. Staff is going to perform once every five full calendar years RAS study to comply with R4 of this standard. A study plan, which is currently under development will be sent out for review and comment.
 - Finished year 2019 RSAWs for all PC related NERC reliability standards for the purpose of documentation.
 - TPL-007-3 - GMD Transmission Performance – Staff had a meeting and discussed compliance of R11 and R12 of this standard, which will be effective on 7/1/2021. R11 states “Each responsible entity, as determined in Requirement R1, shall implement a process to obtain GIC monitor data from **at least one GIC monitor** located in the Planning Coordinator's planning area or other part of the system included in the Planning Coordinator's GIC System model.” Staff sent an email out to PC participants and asked if there is at least one GIC monitor located in the BANC area. The due date to response is February 14th, 2020. (GIC stands for Geomagnetic Induced Currents).
 - Data Requests and Deadlines for BANC PC related NERC Standards – Staff is working on an excel file to provide data requests by months for each standard. The excel file will be sent out to PC participants for review and comment sometime the week of February 10th, 2020.

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

	PC Standard	Estimated % Complete	Notes
1	FAC-002-2 Interconnection Studies	100%	RSAW completed.
2	FAC-010-3 SOL Methodology for Planning Horizon	100%	RSAW completed.
3	FAC-013-2 Transfer Capability for Near-Term Planning Horizon	100%	Final Report was sent out on 5/10/2019. RSAW completed.
4	FAC-014-2 Establish and Communicate SOLs	100%	Final Report was sent out on 8/1/2019. RSAW completed.
5	IRO-017-1 Outage Coordination	100%	Sent out TPL-001-4 Report at the end of October, 2019.
6	MOD-031-2 Demand and Energy Data	10%	2020 Loads and Resources Data Request sent out on 12/31/2019.
7	MOD-032-1 Data for Power System Modeling & Analysis	100%	Ongoing activity. RSAW completed.
8	MOD-033-1 System Model Validation	100%	BANC system validated for R1.1 was completed. RSAW completed.
9	PRC-006-2 Underfrequency Load Shedding	100%	Support WECC study. RSAW completed.
10	PRC-010-2 Undervoltage Load Shedding	100%	Study has been completed. Draft report will be sent out by December 13, 2019. RSAW completed.
11	PRC-012-2 Remedial Action Schemes	10%	New Standard to be effective on 1/1/2021.
12	PRC-023-3 Transmission Relay Loadability	100%	Final Report sent out on 9/25/2019. RSAW completed.
13	PRC-026-1 Relay Performance During Stable Power Swings	100%	Final report sent out on 12/30/2019. RSAW completed.
14	TPL-001-4 Transmission System Planning Performance	100%	Final Report has been posted on the BANC member only website. RSAW completed.
15	TPL-007-3 GMD Transmission Performance	100%	Final approved Agreement was sent on June 27th, 2019. WECC GIC Assessment Report and GIC flows information were sent again on 12/02/2019. RSAW completed.

GM Report

BANC Commission Meeting

February 19, 2020

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

Outreach Efforts:

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

LADWP/Seattle City Light/SRP/TID/Tacoma Power

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, including preparation for the upcoming CAISO EDAM workshops. In addition, we have worked with the other three entities to agree upon the joint funding of BBSW to monitor CAISO interfaces for us. We have also confirmed Tacoma Power and TID interest in participating in the group.

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. Our next conference call is on 2/13/2020 and a face-to-face meeting is being planned for later in the spring.

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 second quarter of EIM Phase 1 operations benefits was issued by the CAISO in October and the third quarter in January, with both showing positive results for SMUD.

The BANC EIM Phase 2 effort is moving forward. The EIM Phase 2 Participation Agreement has been executed by all of the entities. The EIM Phase 2 Implementation Agreement has been executed by both BANC and the CAISO and was accepted by FERC effective 12/11/19. Staff is coordinating with the Phase 2 participants and Utilicast to move forward with Phase 2 implementation with several meetings and discussions underway. The main focus for the project is defining WAPA transmission use approach, defining how the deviation band will be handled under EIM, and determining cost allocations methodologies for the various EIM cost codes. We have reached a tentative agreement on the WAPA transmission and deviation band issues. The cost allocation methodologies effort is proceeding well with initial agreement on about half of the cost codes. We have initiated discussions on metering and Resource Sufficiency/Flex Ramp test approach.

EDAM Participation

The EDAM Feasibility Assessment is complete. The CAISO issued an initial EDAM issues white paper on October 10 and held a stakeholder webinar on October 17. The CAISO requested comments on the issues white paper by November 22, with the EDAM Entities filing joint comments and BANC also filing supporting comments. It is expected that the CAISO will use most of 2020 to conduct the formal stakeholder process, including development of a straw proposal for EDAM, followed by tariff filings at FERC. The EDAM Entities have been using the last month to prepare for the first EDAM public stakeholder workshop on February 11-12, 2020. In addition, we have been doing outreach with other stakeholders to initiate dialogue on issues that will be addressed in the stakeholder process. An EDAM go-live, if there is sufficient interest by EIM entities to participate, is currently estimated to be early 2022 timeframe.

WAPA:

Market Engagement

We have included WAPA-SNR in our EIM Phase 2 planning efforts and WAPA-SNR is an active participant in these efforts. As noted above, the main discussions with WAPA-SNR have been around the approach for use of WAPA-SNR transmission in EIM and how the deviation band will be handled in EIM.

San Luis Transmission Project

WAPA-SNR has announced its intent to work with the Bureau of Reclamation and CDWR to construct the SLTP. BANC met with WAPA and the other parties to fully understand the implications of having this new transmission project in the BANC BA/WAPA-SNR sub-BA. The SLTP developers (DATC) have 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:

Closure Activities

Peak ceased operations as a registered RC on December 4, 2019. The final closure activities (terminating contracts, vacating facilities, etc.) are being handled by a closure administrator (Marie Jordan, former Peak CEO), with completion forecasted by 2nd Quarter 2020. Peak is forecasting under running its budget and that the Funding Parties will be receiving a rebate in mid-2020.

WECC

WECC Board Meetings

I attended the last set of WECC MAC and Board meetings in Salt Lake City, UT, on December 3-4, 2019, in my role as the BANC executive sponsor to WECC. There is a WECC Near-Term Priorities Workshop in Seattle on 2/20/2020, which I plan to attend. The next MAC and Board meetings are March 10-11, 2020.

RC Services for the West

With the completion of the RC transition from Peak to the new RCs, WECC and NERC have refocused their efforts from monitoring transition to monitoring operations of the RCs.

CDWR Delta Pumping Load:

BANC is coordinating with SMUD, CDWR, WAPA, and the CAISO regarding how the construction and pumping loads and ancillary services will be provided for this project. The CAISO has reached out to BANC/SMUD/WAPA-SNR regarding contacts for initiating discussions on how CAISO will supply energy for the construction loads in our footprints. With the Governor's announcement that the project will be downsized from two to one tunnel, CDWR has withdrawn the current applications and will be submitting revised environmental documentation. 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 (Joint Agencies) are required to collaborate with the California BAs to develop a quadrennial report on the status of achieving the goals of SB100. The initial report is due 1/1/21. CMUA is working with the four POU BAs (BANC, IID, LADWP, and TID) to coordinate positions and responses. In addition, we have done outreach to the CAISO, PacifiCorp, NV Energy, and WAPA BA's in California to determine if there is benefit to all BAs coordinating on this effort. BANC filed comments with the agencies on 12/2/19. BANC stated that it supported the long-term goals of the State regarding GHG reductions. However, we also cautioned that the transition from the current mix of resources to the long-term resource mix needs to be done in an orderly manner to ensure that grid reliability and affordability can be maintained for the benefit of the end-use consumers. We also supported a "net zero" carbon approach to meeting the goals, at least on an interim basis. We are discussing how SB100 goals will impact BANC operations in the long-term with the Resource Committee and will be updating the Commission as these discussions evolve. The next SB100 workshop is scheduled for 2/24/2020 and BANC has been requested to participate on a BA reliability panel.

Strategic Initiatives

An update of the 2019/2020 Strategic Initiatives is attached to this report.

BANC 2019/2020 Strategic Plan - Routine Initiatives - February 2020 Update

No./Priority	Focus Area	Initiative	Responsibility	Target Due Date	Status
1 Medium	INDEPENDENCE	Effectively oversee the BA operations.	Jim Shetler	Ongoing	See monthly Ops, PC, Compliance, & GM Reports
2 Medium		Develop long-term succession plan and traits for General Manager	Jim Shetler/Commission	Ongoing	Draft transition plan issued to Commission
3 Medium		Organizational Issues: ~ Develop BANC procedures & processes as appropriate	Jim Shetler/BBSW	4th Qtr. 2020	
4 Medium	OUTREACH	Engage in industry forums (WECC, Peak, NWPPA, etc.)	Jim Shetler	Ongoing	Attend RC West, WECC Board, WEIL, & NWPP Exec. Forum meetings
5 Medium		Coordinate with other POU BAs (Ca and regionally)	Jim Shetler	Ongoing	Coordinating with SCL, SRP, LADWP, TP, & TID on EIM
6 Medium		Outreach to regulatory and legislative bodies on key issues	Jim Shetler/BBSW	Ongoing as Necessary	Attended CREPC/WIRAB Mtg. 10/8-9/19
7 Medium	ASSETS	Evaluate joint options for resource needs for BA	Resource Committee	4th Qtr. 2020	
8 Low	MEMBER SERVICES	Identify and outreach to potential new BANC members	Jim Shetler	Ongoing	Discussions with WAPA-SNR

BANC 2019/2020 Strategic Plan - Routine Initiatives - February 2020 Update

No./Priority	Focus Area	Initiative	Responsibility	Target Due Date	Status
9 High	INDEPENDENCE	Manage implementation of EIM Phase 2 participation effort	Jim Shetler/SMUD	4/1/21	Routine EIM Committee meetings being held
10 High		Manage EIM Phase 1	Jim Shetler/SMUD	Ongoing	
11 High		EDAM evaluation effort ~ CAISO Stakeholder Process ~ CAISO Tariff Development	Jim Shetler/BBSW Jim Shetler/BBSW	3rd Qtr. 2020 1st Qtr. 2021	Coordinating with EDAM SC
12 Medium	OUTREACH	Evaluate opportunities to engage other entities in market development	Jim Shetler	Ongoing	Coordinating with SCL, SRP, LADWP, TID, & Tacoma
13 Medium		Regional Policy Issues: Monitor/ weigh-in where appropriate	Jim Shetler/Commission	Ongoing	
14 High		Regionalization: ~Monitor CAISO GRC effort	Jim Shetler/BBSW	3rd Qtr. 2020	GRC meeting; T. Braun selected
15 High		Coordinate with BAs on SB100 collaboration effort	Jim Shetler/BBSW	12/31/20	Participating in 2/24/20 reliability workshop Submitted BANC comments 11/25/19
16 Medium	ASSETS	Evaluate resource criteria for BANC long-term needs	Jim S./Res. Com.	4th Qtr. 2020	Holding discussions at Resource Committee
17 Medium	MEMBER SERVICES	Evaluate possible support to participants for EIM	Jim S.	4th Qtr. 2020	Finalized software EIM procurement options

Balancing Authority of Northern California

Agenda Item 5C

1. *Resolution 20-02-12 Authorization to Negotiate Sutter Energy Center Term Sheet.*

Braun Blaising Smith Wynne, P.C.

Attorneys at Law

February 12, 2020

TO: BANC Commission

FROM: Jim Shetler, BANC General Manager
BANC Counsel

RE: Authorization to Negotiate Sutter Energy Center Term Sheet

The following memorandum is being provided to the Balancing Authority of Northern California (BANC) Commission to seek authorization for the General Manager to enter into negotiations with Calpine Energy Services, L.P.'s (Calpine) with respect to its Sutter Energy Center (SEC), interconnected to the Western Area Power Administration – Sierra Nevada Region's (WAPA) transmission system and located inside the BANC balancing authority area (BAA), in order to provide certain capacity and energy services to BANC, as described further below.

Background

Current resource projections by the California Independent System Operator (CAISO) raise concerns about available capacity within the region to support reliable grid operations, starting in 2020. For example, the CAISO projects a 2300 megawatt (MW) capacity shortfall in the summer of 2020, a 4400 MW capacity shortfall in 2021 and 4700 MW capacity shortfall in 2022. As a result, the California Public Utilities Commission (CPUC) has ordered several remedial actions, including increasing forward procurement requirements for its jurisdictional load serving entities, thus tightening market conditions. In addition, the units at the Diablo Canyon Power Plant are expected to be shut down in 2024 and 2025, reducing baseload generation by 2200 MW.

Equally concerning, a recent resource adequacy study conducted by the Northwest Power Pool (NWPP) shows that the NWPP region may see capacity shortages as early next year due to retirements of aging baseload generation capacity and expected peak load growth within the region. By the mid-2020s, the region may face a capacity deficit of thousands of megawatts. In response to these concerns, the NWPP utilities are initiating a regional RA Program with a goal of implementation by 2022 (or earlier), which will require industry coordination and stakeholder input. Moreover, the CAISO and CPUC are working to strengthen verification of capacity supply from neighboring regions into the CAISO, which may tend to further exacerbate tightening supply if concerns that resources are double-counted are founded. With BANC's heavy reliance on the Pacific Northwest, both through member use of their significant import capacity on the California-Oregon Transmission Project and its participation in the NWPP Reserve Sharing Group, these capacity shortage developments are troubling.

Members have begun to address these regional capacity developments and possible responses, particular in the transitional period as the grid continues to evolve to reduce carbon emissions.

SMUD has an existing 250 MW agreement with the SEC to support its immediate needs, which agreement terminates at the end of 2020. It has also completed negotiations on a new contract with SEC, for another 3 years (2021-2023). After that period, and given other portfolio changes and overall market conditions, SMUD believes it will have a significant need for contracted capacity beyond 2023.

The expansion of the Energy Imbalance Market (EIM) within the BANC footprint to include nearly all BANC members and WAPA, and the possible addition of an Extended Day Ahead Market (EDAM), may likely further support procurement of additional capacity within the BANC footprint. EIM has, and EDAM will have, Resource Sufficiency (RS) and Flexible Capacity (Flex) tests,¹ and the simplest way to satisfy these requirements would be with controlled resources within the BANC footprint.

Proposal for Consideration by BANC Members

For the above reasons, SMUD began discussion of possible successor arrangements to procure capacity from SEC beyond 2023. These discussions continued last year in the BANC Resource Committee (RC), including the most recent RC Committee meeting of February 6, 2020. The discussion centered around the potential broader need among the members for capacity resources, the impacts of EIM and EDAM markets rules including the Resource Sufficiency tests, and the advantages of having resources procured under a joint BANC umbrella. Under this proposal as currently envisioned, BANC would enter into an agreement with Calpine/SEC *for the full or specified minimum capacity* of the facility and make that energy and capacity available to participating BANC members and/or WAPA. BANC will create a new project and project participation agreement for this purpose, initially with SMUD as its anchor participant.²

There are numerous issues to consider and resolve. For example, the output of the SEC is currently limited within BANC BAA to approximately 250 MW due to the need to avoid establishing a higher Most Severe Single Contingency (MSSC) requirement for the BAA. Consequently, for SEC to currently run above 250 MW, it must do so as a dynamic export to the CAISO, which will be responsible for carrying the Contingency Reserves for the balance of the plant. Therefore, for Calpine, any option that either schedules all or a portion of SEC to the CAISO will allow the plant to run. And while Calpine previously shut down the SEC due to a lack of economic sales into the CAISO, the recent concerns over diminished capacity resources and a decision by the California Public Utilities Commission (CPUC), both affirming the value of SEC as a resource adequacy resource (RAR) and requiring load serving entities

¹ These are complex topics, but put simply, RS is in place in EIM (and will also be part of EDAM, should it proceed), to ensure that each EIM BAA comes to the market fully resourced to prevent leaning on the EIM for anything other than balancing energy (in EDAM, the concept is similar, but it allows for a larger window and volume of economic redispatch). As part of meeting RS, each EIM Entity is also assigned some amount of Flex it must carry in its portfolio to address variable energy resource (wind and solar) intermittency. These more flexible, or “quick ramping,” generators are used to “fill in the holes” caused by the variability. If an entity fails to meet its RS and Flex requirements, the EIM Entity is “locked out” of the EIM until it can otherwise meet its obligation. Such a lockout will impact all BANC EIM participants and could, in some instances, have significant financial consequences.

For example, in the instance of one participant’s failure to meet RS in an hour where pricing went negative during the lockout interval in the CAISO EIM footprint – i.e., BANC EIM participants could have been paid by the CAISO, rather than use their own resources to serve their loads – such a failure would forfeit the other EIM participants’ ability to take advantage of this opportunity. Of course, negative pricing is an extreme example, but SMUD has seen in EIM many instances where it was had hundreds of megawatts redispatched within a single hour, far below its system marginal cost. The bottom line is that RS joins all of the BANC EIM participants at the hip, and the failure of one to meet its RS obligation will impact all. In some cases this lost opportunity cost could be significant.

² This might be similar to what was done for BANC EIM, where SMUD was the first project participant in Phase 1.

(LSE) in the CAISO to issue requests for proposals for RARs at a minimum for 2021-2023³, has afforded SEC new options for SEC output.

However, there is an upgrade that can be done at the two substations to eliminate the single points of failure by unbundling the current single circuits at the SEC facility and at the O'Banion 230 kV substation. This would allow the full plant to run and sink within the BANC BAA without exceeding today's MSSC of 250 MW.⁴ Thus, we suggest that the proposal be broken into phases. The Phase 1 elements will be limited to the current 250 MW threshold. However, during Phase 1, the Parties (i.e., BANC, SMUD, and Calpine) will work with WAPA to upgrade the system to eliminate the single points of failure for the SEC plant output. Once this is completed, the output sinking within the BANC BAA can be increased to as much as the full plant capacity, per the terms of the BANC-SEC agreement. This is expected by 2024.

SMUD Staff has presented this information and concepts to the BANC members and WAPA. This has been done on a preliminary basis with the BANC RC, which has determined that the concept is worth pursuing to the next step -- which would be to enter into discussions with Calpine to determine a general outline of a possible agreement. The RC and BANC staff are therefore seeking authorization for the General Manager to engage in these discussions along with SMUD and Calpine. The results would be a proposal to be brought back to the Commission for consideration. No further authorization is being sought. Below is a general summary of what has been discussed and decided by the RC:

- BANC RC has reviewed the SMUD proposal to contract for capacity and energy from the ~500 MW SEC through BANC.
- SMUD has identified that they have a need for ~70-80% of the capacity from the plant during the 2023-2030 timeframe. They were interested in determining if other members might have interest in contracting for some of the remaining capacity through a participation agreement under BANC.
- Based upon the review, it was determined by the RC that other members might have a collective need for capacity in the range of 20-75 MW during this timeframe. The RC identified additional reasons why having the SEC under contract with BANC, among which includes:
 - Strengthening the long-term value and viability of the BANC BA;
 - Providing voltage support for the BA; and
 - Assisting in meeting Capacity/Energy, EIM/EDAM Resource Sufficiency and Flex Ramping tests in the future within the BANC BAA.

Conclusion

Based on its review, the RC and BANC staff are recommending that the Commission authorize the General Manager to enter in to negotiations with Calpine and SMUD to develop a term sheet for the procurement of capacity and energy from SEC. The term sheet would form the basis for decisions by the members as to participation in a SEC participation agreement.

³ See CPUC "Order Instituting Rulemaking to Develop an Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements," Rulemaking 16-02-007, Decision 19-11-016, November 13, 2019, at 32, 82 (Decision).

⁴ The configuration of SMUD's Cosumnes Power Plant is similar, in that it can run up to its full output of over 500 MW without violating BANC's MSSC.

**Balancing Authority of Northern California
Resolution 20-02-12**

**APPROVAL FOR THE BANC GENERAL MANAGER TO ENTER INTO NEGOTIATIONS FOR
CAPACITY AND ENERGY SERVICES WITH CALPINE ENERGY SERVICES, L.P.**

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

WHEREAS, reports by both the California Independent System Operator (“CAISO”) and the Northwest Power Pool raise significant capacity shortfall concerns within both California and the Pacific Northwest over the next several years; and

WHEREAS, the Sacramento Municipal Utility District (“SMUD”) and other BANC members often rely on imports from both the CAISO balancing authority area (“BAA”) and the Northwest to meet their energy and capacity needs; and

WHEREAS, the BANC Resource Committee (“RC”) has reviewed a SMUD proposal to contract for capacity and energy from the Calpine Energy Services, L.P.’s (“Calpine”) Sutter Energy Center (“SEC”) through BANC; and

WHEREAS, SMUD has identified that it will have a need for approximately 70-80% of the approximately 500 megawatts of capacity from the SEC during the 2023-2030 timeframe; and

WHEREAS, given this need, SMUD wanted to determine if other BANC members and/or the Western Area Power Administration – Sierra Nevada Region (“WAPA”) might have interest in contracting for some of the remaining capacity via a participation agreement through BANC; and

WHEREAS, based upon the review by the RC, it was determined by the other members that some might have a collective need for some portion of the capacity; and

WHEREAS, WAPA has determined it does not have a specific need at this time; and

WHEREAS, the RC identified additional reasons why having the SEC under contract with BANC, should be pursued, among which includes:

- Strengthening the long-term value and viability of the BANC balancing authority (“BA”);
- Providing voltage support for the BA; and
- Assisting in meeting Capacity/Energy, EIM/EDAM Resource Sufficiency and Flex Ramping tests in the future within the BANC BAA; and

WHEREAS, based on their review, the RC and BANC Staff are recommending that the Commission authorize the General Manager to enter into negotiations with Calpine and SMUD to develop a term sheet for the procurement of capacity and energy from SEC for further consideration by the RC and possibly the Commission;

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

“Authorizes the General Manager to proceed with negotiations (inclusive of entering into any required non-disclosure agreements pursuant thereto) with Calpine and SMUD and to develop a term sheet for further review by the BANC Resource Committee and the Commission, if so determined by the BANC Resource Committee.”

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 19th day of February 2020, by the following vote:

**Balancing Authority of Northern California
Resolution 20-02-12**

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

Dan Beans
Chair

Attest by: C. Anthony Braun
Secretary