Balancing Authority of Northern California

Regular Meeting of the Commissioners of BANC

2:00 P.M. Wednesday, January 24, 2018 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 **January 24, 2018** 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.
- **Public Comment** any member of the public may address the Commissioners concerning any matter on the agenda.
- 4 Consent Agenda.
 - A. Minutes of the Regular Commission Meeting held on December 20, 2017.
 - B. BANC Operator's Report.
 - C. Compliance Officer's Report.
 - D. PC Committee Chair's Report.
 - E. General Manager's Report and Strategic Initiatives Update.
- 5 Regular Agenda Items Discussion and Possible Action.
 - A. Update on EIM implementation.
 - B. Consider and Possibly Approve Resolution 18-01-15 Authorization to Execute EIM Services Agreement Between BANC and SMUD.
 - C. Consider and Possibly Approve Resolution 18-01-16 *Authorization to Execute Balancing Authority Participation Agreement between BANC and CCFC Sutter Energy, LLC.*
- **Closed Session:** Conference with legal counsel significant exposure to litigation pursuant to subdivision (c) of Cal. Gov't Code § 54956.9; one case.
- 7 Adjournment.

Balancing Authority of Northern California

Consent Agenda Items

- A. Minutes of the December 20, 2017 BANC Regular Meeting.
- B. BANC Operator's Report.
- C. Compliance Officer's Report.
- D. PC Committee Chair's Report.
- E. General Manager's Report and Strategic Initiatives Update.

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

December 20, 2017

On this date, a Regular Meeting of the Commissioners of the Balancing Authority of Northern California (BANC) was held at 915 L Street, Suite 1480, Sacramento, CA 95814.

Representatives Present:

Member Agency	Commissioner
Modesto Irrigation District	Greg Salyer, Chair
City of Redding	Nick Zettel
City of Roseville	Michelle Bertolino
Sacramento Municipal Utility District	Arlen Orchard
City of Shasta Lake	Absent
Trinity Public Utilities District	Paul Hauser

Agency	Liaison
Western Area Power Administration	Subash Paluru

- 1. Call to Order: Chair Salyer called the meeting to order at 2:03 p.m.
- 2. <u>Matters Subsequent to Posting the Agenda</u>: Mr. Shetler indicated that he will update the Commission regarding one of BANC's members potentially contracting for service with a Sutter plant, which has ramifications for agreements BANC has with CAISO and for potential agreements BANC may need to enter into with Western. Mr. Shetler will brief the Commission (no action requested), as a part of the General Manager's Report (Item 4F).
- 3. Public Comment: Chair Salyer invited comments from the public and none were given.
- 4. <u>Consent Agenda</u>: Mr. Shetler requested that Mr. Smith, BANC Counsel, provide the Commission with an update regarding SMUD's discussions with Sutter (Calpine) and capacity arrangements involving BANC Member SMUD and the Sutter plant mentioned previously. WAPA has been in those discussions as well, as the plant is currently a pseudotie into the CAISO, interconnected to and operating over WAPA transmission, and treated as an internal CAISO generator. Because the agreement will be between SMUD and Sutter, the current pseudo-tie arrangement is planned to be suspended.

The agreements contemplate that the Sutter facility will be run as an internal SMUD generator inside the BANC Balancing Authority, operated as something akin to a pseudo-tie between the WAPA sub-system and the SMUD sub-system (sunk into SMUD); all BA services and station service will be provided by SMUD. There will be a proposed Balancing Authority agreement between BANC and Sutter that is planned to come to the BANC Commission at the January meeting for approval. The Dynamic Transfer Agreement between BANC and the CAISO, which lists Sutter as a pseudo-tie resource, can be amended via a written agreement between BANC and the CAISO (no FERC action required). CAISO has made an informational filing to the FERC Commission to notify them of the suspension of the

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

existing pseudo-tie. There will also be a temporary termination of the agreement for transmission service between WAPA and Calpine. The agreement between SMUD and Calpine is currently expected to be a 2-year deal, which could be extended at a future point in time for an additional year. More information will follow as the details of the arrangement are finalized.

Mr. Orchard moved, Ms. Bertolino seconded, and the participating Commissioners unanimously approved the Consent Agenda items comprised of the: (A) Minutes of the Regular Commission Meeting held on October 25, 2017; (B) BANC Operator's Reports (October & November); (C) Compliance Officer's Reports (November & December); (D) PC Committee Reports (November and December); and (E) General Manager's Report and Strategic Initiatives Update.

5. Regular Agenda Items:

A. Mr. Shetler provided an EIM Implementation Update, including the status of EIM Operator new operator positions, EMS and other support software upgrades, the BANC/SMUD EIM Services Agreement, and BANC EIM Entity Agreement (finalizing 1st quarter 2018). Mr. Shetler also shared that he has spoken with BBSW regarding dialogue taking place with Seattle City Light, SRP, and LADWP around the possibility of BBSW providing joint POU coordination & communication with the CAISO through a cost-sharing arrangement that would likely go into effect sometime in the first quarter of 2018.

Seattle City Light has delayed their EIM go-live until spring of 2020.

BANC must become a Scheduling Coordinator as a result of joining EIM, which requires BANC to set up credit arrangements with the CAISO. Mr. Shetler is in dialogue with Ms. Noreen Roche-Carter at SMUD regarding these requirements, and more information will likely be brought back to the Commission at February's meeting. Mr. Salyer asked what type of credit arrangements were being requested. Mr. Shetler responded that the details were still under review and that more dialogue was required.

- B. Agenda items B & C were addressed in reverse order while the electronic presentation pertaining to item B was loaded. Mr. Shetler briefly reviewed the circumstances surrounding the annual renewal of the Interim Participation Agreement 13-SNR-01718 between BANC and WAPA. Mr. Hauser moved, Ms. Bertolino seconded, and the participating Commissioners unanimously approved Resolution 17-12-13 *Authorization to Amend Interim Participation Agreement 13-SNR-01718*.
- C. Mr. Joseph Gillette provided an overview of the BANC PC Area 2017 Ten-Year Transmission Planning Assessment, including the participants (MID, REU, Roseville Electric, SMUD), the study inputs, performance criteria, analyses performed and study results. No issues were identified within the assessment, which was previously reviewed by the participants and approved by the BANC PC Committee. Mr. Orchard moved, Mr. Hauser seconded, and the participating Commissioners unanimously approved Resolution 17-12-07 Acceptance of BANC PC Area 2017 Transmission Planning Assessment.

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

6. Closed Session:

A. The Commission retired to closed session for conference with legal counsel pursuant to subdivision (c) of Cal. Gov't Code § 54956.9; three cases.

After returning to open session, Mr. Braun reported that during closed session, the Commission took action to authorize the General Manager to effectuate documents to facilitate BANC's withdrawal from PEAK.

The meeting was adjourned at 3:16 p.m.

Minutes approved on January 24, 2018.



BALANCING AUTHORITY OF NORTHERN CALIFORNIA

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

TO: BANC Commission

RE: BANC Operator Report for December 2017

Operations:

- BA Operations: Normal
- Significant BA Issues: None
- NWPP
 - 0 contingency requiring activation of NWPP
 - o 0 MW average generation lost
 - o 0 MW maximum generation lost
 - All recoveries within 0 minutes
- USF
 - 9 of 31 days with instances of USF mitigation procedure utilized
 - 0 days on Path 66
 - No operational impact on BANC
- BAAL Exceedances and Violations: None
- COI Actual Flow Greater Than TTC: 0.4 Hours

Monthly Notes:

No additional notes or impacts for December 2017

Compliance Officer's Report BANC Commission January 2018

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.
- Routine periodic compliance reviews of selected BA operational actions and data confirm that all standard requirements reviewed are being met or exceeded.

BANC MCRC:

- The next Member Compliance Review Committee (MCRC) teleconference will be held at 10:00 AM on Monday, January 29, 2018.
- The BANC PC Gap Implementation Plan achieved full compliance by the target date of January 1, 2018. BANC is now responsible entity for compliance with NERC PC standards for BANC PC participants (MID, Redding, Roseville, and SMUD). SMUD has concurrently deregistered as a PC.
- WECC has concurred with BANC's approach to remain status quo as to how BANC currently operates while WECC reviews the interpretations of the term "Balancing Contingency Event" in the revised NERC Reliability Standard BAL-002-2 (effective January 1, 2018) as it applies to COI outages. WECC will review and provide additional guidance to all BAs to assist in understanding and applying the new BCE definition in the near future.

BANC PC Committee Chair's Report January 2018

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 have already begun working on the 2018 BANC PC Area Transmission System Assessment (TPL-001-4). The results of this assessment, as well as the requisite system models that are developed for it, are key inputs into many of the other PC standards. As such, starting work on this assessment earlier in the year allows SMUD staff more time to complete the remaining PC standards. Staff are currently working on the study plan and reviewing our lists of contingencies for the PC Participants.
- SMUD staff are developing a high-level work plan that show in what order and when they intend to work on the various PC standards in 2018.
- The PC Committee Chair will schedule a BANC PC Committee meeting within the next 30 days to discuss the aforementioned items.

GM Report BANC Commission Meeting January 24, 2018

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:

TID

We continue to be open to discussions with TID regarding potential joint efforts on EIM participation. TID provided feedback that they have been given authority to work with BANC on potential EIM participation and possible joint use of the SMUD/BANC EMS. Recent feedback from TID is that they want to see if the actual benefits for SMUD in Phase 1 of BANC EIM match the forecast before they commit to moving forward with EIM participation. However, TID did seek a rough estimate of what joining the BANC EIM might cost for their planning purposes. We had a meeting with TID staff on January 12, 2018, to discuss various options for BANC and TID to work together in the future. These included the potential for TID to join BANC and/or to work with BANC on EIM participation. This was the most productive meeting we have had with TID and we will follow-up on next steps.

LADWP/Seattle City Light/SRP

Dialogue continues with these entities regarding EIM participation. LADWP received approval from the City Council in May 2017 to participate in EIM. They are still shooting for a Spring 2019 go-live date, though there are strong indications this could slip to Spring 2020. Seattle City Light received approval in November 2016 from the City Council to proceed with participation in EIM. SCL has recently announced that they will slip implementation to spring of 2020. SRP management received approval from its Board in February 2017 to participate in EIM and made its formal announcement in early May. They are currently forecasting "go-live" in spring 2020. 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. The CAISO also announced in early June 2017 that Powerex would be joining the EIM. The POU group is still trying to understand what this means and exactly how they will be participating. Several meetings have been held to better understand the impacts of Powerex participation in the EIM. In addition, the POU attorneys are collaborating on joint language to use in the EIM agreement

that we will all need to sign for EIM operations. We have also 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 everchanging power markets in the West. We held a conference call on December 15, 2017, to update on regional market activities. Based upon additional discussions, the group has developed a set of high level, generic comments which have been filed with WAPA and for possible use in the upcoming public stakeholder process SPP for the MWTG effort. We also shared our comments with Peak for consideration in their proposed partnership with PJM Connext. The group also held an in-person meeting on January 11,2018, in Sacramento. This included discussions on the MWTG initiative and an update with the CAISO.

South San Joaquin Irrigation District (SSJID)

SSJID is in the process of evaluating which California BA they should join once they become a LSE. They have had some preliminary discussions with BANC on what would be involved in joining BANC. In addition, SJIID has contacted BANC regarding working with other BANC members to help secure resources to meet RA requirements should they join BANC.

Market Initiatives:

ADI/FRSG

With the launch of the new BAAL approach, the BANC has suspended participation in ADI as of June 1, 2016. We have formally withdrawn effective 1/1/2018.

BANC continues to work with the NWPP on a joint effort for meeting the new frequency reserve requirements of NERC BAL-003, which was phased-in late 2016. Implementation results continue to look good.

EIM Participation

The CAISO filed the BANC Implementation Agreement with FERC on 3/24/17. BANC did file at FERC in support of approval of the agreement. FERC issued a letter order on 5/18/17 accepting the CAISO filing for BANC EIM participation. BANC has initiated the efforts for registering with the CAISO as the BANC EIM Entity and SC for the EIM project. In addition, BANC is working with the Treasurer to identify the processes and approvals needed to obtain counterparty financial status with the CAISO. It is anticipated that some approvals by the Commission will be required during the 1st Quarter to meet the schedule for implementation.

Utilicast finalized the system "gap" analysis on technologies to identify any additional areas needed for supporting EIM implementation. Results of the system "gap" analysis were presented on June 29, 2017. No major areas of concern were identified. Utilicast stated that the BANC/SMUD team is the best prepared for EIM participation of any entity they have evaluated. Utilicast completed a process "gap" analysis, with a report provided on October 3, 2017. This analysis also concluded that there are no major areas of concern.

BANC and SMUD have met to discuss the initial outline of scope of services for the BANC/SMUD EIM Services Agreement. BBSW has finalized a formal agreement and BANC and SMUD have agreed upon initial funding levels. We expect to bring the agreement to the Commission at the January 2018 meeting for approval.

BANC, SMUD, and the other members continue to discuss the issue of internal bilateral trading within the BANC footprint once SMUD participates in EIM in 2019. We have outlined the scope of the problem, have held discussions with the CAISO to better understand the limitations on SMUD in EIM, and are shooting to return to the Commission late 2018 with some preliminary recommendations on how to proceed.

BANC and TANC continue to hold discussions with the CAISO regarding IBAA relief. As a result of these discussions, the CAISO has initiated evaluating options for BANC/TANC consideration. We will update the Commission when these options are fully defined.

The CAISO has also announced the intent to allow EIM entities to participate in the Day-ahead Market. The details of how this will work will be discussed during the coming year, with the intent to have the enhancements in place in 2020.

WAPA:

Market Engagement

We are working with WAPA on integrating them in to the EIM implementation discussions. This includes EIM Phase 2 discussions with WAPA, MID, Redding, and Roseville. Based upon these discussions, the group has developed a set of "principles" for a possible Phase 2. In addition, the group has contracted with GridSME for additional evaluation work for a possible Phase 2. GridSME issued its preliminary report in early August and a revision in early September. The Phase 2 group is currently reviewing this report. In addition, SMUD has offered some concepts around moving forward with a possible Phase 2, which the group reviewed in December 2017. The goal is to have a concept by early 2018 of how we would like to see Phase 2 proceed.

In addition, Redding has requested that a separate task, which would be solely funded by Redding, be initiated with GridSME to evaluate the effort necessary for Redding to become a scheduling coordinator (SC). Based upon discussions with

BBSW, we have determined that this task can be initiated under the current delegations to the General Manager. I have initiated a task change order with GridSME for this effort and have executed a funding agreement with Redding.

Peak Reliability:

Aliso Canyon

Peak/CAISO/LADWP/SCE have finalized assessments for summer 2017. Public meetings were scheduled to start the process for determining if Aliso Canyon can "restart". Indications are that public opposition to restart of Aliso Canyon will be strong. At this stage, it is assumed that Aliso Canyon will not be available for use this summer, though there might be a possibility for "emergency" use. Though partial injection of gas in to the fields has begun, the Governor has also requested that shutdown of the field within 10 years be evaluated.

Peak Interest in Overseeing Congestion Management for Western Interconnection

Peak provided more clarification on this concept at the December 2016 Board meeting. The focus is on assisting the BAs and TOPs along with Peak in using the new Enhanced Curtailment Calculator (ECC) tool to better manage congestion in the Interconnection. Peak made it clear that they only intended to retain their role from a reliability perspective and *would not* perform economic re-dispatch functions. We continue to work with Peak staff on better defining Peak's role in congestion management in the future. This issue was discussed as part of the Enhanced Curtailment Calculator (ECC) Phase 4 update at the September 2017 Peak meetings. Peak and the BAs/TOPs held a webinar on December 6, 2017, to discuss the proposal for implementation of Phase 4. This was discussed further at the Peak Board meeting in December.

Peak MAC and Board Meetings

I attended the Peak quarterly MAC and Board meetings in Vancouver, WA, in December and will be attending the next meetings in early February 2018. As part of these meetings the issue of the future of Peak has been teed up. The MWTG continues to evaluate joining SPP, which would assume RC services for the MWTG; Peak has announced a potential partnership with PJM Connext; and the CAISO announced its notice of withdrawal from Peak, which will occur in September 2019. BANC is working with the other Peak Funding Parties on a transition for future RC services.

WECC

Electricity/Natural Gas Reliability Interface

WECC initiated its natural gas/electricity interface study in September 2017. Based upon further discussions with WECC, I have been asked to participate on the executive oversight committee for this effort. The status of this effort was discussed

at the October 6, 2017, WEIL meeting in Portland, which I attended, and another status update was provided in early November and December. The next update will be provided at the WEIL meeting in early February 2018. The goal is to have the report out in the fall of 2018.

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. We have received informal feedback that CDWR intends to use SMUD for transmission service at the north end of the project and WAPA for the south end, but are still awaiting a formal announcement of their decision. CDWR is also waiting on formal decisions by the water contractors to fund the project. A follow-up meeting with CAISO, WAPA-SNR, CDWR, and us was held on 11/9/17 to discuss how load will be served for this project.

Strategic Initiatives:

Refer to the 2017/2018 Strategic Initiatives update, which is attached to this report. Note that this update reflects the additional initiatives agreed upon at the June 2017 Strategic Planning Session.

BANC 2017/2018 Strategic Plan - Routine/Ongoing Initiatives - January 2018 Update

No./Priority	Focus Area	Initiative	Responsibility	Target Due Date	Status
1	INDEPENDENCE	Effectively oversee the BA	Jim Shetler	Ongoing	See monthly Ops, PC,
Medium		operations.			Compliance, & GM Reports
2		Develop long-term succession	Jim Shetler/Commission	4th Qtr. 2019	
Medium		plan and traits for General			
		Manager			
3		Develop BANC "101" Training	Jim Shetler/BBSW	4th Qtr. 2017	COMPLETED
Medium		presentation			
4		Organizational Issues:			
Low		~Issue committee rosters	Jim Shetler/BBSW	3rd Qtr. 2017	COMPLETED
		~Update website	Jim Shetler/BBSW	1st Qtr. 2018	
5	OUTREACH	Engage in industry forums	Jim Shetler	Ongoing	Continue attending Peak &
Medium		(WECC, Peak, NWPPA, etc.)			WECC Board meetings &
					NWPP Exec. Forum
6		Coordinate with other POU BAs	Jim Shetler	Ongoing	Coordinating with SCL, SRP,
Medium		(Ca and regionally)			LADWP, & TID on EIM
7		Outreach to regulatory and	Jim Shetler/BBSW	Ongoing	~Update meeting w/ CPUC
Medium		legislative bodies on key issues			Chair Picker 10/2/17
					~Attended EIM Gov. Body
					meeting 11/29/17
8	ASSETS	Identify and implement efforts	Resource Committee	1st Qtr. 2018	~Data collection complete
Medium		to improve BANC member asset			~Developed scenarios &
		optimization & renewable			evaluation plan. Work will
		integration			extend in to 2018.
9	MEMBER SERVICES	Identify and outreach to	Jim Shetler	Ongoing	~Continue follow-on
Low		potential new BANC members			discussions with TID on
					EIM. Mtg on 1/12/2018
					~Discussions with SSJID on
					joining BANC

BANC 2017/2018 Strategic Plan - Focused Initiatives - January 2018 Update

No./Priority	Focus Area	Initiative	Responsibility	Target Due Date	Status
10	INDEPENDENCE	Manage implementation of EIM	Jim Shetler	No earlier than	~ Finalizing EIM Services
High		participation effort		Spring 2019	Agreement.
					~ Addressing Bilateral
					trading issue
					~ Addressing EIM data
					sharing issue
					~ Evaluating consultant
					support
11	OUTREACH	Evaluate opportunities to	Jim Shetler	4th Qtr. 2017	~ Continue coordination
Medium		engage other entities in market			w/ LA, SCL, SRP
		development			~ Meeting w/TID 1/12/18
12		Regional Policy Issues: Monitor/	Jim Shetler/Commission	Ongoing	
High		weigh-in where appropriate			
13		Regionalization:			
Medium		~Monitor CAISO governance	Jim Shetler/BBSW	Ongoing	
		~ Develop white paper on BA	Jim Shetler/BBSW	1st Qtr. 2018	
		consolidation			
14		Monitor MWTG & Peak impacts	Jim Shetler	Ongoing	~Engaged w/ Funding
Medium		& alternatives			Parties on next steps for RC
15	ASSETS	Develop BANC footprint "IRP"	Resource Committee	1st Qtr. 2018	~Developed scenarios &
Medium		focused on VERs firming &			evaluation plan. Work will
		renewables.			extend in to 2018.
16	MEMBER SERVICES	Implement PA/PC project to be	Jim Shetler/SMUD	Dec-17	COMPLETED
High		fully compliant			

Balancing Authority of Northern California

Agenda Item 5B

1. Resolution 18-01-15 Authorization to Execute EIM Services Agreement between BANC and SMUD.

Braun Blaising Smith Wynne, P.C.

Attorneys at Law

1/15/2018

To: BANC Commission

From: BANC Counsel

RE: Authorization to Execute EIM Services Agreement between BANC and

SMUD

The purpose of this memorandum is to summarize the EIM Services Agreement (EIMSA) between the Balancing Authority of Northern California (BANC) and the Sacramento Municipal Utility District (SMUD), which we will be asking the Commission to both approve and authorize the General Manager to execute.

The EIMSA has been reviewed by BANC staff/legal, SMUD staff/legal, and by the members of the BANC Legal Committee and BANC EIM Oversight Group (which includes the Modesto Irrigation District and the Western Area Power Administration – Sierra Nevada Region representatives). The agreement is in substantially final form.

The BANC EIMSA was developed in conjunction with SMUD and defines the relationship between BANC as the EIM Entity and SMUD, as the EIM services provider. The agreement identifies BANC and SMUD obligations, defines EIM Scope of Services (Exhibit A), and includes a proposed EIM Services Budget (Exhibit B), which will be formulated and agreed to by BANC and SMUD no less than annually. Commission approval is required for any annual augmentations to the budget. Each of the budget categories have been broken out into various buckets to allow for sufficient transparency. The annual budget (\$2,426,750.00 for FY 2018) has been divided into monthly payments (\$202,229.00 per month for 2018).

Based upon our review and further review by and discussion with BANC members' staffs and counsel, BANC Counsel recommends that the Commission authorize the General Manger to execute the EIMSA, which has been provided to you in substantially final form.¹

¹ Additional clean up edits will be made prior to execution. In the event of an unanticipated significant substantive change, counsel will bring the EIMSA back for further Commission direction.

Balancing Authority of Northern California Resolution 18-01-15

AUTHORIZATION TO EXECUTE EIM SERVICES AGREEMENT BETWEEN BANC AND SMUD

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 has determined it will participate in the Energy Imbalance Market ("EIM") operated by the California Independent System Operator Corporation ("CAISO"); and

WHEREAS, in order for this to occur, BANC, as the Balancing Authority, shall become an EIM Entity; and

WHEREAS, BANC members and/or the Western Area Power Administration – Sierra Nevada Region ("WAPA") desiring to participate in EIM within the BANC EIM footprint may become EIM Participating Resources; and

WHEREAS, BANC participation in EIM will be conducted in phases, wherein in Phase 1, the Sacramento Municipal Utility District ("SMUD") will be the only EIM Participating Resource, and any subsequent Phase 2 may involve other BANC members and/or WAPA as EIM Participating Resources, should they choose to do so; and

WHEREAS, for BANC to facilitate EIM participation within the BANC EIM footprint, certain EIM Services are needed; and

WHEREAS, it was determined by the BANC Commission that BANC should enter into a contract with SMUD whereby SMUD shall provide EIM Services to BANC.

Balancing Authority of Northern California Resolution 18-01-15

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

1. Approve the EIM Services Agreement between BANC and SMUD, and authorize and direct the General Manager to execute the Agreement.

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 24th day of January 2018, 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	Gerald Cupp				
SMUD	Arlen Orchard				
TPUD	Paul Hauser				

Greg Salyer	Attest by: C. Anthony Braun
Chair	Secretary

ENERGY IMBALANCE MARKET SERVICES AGREEMENT BETWEEN THE

BALANCING AUTHORITY OF NORTHERN CALIFORNIA

AND THE

SACRAMENTO MUNICIPAL UTILITY DISTRICT

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1 PREAMBLE

This Energy Imbalance Market Services Agreement (Agreement) is entered into between the BALANCING AUTHORITY OF NORTHERN CALIFORNIA, a joint exercise of powers agency (JPA) organized under Section 6500 *et seq.*, of the California Government Code, hereinafter called "BANC," its successors and assigns; and the SACRAMENTO MUNICIPAL UTILITY DISTRICT (SMUD), a local publicly owned electric utility within the State of California. BANC and SMUD may be referred to herein individually as the "Party" or collectively as the "Parties."

2 EXPLANATORY RECITALS

- **2.1** WHEREAS, BANC has determined it will participate in the Energy Imbalance Market (EIM) operated by the California Independent System Operator Corporation (CAISO);
- **2.2** WHEREAS, in order for this to occur, BANC, as the Balancing Authority, shall become an EIM Entity;
- 2.3 WHEREAS, BANC members and/or the Western Area Power Administration Sierra Nevada Region (WASN) desiring to participate in EIM within the BANC EIM footprint shall become EIM Participating Resources;
- **2.4** WHEREAS, BANC participation in EIM will be conducted in phases, wherein in Phase 1, SMUD will be the only EIM Participating Resource, and any subsequent Phase 2 may involve other BANC members and/or WASN as EIM Participating Resources, should they choose to do so;
- **2.5** WHEREAS, for BANC to facilitate EIM participation within the BANC EIM footprint, certain EIM Services are needed;
- **2.6** WHEREAS, it was determined by the BANC Commission that BANC should enter into a contract with SMUD whereby SMUD shall provide EIM Services to BANC; and
- **2.7** WHEREAS, this Agreement, along with its appendices and exhibits, contains the agreed upon terms and conditions respecting the EIM Services to be provided by SMUD to BANC.

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

3 DEFINITIONS

Unless otherwise defined herein, capitalized terms when used with initial capitalization, whether singular or plural, shall have the meaning set forth in the FERC-approved NERC Glossary of Terms used in NERC Reliability Standards, the NERC Functional Model, the CAISO Tariff and Business Practice Manuals, as defined, the SMUD Open Access Transmission Tariff, or as commonly used and accepted in industry.

- **3.1** *Balancing Authority* shall mean the responsible entity that integrates resource plans ahead of time, matches generation and load, maintains interchange with other Balancing Authority Areas, and maintains frequency in real time of the electric power systems.
- **3.2** Balancing Authority Area shall mean the collection of generation, transmission, and loads within the metered electrical boundaries of the Balancing Authority.
- **3.3 Business Practice Manuals** shall mean the collection of documents made available by the CAISO on the CAISO website that contain the rules, policies, procedures and guidelines established by the CAISO for operational, planning, accounting and settlement requirements of CAISO market activities, consistent with the CAISO Tariff, as these documents may be amended from time-to-time.
- **3.4** *CAISO* shall mean the "California Independent System Operator Corporation."
- **3.5** *CAISO Tariff* shall mean the CAISO's open access transmission tariff filed with, and approved by, FERC, as that tariff may be amended from time-to-time.
- **3.6** *Commission* shall mean the "BANC Commission," as established in the BANC Joint Powers Agreement, as that agreement may be amended from time-to-time.
- 3.7 Confidential Information shall mean: (a) all written materials marked "Confidential," "Proprietary," or with words of similar import provided to a Party by another Party; and (b) all observations of equipment (including computer screens) and oral disclosures related to a Party's systems, operations, or activities that are indicated as such at the time of observation or disclosure (or are identified as "confidential" or "proprietary" in a letter sent to another Party no later than five (5) calendar days after the disclosure), respectively. Confidential Information includes portions of documents, records, and other material forms or representations that any Party may create, including but not limited to, handwritten notes or summaries that contain or are derived from such Confidential Information.
- **3.8** *Energy Imbalance Market or EIM* shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time.
- **3.9** *EIM Committee* shall mean the administrative committee established in Section 10 of the EIM Participation Agreement.

- **3.10** *EIM Desk* shall mean the real-time operations desk solely dedicated to EIM operations by the EIM Entity.
- **3.11** *EIM Entity* shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. BANC is the EIM Entity under this Agreement.
- **3.12** *EIM Entity Agreement* shall have the meeting set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. The EIM Entity Agreement is between BANC and the CAISO.
- **3.13** *EIM Entity Network Model* shall mean the electrical system model of the EIM Entity footprint, provided to the CASIO by the EIM Entity, which is necessary for the accurate modeling and integration of EIM Entity into the CAISO EIM.
- **3.14** *EIM Entity Services* shall mean those services rendered to the EIM Entity by the EIM Services Provider as set forth in Exhibit A, Schedule 1 of this Agreement.
- **3.15** *EIM Implementation Agreement* shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. The EIM Implementation Agreement for this participation is between BANC and the CAISO.
- **3.16** *EIM Participant* shall mean a signatory to the EIM Participation Agreement.
- **3.17** *EIM Participant Cost*(*s*) shall mean the cost responsibility of each EIM Participant to BANC as set forth in Section 6 of this Agreement.
- **3.18** *EIM Participating Resource* shall have the meaning set forth in the CAISO Tariff, as that tariff may be amended from time to time.
- **3.19** *EIM Participating Resource Services* shall mean those services rendered to the EIM Participating Resource, through the EIM Entity, by the EIM Services Provider as set forth in Exhibit A, Schedule 2 of this Agreement.
- **3.20** *EIM Participation Agreement* shall mean the agreement between BANC, as the EIM Entity, and the EIM Participant(s) within the BANC EIM footprint.
- **3.21** *EIM Services* shall mean the services provided by the EIM Services Provider to BANC, as set forth in this Agreement.
- **3.22** *EIM Services Agreement* shall mean this Agreement.
- **3.23** *EIM Services Budget* shall mean the agreed upon compensation between BANC and the EIM Services Provider as set forth in Exhibit B to this Agreement.
- **3.24** *EIM Services Provider* shall mean the entity providing EIM Services to the EIM Entity, subject to Exhibit A, Schedule 1 and/or Exhibit A, Schedule 2 of this Agreement. SMUD, or its successor, shall be the EIM Services Provider.

- 3.25 Electric System shall mean all properties and assets that are owned or operated by a Party or an EIM Participant, including any interests in joint powers agency facilities, that are used for or pertain to the generation, transmission, transformation, or distribution of electric power, including all additions, replacements, extensions, expansions, improvements, and betterments thereto, and equipment associated therewith. Communication systems and equipment associated with operation of the Electric System shall be included as part of a Party's or an EIM Participant's Electric System. To the extent a Party or an EIM Participant is not the sole owner of an asset or property, only that entity's ownership portion or entitlement in such property shall be considered as a part of its Electric System.
- **3.26** FERC shall mean the "Federal Energy Regulatory Commission," or its successor.
- **3.27** *Internal Compliance Program* shall mean the BANC Internal Compliance Program, approved by the Commission, as that program may be amended from time-to-time.
- **3.28** *Internal Compliance Program Charter* shall mean the policy-level document outlining the Internal Compliance Program, which has been adopted by the Commission, as that program may be amended from time-to-time.
- **3.29** *Member Compliance Review Committee* shall mean the BANC committee established in accordance with the Internal Compliance Program Charter.
- **3.30** *Meter Data* shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time.
- **3.31** *NERC* shall mean the "North American Electric Reliability Corporation," or its successor.
- **3.32** *Reliability Standards* shall mean those NERC Reliability Standards and WECC Regional Reliability Standards that have been approved by FERC under Section 215 of the Federal Power Act and WECC applicable Regional Criteria referenced in FERC-approved Reliability Standards.
- 3.33 WECC shall mean the "Western Electricity Coordinating Council," or its successor.

4 TERM AND TERMINATION

4.1 Effective Date

The Agreement shall be effective upon execution by the last Party (Effective Date).

4.2 Term

This Agreement shall remain in effect from the Effective Date until terminated in accordance with Section 4.3.

4.3 Termination

- 4.3.1 Either Party may terminate this Agreement on not less than one (1) year written notice to the other Party; however, in the event of termination by SMUD, SMUD agrees to work with BANC to coordinate the transfer of the EIM Services to a successor entity, should EIM Services still be required, and furthermore, SMUD will work with the successor entity, BANC and EIM Participants within the BANC footprint, to the extent reasonably practicable, to transition SMUD's obligations under this Agreement to a successor entity.
- 4.3.2 In the event the EIM Entity Agreement terminates, this Agreement shall terminate. To the extent reasonably practicable, the Parties shall conform the termination timelines and procedures of this Agreement to those of the EIM Entity Agreement.
- 4.3.3 Notwithstanding the foregoing, termination of this Agreement or a Party's participation herein shall not extinguish the obligation of any Party to complete inprogress compliance investigations, implement any resulting corrective mitigating actions and otherwise complete any active compliance process as well as satisfy all other obligations, including any financial responsibilities. In addition, any outstanding financial right or obligation, and any provision of this Agreement necessary to give effect to such right or obligation, shall survive until satisfied, and all limitations of liability provided in this Agreement will survive until all statutes of limitation related to claims that could be made in connection with this Agreement have run.

5 BANC AND SMUD OBLIGATIONS

5.1 BANC Obligations

BANC agrees to support SMUD in accordance with the following:

- 5.1.1 BANC shall enter into an EIM Participation Agreement with each of its members who elect to have BANC serve as their EIM Entity (individually "EIM Participant" or collectively "EIM Participants"). The EIM Participation Agreement will include, at a minimum, all of the following:
 - 5.1.1.1 A description of the rights and obligations of BANC and EIM Participant(s) in order to ensure SMUD may effectively perform its obligations under this Agreement, including but not limited to, matters relating to timely data exchanges;
 - 5.1.1.2 The creation of an EIM Committee that consists of representatives from BANC and EIM Participants, as described in Section 10 of the EIM Participation Agreement; and

5.1.1.3 A methodology to allocate the costs of EIM Services to EIM Participants and a mechanism to collect those costs.

5.2 SMUD Obligations

SMUD agrees to provide EIM Services in accordance with the following:

- 5.2.1 Provide BANC with a description of the resources needed and the actual or estimated costs associated with performing the services under this Agreement;
- 5.2.2 Perform the activities described in the EIM Scope of Services document, set forth in Exhibit A to this Agreement, as that Exhibit A may be modified from time-to-time in accordance with the procedures set forth therein and the terms of this Agreement;
- 5.2.3 Perform the EIM Services in accordance with the relevant provisions of the CAISO Tariff, as that tariff may be amended from time-to-time;
- 5.2.4 Provide regular coordination with, and updates to, BANC, including, but not limited to, the Commission and the EIM Committee, as determined by the protocols developed by the Parties;
- 5.2.5 Unless directed otherwise by law or an enforcement agency, cooperate with the Compliance Officer and BANC counsel in the event of any potential violation of applicable Reliability Standards or any Internal Compliance Program activities, in accordance with the Internal Compliance Program Charter;
- 5.2.6 Cooperate and provide support for any legal or regulatory investigation(s) and/or proceeding(s), including but not limited to any investigations and/or proceedings initiated by the CAISO Department of Market Monitoring, as defined and authorized under the CAISO Tariff, or as initiated by or before FERC or any other statutory agency; provided however that these regulatory investigation(s) and/or proceeding(s) are directed to, or significantly impact, the EIM Entity;
- 5.2.7 Cooperate and submit to any audit of EIM operations or services (annual or otherwise), as so directed by the Commission;
- 5.2.8 Provide subject matter expert support for ongoing regulatory and stakeholder activities relating to EIM, as reasonably requested by BANC; and
- 5.2.9 Work with the EIM Committee to ensure the costs for EIM Services are properly allocated between EIM Entity Services and EIM Participating Resource Services;

6 COSTS AND COMPENSATION

BANC agrees to compensate SMUD for its performance of services under this Agreement in accordance with the following:

- **6.1** The EIM Services Budget will be formulated and agreed to by BANC and SMUD, no less than annually, and included as Exhibit B (EIM Services Budget) to this Agreement, as that Exhibit B may be amended from time-to-time in accordance with the terms of that exhibit.
- 6.2 BANC shall be obligated to pay SMUD in accordance with an approved annual EIM Services Budget as set forth in Exhibit B, except that, subject to Commission approval, SMUD may seek augmentation(s) to its annual EIM Services Budget. In the event the Commission does not approve all or a portion of the augmentation(s), the Parties shall prioritize the work SMUD shall perform within the approved annual EIM Services Budget.
- **6.3** BANC shall pay SMUD within twenty (20) calendar days after receipt of its invoice for providing EIM Services.

Invoices will be sent to the following address:

Balancing Authority of Northern California P.O. Box 15830 MS D109 Sacramento, CA 95852-1830

SMUD shall be under no obligation to perform services absent funding.

7 LIABILITY

7.1 General

Except for any loss, damage, claim, cost, charge, or expense resulting from gross negligence or intentional misconduct, or for the nonpayment of monies due or costs for violation(s) of Reliability Standards under Section 7.3 of this Agreement, neither Party, its directors, members of governing bodies, officers, employees, or agents shall be liable to the other Party for any death, injury, loss, damage, claim, cost, charge, or expense of any kind or nature incurred by the other Party, including, without limitation, direct, indirect, or consequential loss, damage, claim, cost, charge, or expense, and whether or not resulting from the negligence of any Party, its directors, members of governing bodies, officers, employees, or any person or entity whose negligence would be imputed to such Party, from the performance or non-performance of the obligations under the Agreement. Except for any death, injury, loss, damage, claim, cost, charge, or expense resulting from willful action, each Party releases the other Party, their directors, members of governing bodies, officers, employees, or agents from any such liability.

7.2 Indemnification

Notwithstanding anything herein to the contrary, BANC shall indemnify, defend, and hold the EIM Services Provider (including its governing bodies, officers, employees, assigns, and agents) harmless from and against any and all claims, demands, liabilities imposed for injury (as defined by Government Code Section 810.8), losses, costs, expenses, penalties, suits, judgments, or damages, arising in whole or in part, directly or indirectly, from performance or non-performance of EIM Services set forth in Section 5.2 of this Agreement.

7.3 Reliability Standards

BANC shall be responsible for addressing all violations of applicable Reliability Standards or directives from an enforcement authority applicable to BANC. Nothing in this Section relieves SMUD from its obligations under Section 5.2 of this Agreement.

8 CONFIDENTIALITY

8.1 Treatment of Confidential Information

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

8.2 Required Disclosure of Confidential Information

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

8.3 Third Parties

Except as set forth herein, each Party shall keep Confidential Information in confidence and shall not disclose such information or otherwise make it available, in any form or manner, to any other person or entity other than its employees, consultants, or attorneys without the prior written consent of the other Party. Each Party will cause each of its employees, contractors, sub-contractors, sub-contractors' employees, and agents who will have access to Confidential Information, if any, to acknowledge that they have read this Agreement and agree to abide by

all of its terms regarding the use and disclosure of Confidential Information. Disclosure of Confidential Information to the Compliance Officer, the Member Compliance Review Committee or to the EIM Committee does not constitute a breach of this Agreement.

9 DISPUTE RESOLUTION

In the event of any dispute regarding the terms, conditions and performance of this Agreement, the Parties shall attempt in good faith to promptly resolve any such dispute informally by negotiations between an executive representative, or his or her delegate, from each Party. If the matter cannot be resolved informally, any Party shall proceed as follows:

9.1 Mediation

Either party may initiate a mediation of the controversy. All negotiations, settlement conferences, compromise discussions, and any mediation conducted pursuant to this clause are non-binding, confidential, and shall be treated as compromise and settlement negotiations.

9.2 Arbitration

In the absence of a voluntary resolution reached in accordance with this Section, then the Parties may submit the dispute for arbitration before a single arbitrator in accordance with the provisions of this Section and in accordance with the Commercial Arbitration Rules of the American Arbitration Association (Rules).

9.3 Fees

The fees and expenses of any arbitrator will be shared equally by the Parties.

9.4 Notice of Arbitration

Any Party desiring arbitration will serve on the other Party and the San Francisco, California office of the American Arbitration Association, in accordance with the Rules, its notice of intent to arbitrate (Arbitration Notice). In no event may a dispute be commenced under this Section regarding the terms, conditions and performance of this Agreement later than three (3) months before the applicable statutes of limitations would run upon institution of legal or equitable proceedings based on such dispute, controversy, or claim. In order to meet the time period for filing a claim under California Government Code Section 911.2, the time period for filing a claim shall be tolled from the date of filing an Arbitration Notice pursuant to this Subsection.

9.5 Appointment of Arbitrator

If the Parties cannot agree on an arbitrator, then BANC shall, on reasonable notice to the other Party, make application to the San Francisco, California office of the American

Arbitration Association for the appointment of a single arbitrator who shall serve as the arbitrator under this Section.

9.6 Conduct of the Arbitrator

The arbitrator selected to act hereunder shall be qualified by education, experience, and training to pass upon the particular controversy in dispute. The arbitrator shall fix a reasonable time and place for a hearing, at which time each of the Parties hereto may submit such evidence as each Party may see fit with respect to the controversy in issue. The arbitrator will determine all questions of fact and law relating to any dispute, controversy or claim that arises under, out of, or in relation to the Agreement. The arbitration shall be held and completed no later than three (3) months following the Arbitration Notice provided in Section 9.4. The arbitrator shall determine the matters submitted to him or her pursuant to the provisions of this Agreement and render a decision thereon no later than sixty (60) calendar days after the arbitration has been completed.

9.7 Finality and Enforcement of Decision

Any decision or award of an arbitrator shall govern, and the decision in writing shall be final, non-appealable, and binding on the Parties, subject to vacation only as expressly set forth under the provisions of Part 3 of Title 9 of the California Code of Civil Procedure (and/or any other section or sections of the California Code of Civil Procedure that are subsequently adopted to replace or amend Part 3 of Title 9). Each of the Parties hereto agrees that the arbitrator's award may be enforced against it or its assets wherever they may be found and that a judgment upon an arbitrator's award may be entered in any court having jurisdiction thereof. The arbitration award may be confirmed and judgment entered in accordance with the provisions of Part 3 of Title 9 of the California Code of Civil Procedure (and/or any other section or sections of the California Code of Civil Procedure that are subsequently adopted to replace or amend Part 3 of Title 9).

9.8 Damages Waiver

No arbitrator will have the power to award damages.

9.9 Continuing Performance Obligations

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

10 AMENDMENT

Except as specified in the attached exhibits, which shall be amended in accordance with the terms set forth therein, this Agreement may only be amended or otherwise modified with the written agreement of the Parties.

11 EIM PARTICIPATION AGREEMENT

BANC has entered into an EIM Participation Agreement, initially with SMUD in Phase 1, but potentially with any BANC member and/or WASN should they request to become an EIM Participant within the BANC EIM footprint in Phase 2, or any other subsequent phases as determined by BANC. The EIM Services Provider will work with BANC and any potential new EIM Participant(s) to help facilitate their participation and will work with BANC to make any changes to the exhibits to this Agreement to enable such participation.

12 EIM COMMITTEE

The EIM Services Provider will provide support to BANC and participate on the EIM Committee, as that committee has been authorized and formed pursuant to Section 10 of the EIM Participation Agreement.

13 GOVERNING LAW

The rights and obligations of the Parties and the interpretation and performance of this Agreement shall be governed by the laws of the State of California.

14 NO THIRD PARTY BENEFICIARIES

No right or obligation contained in this Agreement shall inure to the benefit of any person or entity not a Party to this Agreement. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any third party.

15 ASSIGNMENTS

BANC or SMUD may make an assignment of its rights and obligations under this Agreement only after obtaining the written consent of the other Party, which consent shall not be unreasonably withheld. A Party's assignee shall expressly assume, in writing, the duties and obligations of such Party under this Agreement and shall immediately furnish or cause to be furnished to the other Party a true and correct copy of the documents evidencing such assignment and assumption of duties and obligations. The assigning Party shall give notice to and provide the other Party with a copy of the documents evidencing such proposed assignment no less than thirty (30) calendar days prior to the proposed effective date of the assignment. Each Party shall give notice of its consent or denial of consent within such thirty (30) day period in accordance with Section 22 of this Agreement.

16 NO EXCLUSIVE REMEDY

Subject to the provisions of Section 9 (Dispute Resolution), no remedy in this Agreement conferred upon or reserved to any Party is intended to be exclusive of any other remedy or remedies available under this Agreement or existing at law, in equity, by statute, or otherwise, but each and every such remedy shall be cumulative and shall be in addition to every other remedy under this Agreement or now or hereafter existing at law or in equity or otherwise provided by statute. The pursuit by any Party of any specific remedy shall not be deemed to be an election of that remedy to the exclusion of any other or others, whether provided hereunder or at law, in equity, by statute, or otherwise.

17 UNCONTROLLABLE FORCE

- 17.1 No Party shall be considered to be in default in the performance of any of its obligations when a failure to perform is due to an Uncontrollable Force.
- 17.2 No Party shall be considered to be in default in respect to any obligation hereunder if prevented from fulfilling such obligation by reason of an Uncontrollable Force. The term "Uncontrollable Force" for the purpose of this Agreement shall mean any cause beyond the control of the Party affected, including but not limited to flood, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance, labor disturbance, sabotage, and restraint by court or public authority, which by exercise of due diligence and foresight, such Party could not reasonably have been expected to avoid. Any Party rendered unable to fulfill any obligation by reason of an Uncontrollable Force shall exercise commercially reasonable efforts to remove such inability with all reasonable dispatch.
- 17.3 Nothing contained herein shall be construed to require a Party to settle any strike or labor dispute in which it may be involved.
- 17.4 In the event a Party is rendered unable to fulfill any of its obligations under this Agreement by reason of an Uncontrollable Force, such Party shall give prompt written notice of such fact to the EIM Committee and shall seek to remove such inability with all reasonable dispatch.

18 JUDGEMENTS AND DETERMINATIONS

When the terms of this Agreement provide that an action may or must be taken, or that the existence of a condition may be established, based on a judgment or determination of a Party, such action or judgment shall be exercised or such determination shall be made in good faith and where applicable in accordance with Good Utility Practice, and shall not be arbitrary or capricious.

19 NON-WAIVER

Any waiver at any time by a Party of its rights with respect to any default or other matter arising in connection with this Agreement shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay short of the statutory period of limitations in asserting or enforcing any right shall not constitute or be deemed a waiver.

20 SEVERABILITY

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

21 NO DEDICATION OF FACILITIES

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

22 NOTICES

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

23 PRESERVATION OF OBLIGATIONS

Upon termination of this Agreement, all unsatisfied obligations of each Party shall be preserved until satisfied.

24 APPENDICES AND EXHIBITS MADE PART OF AGREEMENT

Referenced Appendices and Exhibits shall become a part of this Agreement; however, may be amended as provided individually therein. The initial Appendix 1 and Exhibits A-B are attached hereto, and shall be in force and effect in accordance with their respective terms until superseded by a subsequent exhibit or modified in accordance with this Agreement and the terms thereof.

25 MULTIPLE COUNTERPARTS

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

26 SIGNATURE CLAUSE

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

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

Balancing Authority of Northern California

D		
By:		
Name:	James R. Shetler	
Title:	General Manager	
Date:		
Sacrar	nento Municipal Utility District	
By:		
Name:		
Title:		
Date:		

Appendix 1 – Notices

Sacramento Municipal Utility District

Name of Primary	
Representative:	Paul Lau
Title:	Chief Grid Strategy and Operations Officer
Company:	Sacramento Municipal Utility District
Address:	6301 S Street, MS A312
City/State/Zip Code:	Sacramento, CA 95817
Email Address:	Paul.lau@smud.org
Phone:	(916) 732-6252
Fax:	(916) 732-6562
Name of Alternative	
Representative:	Mark Willis
Title:	Director, Grid Operations
Company:	Sacramento Municipal Utility District
Address:	6001 S Street, MS D109
City/State/Zip Code:	Sacramento, CA 95817
Email Address:	Mark.willis@smud.org
Phone:	(916) 732-5451
Fax:	None

Balancing Authority of Northern California

Name of Primary	
Representative:	James R. Shetler
Title:	General Manager
Company:	Balancing Authority of Northern California
Address:	P.O. Box 15830, MS D109
City/State/Zip Code:	Sacramento, CA 95852-1830
Email Address:	jimshetler@thebanc.org
Phone:	(916) 870-3774
Fax:	
Name of Alternative	
Representative:	C. Anthony Braun
Title:	General Counsel
Company:	Braun Blaising Smith Wynne, P.C.
Address:	915 L Street, Suite 1480
City/State/Zip Code:	Sacramento, CA 95814
Email Address:	braun@braunlegal.com
Phone:	916-326-5812
Fax:	916-330-4337

This Appendix 1 may be updated as needed by either Party without formal amendment to this Agreement. Any changes will be provided to all individuals listed herein. Email may be used to communicate the revisions.

EXHIBIT A: EIM Scope of Services

Schedule 1

(EIM Entity Services)

The EIM Services Provider will perform the following EIM Entity Services, in support of BANC as the EIM Entity, in accordance with the terms of this Agreement and the CAISO Tariff, as applicable:

- 1. EIM Entity Staffing Provide the staffing for a real-time, around-the-clock (24 x 7) EIM Desk that performs the EIM Entity functions in accordance with the CAISO Tariff and associated Business Practice Manuals.
- 2. EIM Entity Settlements Provide the staffing associated with the EIM Entity settlement process between the CAISO and the EIM Entity for all CAISO EIM market-related charges associated with the EIM Entity in accordance with the CAISO Tariff and associated Business Practice Manuals.
- 3. EIM Outage Management Process Perform all necessary tasks related to the CAISO's Outage Management process for EIM. Each EIM Participant is responsible for adhering to the outage reporting requirements and timeline in accordance with the CAISO Tariff and associated Business Practice Manuals. Each EIM Participant may elect to utilize one of the following processes for EIM Outage Management System with the CAISO:
 - a. Report required Generator and Transmission outages to the EIM Services Provider. The EIM Services Provider will then manage the outages with the CAISO.
 - b. Report required Generator and Transmission outages to the CAISO via the CAISO Outage Management System. The EIM Services Provider will then retrieve the EIM Participant's outage data from the CAISO Outage Management System.
- 4. Energy Management System (EMS) for EIM Provide the EMS and EIM Entity Network Model support needed to implement EIM participation capability on the EIM Service Provider's EMS. This includes:
 - a. Automated Dispatch System (ADS) capability to support 5-minute dispatch of EIM Participating Resources.
 - b. Dispatch Operating Target retrieval and distribution to EIM Participating Resources.
 - c. EIM Entity Network Model management, data exchange and interface with the CAISO.

- d. Inter-Control Center Communications Protocol (ICCP) Data provision to CAISO for network resources as indicated by the EIM Entity Network Model.
- 5. EIM Meter Data Management Act as CAISO Meter Data Management Agent for EIM Entity, submission of Meter Data for EIM Participating Resources, tie lines, and load locations that are registered to the EIM Entity. Execute pre-submission validation, estimation, and editing of that Meter Data. Meet the Meter Data periodicity and submission timelines as described in the CAISO Tariff and Business Practice Manuals.
- 6. Subject Matter Expert Oversight Support Provide EIM program management and subject matter expertise in support of CAISO EIM-related stakeholder processes, as well as other relevant stakeholder initiatives and forums deemed necessary for EIM Entity participation.
- 7. EIM Software and Hardware Maintenance and Enhancements Ensure the procurement, deployment, IT support required for implementation, operations, and on-going maintenance costs of any software and hardware necessary to communicate with the CAISO's systems and execute the EIM related processes.

EXHIBIT A: EIM Scope of Services

Schedule 2

(EIM Participating Resource Services)

For Phase 1, with SMUD as the sole EIM Participating Resource, there are no EIM Participating Resource Services.

Amendments

This Exhibit A may be amended as determined by BANC without formal amendment to this Agreement. Any amendment to this Exhibit A shall be in writing and transmitted to all Parties to the Agreement within seven (7) business days of the version change contained in the document Version History.

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

Version History

VERSION	CHANGE	BY	DATE
1.0	Execution Version	Commission	XX/XX/XXXX

EXHIBIT B: EIM Services Budget

EIM Services Budget Categories and Costs*

EIM Service	Position Title	# of Positions	Estimated Budget FY 2018**
EIM Desk (EIM Entity)			
Staffing	PSO (IBEW – 5 Shift PSO IIs)	5	\$1,587,138
EIM Entity Settlements			
Staffing***	Senior Power System Analyst	0.5	118,118
EIM Outage Management			
Process Staffing	PSO (IBEW – 1 Senior PSO)	0.4	126,971
	Principal EMS Engineer	0.5	131,919
EIM EMS and EIM Entity Network Model Staffing	Principal Power Operations Engineer	0.5	135,924
EIM Meter Data Management Staffing	Senior Business Technology Analyst	0.5	39,648
· ·	Program Manager	0.2	109,504
EIM Subject Matter Expert and Oversight Staffing	Management Analyst	0.2	61,675
EIM IT Support***	Senior Enterprise Technology Analyst/Developer	0.25	55,853
	Subtotal (Positions)	8.15	\$2,366,750
	iTOA		\$20,000
EIM Software/ Hardware	WebEIM		40,000
	Subtotal (Software/Hardware Support)		\$60,000
	Total		\$2,426,750
	Monthly Charge		\$202,229

^{*}All costs may be impacted by other general annual adjustments, such as cost of living, etc.

Amendments

This Exhibit B may be amended as determined by the Parties, without formal amendment to this Agreement; however, changes to the EIM Services Budget costs or the addition of new categories are subject to Commission approval. Any amendment to this Exhibit B shall be in writing and transmitted to all Parties to this Agreement.

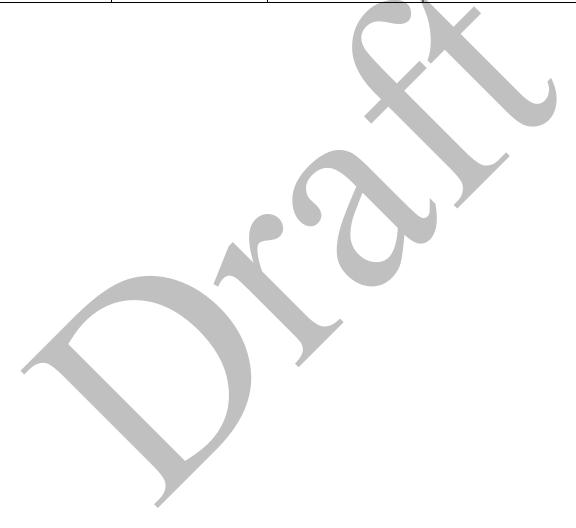
^{**}Using WAPA/TANC 2018 BA Reimbursement Rates

^{***}Signifies costs which may require EIM Phase II readjustment.

Any changes will be reflected through a change in the Version number. Minor, non-substantive changes will be reflected in 1/10th increments to the Version History (e.g., 1.1, 1.2, etc.). EIM Services Budget changes shall be reflected in complete Version changes (e.g., 2.0, 3.0, etc.).

Version History

VERSION	CHANGE	BY	DATE
1.0	Execution Version	Commission	XX/XX/XXXX



Balancing Authority of Northern California

Agenda Item 5C

1. Resolution 18-01-16 Authorization to Execute Balancing Authority Participation Agreement between BANC and CCFC Sutter Energy, LLC.

Braun Blaising Smith Wynne, P.C.

Attorneys at Law

1/16/18

To: BANC Commission

From: BANC Counsel

RE: Authorization to Execute Balancing Authority Participation Agreement

between BANC and CCFC Sutter Energy, LLC

As briefed during the December 2017 Balancing Authority of Northern California (BANC) Commission meeting, the Sacramento Municipal Utility District (SMUD) is entering into an agreement to purchase capacity and energy from CCFC Sutter Energy, LLC (Sutter). The basic construct of the agreement is to internalize the Sutter Energy Center (SEC) into SMUD operations, with SMUD assuming operational control of the facility and also assuming liability for the consequences of operation of the plant for the purposes of BANC-applicable reliability standard compliance. While this is a relatively simple concept that largely leaves BANC materially unaffected, the complexity of the existing arrangements (third party generator, interconnection and transmission service to Western Area Power Administration – Sierra Nevada Region (WAPA), and a pseudo-tie to the California Independent System Operator (CAISO)) necessitate execution of new agreements to reflect the new commercial agreement between the generator owner and SMUD. As such, BANC and Sutter anticipate entering into a Balancing Authority Participation Agreement to facilitate the transfer of the SEC from the CAISO Balancing Authority (BA) -- as an existing pseudo-tie -- into the BANC BA.

As mentioned briefly above and discussed at the December Commission meeting, SMUD has been in negotiations with Calpine Energy Services, LP (Calpine), the commercial energy sales division of Calpine Corporation, to restart a portion of the SEC, which is interconnected to the WAPAs system at the O'Banion substation. The contract will be for capacity and energy commencing in April 2018 through October 2019, with an option to extend one year (to October 31, 2020).

While currently not running, the SEC has been operated through a pseudo-tie arrangement with the CAISO (dynamically transferred from the BANC BA Area to the CAISO BA Area) and therefore treated as an internal CAISO generator. In order to effectuate the commercial arrangement between SMUD and Calpine, the existing pseudo-tie into the CAISO BA Area of the SEC will be temporarily suspended, and the SEC will become a generator within the BANC BA Area. For this reason, SEC will require an agreement with BANC, referred to as a Balancing Authority Participation Agreement (BAPA), to address the respective rights and obligations of both BANC and SEC/CCFC Sutter Energy, LLC.

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¹ CCFC Sutter LLC is subsidiary of Calpine Corporation.

The BAPA is largely a backstop agreement, because many of the obligations are addressed through the interconnection agreement between SEC and WAPA. Additionally, because SMUD will be the full recipient of the SEC output, SEC will be moved via a pseudo-tie-like arrangement from the WAPA sub-BA to the SMUD sub-BA and operated as an internal SMUD unit (SMUD will hold WAPA harmless and take on any and all obligations in support of the contracted portion of the unit). Thus, there will be an operating agreement between SMUD and Sutter to describe the operational requirements. Because SEC will be treated as an internal SMUD unit, SMUD will hold BANC harmless for any BA compliance risks. This will be addressed prior to the commencement of SEC operations (April 2018) through a letter agreement or some equivalent.

Because BANC does not routinely host merchant generators in its BA, we had to develop this agreement (BAPA) based on the context of the proposal but also consistent with BANC's existing form and format. In addition to the BAPA, there are several other agreements being developed to facilitate the transaction, including agreements for services between SMUD and SEC/Calpine, a transfer agreement between WAPA and SMUD, and other supporting arrangements (e.g., to address EMS and other changes). On the BANC side, Schedule 2 of the BANC-CAISO Dynamic Transfer Balancing Authority Operating Agreement (DTBAOA) must also be amended to remove SEC as a Pseudo Tie Resource. This is a simple change which requires no approvals from FERC.

Finally, because the commercial arrangement between Calpine and SMUD extends through EIM start-up, SEC will be part of SMUD's EIM resource portfolio. Both this agreement, as well as some of the other arrangements, address this.

BANC Counsel recognizes that there are many moving parts here, but this is largely driven by the complexity of the current arrangement, not the underlying commercial agreement between SMUD and Calpine that is driving the changes. Accordingly, BANC Counsel recommends that the Commission authorize the General Manger to execute the Balancing Authority Participation Agreement between BANC and CCFC Sutter Energy, LLC, in substantially final form.

BANC counsel further recommends that the Commission authorize the General Manager to make changes to Schedule 2 of the DTBAOA to reflect the removal of the SEC as a pseudo tie resource from the BANC BA Area to the CAISO BA Area, and to take other actions within authorized delegations to effectuate the BAPA.

Balancing Authority of Northern California Resolution 18-01-16

AUTHORIZATION TO EXECUTE BALANCING AUTHORITY PARTICIPATION AGREEMENT BETWEEN BANC AND CCFC SUTTER ENERGY, 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, the Sacramento Municipal Utility District ("SMUD") has entered into negotiations with CCFC Sutter Energy, LLC ("Sutter") to restart a portion of the Sutter Energy Center power plant ("SEC"), which is interconnected to the Western Area Power Administration – Sierra Nevada Region ("WAPA") transmission system; and

WHEREAS, in order to effectuate a commercial arrangement allowing Sutter to re-operate its SEC power plant, Sutter, WAPA, the California Independent System Operator Corporation ("CAISO") and BANC have taken certain actions to temporarily suspend Sutter's participation in the California Independent System Operator Corporation's (CAISO) Balancing Authority (BA) through a pseudo-tie arrangement; and

WHEREAS, SEC will instead become part of the BANC Balancing Authority; and

WHEREAS, it was determined that BANC and Sutter should enter into a Balancing Authority Participation Agreement ("BAPA") to address the respective rights and obligations of both BANC and Sutter/SEC.

Balancing Authority of Northern California Resolution 18-01-16

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

- 1. Authorize and direct the General Manager to execute the BAPA between BANC and Sutter Energy, LLC; and
- 2. Authorize and direct the General Manager to amend Schedule 2 of the CAISO-BANC Dynamic Transfer Balancing Authority Operating Agreement to remove the SEC as a Pseudo Tie resource.
- 3. Authorize and direct the General Manager to take other actions within authorized delegations to effectuate the BAPA.

PASSED AND ADOPTED by the Commissioners of the Balancing Authority of Northern California this 24th day of January 2018, 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	Gerald Cupp				
SMUD	Arlen Orchard				
TPUD	Paul Hauser				
Greg Salyer			Attest by: 0	C. Anthony Br	aun

Secretary

Chair

BALANCING AUTHORITY PARTICIPATION AGREEMENT BETWEEN THE

BALANCING AUTHORITY OF NORTHERN CALIFORNIA

AND

CCFC SUTTER ENERGY, LLC

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1 PREAMBLE

This Balancing Authority Participation Agreement (Agreement) is entered into between the BALANCING AUTHORITY OF NORTHERN CALIFORNIA, a joint exercise of powers agency organized under Section 6500 *et seq.*, of the California Government Code, hereinafter called "BANC," its successors and assigns; and CCFC SUTTER ENERGY, LLC, a Delaware limited liability company, hereinafter called "Sutter," its successors and assigns. Sutter wholly owns the Sutter Energy Center power plant (SEC), located near Yuba City in Sutter County, California, which is interconnected to the Western Area Power Administration – Sierra Nevada Region (WAPA) transmission system. BANC and Sutter may be referred to herein individually as the "Party" or collectively as the "Parties."

2 EXPLANATORY RECITALS

- 2.1 WHEREAS, in order to effectuate a commercial arrangement allowing Sutter to operate its SEC power plant, Sutter, WAPA, the California Independent System Operator Corporation (CAISO) and BANC have taken certain actions to temporarily suspend SEC's participation in the California Independent System Operator Corporation's (CAISO) Balancing Authority (BA) through a pseudo-tie arrangement, and instead, SEC will become part of the BANC Balancing Authority upon the Effective Date of this Agreement;
- 2.2 WHEREAS, with respect to Phase 1 Operation, as defined herein, SEC will be treated as a SMUD internal system resource and operated in accordance with an operating agreement between Sutter and SMUD and other Phase 1 Operation Enabling Agreements set forth in Exhibit A to this Agreement;
- **2.3** WHEREAS, as part of this change in balancing authorities, certain rights and obligations will need to be addressed between the Parties; and
- **2.4** WHEREAS, this Agreement, along with its appendices and exhibits, contains the agreed upon terms and conditions respecting Sutter's participation and the inclusion of SEC in the BANC Balancing Authority Area.

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

3 DEFINITIONS

Unless otherwise defined herein, capitalized terms when used with initial capitalization, whether singular or plural, shall have the meaning set forth in the FERC-approved NERC Glossary of Terms used in NERC Reliability Standards, the NERC Functional Model, the CAISO Tariff or as commonly used and accepted in industry.

- **3.1** *Balancing Authority* shall mean the responsible entity that integrates resource plans ahead of time, matches generation and load, maintains interchange with other Balancing Authority Areas, and maintains frequency in real time of the electric power systems.
- **3.2** Balancing Authority Area shall mean the collection of generation, transmission, and loads within the metered electrical boundaries of the Balancing Authority.
- **3.3** *CAISO Tariff* shall mean the CAISO's open access transmission tariff filed with, and approved by, FERC, as that tariff may be amended from time-to-time.
- **3.4** *Commission* shall mean the "BANC Commission," as established in the BANC Joint Powers Agreement, as that agreement may be amended from time-to-time.
- 3.5 Confidential Information shall mean: (a) all written materials marked "Confidential," "Proprietary," or with words of similar import provided to a Party by another Party; and (b) all observations of equipment (including computer screens) and oral disclosures related to a Party's systems, operations, or activities that are indicated as such at the time of observation or disclosure (or are identified as "confidential" or "proprietary" in a letter sent to another Party no later than five (5) calendar days after the disclosure), respectively. Confidential Information includes portions of documents, records, and other material forms or representations that any Party may create, including but not limited to, handwritten notes or summaries that contain or are derived from such Confidential Information.
- **3.6** *Confirmation Agreement* shall mean the commercial confirmation agreement executed on December 15, 2017, between SMUD and Calpine Energy Services, L.P., pursuant to the WSPP Agreement, which details the commercial terms for Phase 1 Operation.
- **3.7** *Energy Imbalance Market or EIM* shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time.
- **3.8** *EIM Entity* shall have the meaning set forth in the CAISO Tariff, as that tariff shall be amended from time-to-time. BANC is the EIM Entity under this Agreement.
- **3.9** *Electric System* shall mean all properties and assets that are owned or operated by a Party, including any interests in joint powers agency facilities, that are used for or pertain to the generation, transmission, transformation, or distribution of electric power, including all additions, replacements, extensions, expansions, improvements, and betterments thereto, and equipment associated therewith. Communication systems and equipment associated with operation of the Electric System shall be included as part of a Party's Electric System. To the extent a Party is not the sole owner of an asset or property, only that entity's ownership portion or entitlement in such property shall be considered as a part of its Electric System.
- **3.10** *FERC* shall mean the "Federal Energy Regulatory Commission," or its successor.

- **3.11** *NERC* shall mean the "North American Electric Reliability Corporation," or its successor.
- **3.12** *Phase 1 Operation* shall mean the delivery of products dedicated to SMUD under the terms of the Confirmation Agreement, including required commissioning and testing activities for SEC. To enable Phase 1 Operation, SEC shall be operated as an internal SMUD system resource in accordance with the relevant Phase 1 Operation Enabling Agreements.
- **3.13** *Phase 1 Operation Enabling Agreements* shall mean the agreements among and between Sutter, WAPA, BANC, and SMUD that enable Phase 1 Operation. The Phase 1 Operation Enabling Agreements are set forth in Exhibit A to this Agreement.
- **3.14** *Phase 2 Operation* shall mean delivery of any commercial sales of products from SEC, which are not dedicated SMUD deliveries under the terms of the Confirmation Agreement.
- **3.15** *Reliability Standards* shall mean those NERC Reliability Standards and WECC Regional Reliability Standards that have been approved by FERC under Section 215 of the Federal Power Act and WECC applicable Regional Criteria referenced in FERC-approved Reliability Standards.
- **3.16** *Sub-Balancing Authority Areas* shall mean sub balancing authority areas that are part of the BANC Balancing Authority Area, which at present includes the collection of generation, transmission, and loads within the metered electrical boundaries of WAPA and SMUD, respectively.
- **3.17** *WECC* shall mean the "Western Electricity Coordinating Council," or its successor.

4 TERM AND TERMINATION

4.1 Effective Date

The Agreement shall be effective upon the later of 1) the execution by the last Party; or 2) 12:01 A.M. Pacific Time on February 22, 2018 (the "Effective Date").

4.2 Term

This Agreement shall become effective upon the Effective Date and shall remain in effect through December 31, 2019; provided, however, that this Agreement may be extended annually thereafter by the mutual agreement of Parties, provided that, unless otherwise agreed upon by the Parties in writing, any such extension will be null and void unless the Phase 1 Operation Enabling Agreements, as defined herein, are also extended for the same

term. Notwithstanding the foregoing, this term may be modified by the Parties in accordance with Section 7.

4.3 Termination

Prior to expiration of its term, this Agreement may be terminated by a Party upon ninety (90) days advanced written notice to the other Party; provided that such termination shall not be effective against Sutter, unless and until Sutter provides notice to BANC that Sutter has obtained agreements with and transitioned to a replacement Balancing Authority that has certification to provide balancing authority services to or for SEC. Notwithstanding the foregoing, Sutter shall use reasonable efforts to obtain such agreements and transition to a replacement Balancing Authority.

5 BANC AND SUTTER OBLIGATIONS

5.1 BANC Obligations

BANC agrees to support Sutter in accordance with the following:

- 5.1.1 Cooperate with the CAISO, Sutter, WAPA and SMUD to effectuate the transfer of operational oversight from the CAISO Balancing Authority to BANC Balancing Authority;
- 5.1.2 Comply with all Reliability Standards applicable to its Balancing Authority Area, either directly or through agreements with Sub-Balancing Authority Areas;
- 5.1.3 Cooperate with Sutter in any efforts to obtain for SEC balancing authority area services necessary to support Phase 1 Operation, the agreements for which, as executed, shall be included in or sufficiently described in Exhibit A to this Agreement;
- 5.1.4 Work with the CAISO in any efforts to amend Schedule 2 of the CAISO-BANC Dynamic Transfer Balancing Authority Operating Agreement in order to remove SEC as a listed resource;
- 5.1.5 Provide Sutter with clear written directions and/requests related to BANC's EIM Entity needs and requirements as they specifically relate to SEC; however, any costs related to EIM implementation imposed upon Sutter for SEC shall be addressed and limited, as set forth in the Confirmation Agreement;
- 5.1.6 Upon termination of this Agreement, unless otherwise agreed, cooperate with Sutter to transition Sutter to its former service arrangements with BANC, WAPA and the CAISO:
- 5.1.7 Interpersonal Communication capabilities shall be established and/or maintained between BANC and SEC (per Reliability Standard COM 001-3);

- 5.1.8 As the BANC Balancing Authority operator, support and address any Energy Management System (EMS) changes to convert SEC from a CAISO generating resource in the CAISO Balancing Authority Area (through a Pseudo-Tie) to a generating resource in the BANC Balancing Authority Area, including addressing and coordinating all Balancing Authority operational requirements for SEC as a generating resource in the BANC Balancing Authority Area;
- 5.1.9 Upon request by Sutter based on a valid commercial opportunity, BANC will use reasonable efforts to work with Sutter to address Phase 2 Operation requirements;
 - 5.1.9.1. Notwithstanding the foregoing, BANC will not be required to support a Phase 2 Operation that, in its judgement, would impair the reliable operation of the BANC Balancing Authority;
- 5.1.10 Update the other Party as soon as practicable with respect to changes to the Operation Contacts in Appendix 2.

5.2 Sutter Obligations

- 5.2.1 Operate SEC in accordance with Reliability Standards and applicable to Generator Owners and Generator Operators in the BANC Balancing Authority Area;
- 5.2.2 Cooperate with the BANC Balancing Authority operator in providing any information necessary for BANC to meet its Balancing Authority Area Reliability Standards obligations, including but not limited to:
 - 5.2.2.1 Establishing and maintaining Interpersonal Communication capabilities between BANC and SEC per Reliability Standard COM 001-3, or its successor standard; and
 - 5.2.2.2 Providing any data and information required by the BANC Balancing Authority to comply with its obligations under Reliability Standard EOP-011-1, or its successor standard;
- 5.2.3 Follow any operational directives from the BANC Balancing Authority operator, provided that any such directive does not compromise the health and safety of Sutter employees or its Electric System or does not violate any applicable law or permit;
- 5.2.4 Cooperate in any compliance investigations by BANC relating to any potential or actual violations of Reliability Standards applicable to the BANC Balancing Authority which directly or indirectly involve SEC;
- 5.2.5 Communicate and coordinate with the relevant Operations Contacts set forth in Appendix 2 SEC planned and forced outage information in accordance with the relevant Phase 1 Operation Enabling Agreement(s);

- 5.2.6 Communicate with the relevant Operations Contacts set forth in Appendix 2 operating status information in accordance with the relevant Phase 1 Operation Enabling Agreement(s);
- 5.2.7 Promptly provide any information reasonably requested by the BANC Balancing Authority operator related to a major incident involving SEC;
- 5.2.8 Arrange services and service agreements for the provision of Balancing Authority Area services to support SEC, and such agreements shall be included in or sufficiently described in Exhibit A to this Agreement; for the avoidance of doubt, such services arrangements and agreements for Phase 1 Operation shall be with SMUD;
- 5.2.9 Cooperate with BANC with respect to EIM implementation; provided, however, that all such cooperation is consistent with Sutter's obligations in the Confirmation Agreement; and
- 5.2.10 Update the other Party as soon as practicable with respect to changes to the Operation Contacts in Appendix 2.

6 ADDITIONAL ACKNOWLEDGEMENTS

The Parties further acknowledge the following:

- 6.1 BANC is not a transmission service provider and does not have an Open Access Transmission Tariff (OATT), and therefore, BANC is not responsible for the provision of any transmission services, including, but not limited to, generator imbalance service or transmission rights. SMUD is solely responsible to contract for any OATT-based transmission services for delivery of the products in Phase 1 Operation. Sutter and/or its counterparties are responsible for transmission services for the delivery of the products in Phase 2 Operation.
- 6.2 BANC is not an energy service provider or a load serving entity; therefore, BANC cannot provide station service power for SEC. Sutter is solely responsible to arrange for station service power through a third party services provider. For purposes of Phase 1 Operation, the services provider for station service power shall be SMUD.
- Operation may require amendment(s) to this Agreement, as determined by the Parties, and will require additional arrangements with a third party (or parties) for the delivery of a portion of the SEC plant output to a third party. Any Potential Phase 2 Operation may also impose additional costs and/or obligations on Sutter or the third party, including, but not limited to, new or additional station service needs, transmission service and imbalance service.

7 FAILURE TO EXECUTE PHASE 1 OPERATION ENABLING AGREEMENTS OR TO ACHIEVE PHASE 1 OPERATION

Parties agree to meet and confer in good faith and amend this Agreement, to the extent necessary, in the event that the Phase 1 Operation Enabling Agreements are not executed on or before March ___, 2018, or there is a failure to achieve Phase 1 Operation by April ___, 2018.

8 COSTS AND COMPENSATION

Neither Party shall be responsible for any costs incurred in the performance of this Agreement, unless otherwise agreed to, in writing, between the Parties.

9 LIABILITY

9.1 General

Except for any loss, damage, claim, cost, charge, or expense resulting from gross negligence or intentional misconduct, or for the nonpayment of monies due, neither Party, its directors, members of governing bodies, officers, employees, or agents shall be liable to the other Party for any death, injury, loss, damage, claim, cost, charge, or expense of any kind or nature incurred by the other Party, including, without limitation, direct, indirect, or consequential loss, damage, claim, cost, charge, or expense; and whether or not resulting from the negligence of any Party, its directors, members of governing bodies, officers, employees, or any person or entity whose negligence would be imputed to such Party from the performance or non-performance of the obligations under the Agreement. Except for any death, injury, loss, damage, claim, cost, charge, or expense resulting from willful action, each Party releases the other Party, their directors, members of governing bodies, officers, employees, or agents from any such liability.

9.2 Reliability Standards

BANC shall be responsible for addressing all violations of applicable Reliability Standards or directives from an enforcement authority applicable to the BANC Balancing Authority. Nothing in this Section relieves Sutter from its obligations under Section 5.2 of this Agreement.

10 CONFIDENTIALITY

10.1 Treatment of Confidential Information

The Parties recognize and agree that for the purposes of complying with applicable Reliability Standards and responding to any report or notice of potential violation, they may receive information from each other that has been marked as Confidential Information.

Except as set forth herein, the Parties agree to keep in confidence and not to copy, disclose, or distribute any Confidential Information or any part thereof, without the prior written permission of the other Party. Except with respect to the review of a BANC internal compliance investigation report for which the SEC was directly or indirectly involved in the underlying alleged violation of a Reliability Standard applicable to the BANC Balancing Authority, for purposes of this Section 10, except as expressly agreed to by Sutter in writing, members of BANC are not a Party with whom Confidential Information of Sutter may be shared.

10.2 Required Disclosure of Confidential Information

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

10.3 Third Parties

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

11 DISPUTE RESOLUTION

In the event of any dispute regarding the terms, conditions and performance of this Agreement, the Parties shall attempt in good faith to promptly resolve any such dispute informally by negotiations between an executive representative, or his or her delegate, from each Party. If the matter cannot be resolved informally, any Party shall proceed as follows:

11.1 Mediation

Either party may initiate a mediation of the controversy. All negotiations, settlement conferences, compromise discussions, and any mediation conducted pursuant to this clause are non-binding, confidential, and shall be treated as compromise and settlement negotiations.

11.2 Arbitration

In the absence of a voluntary resolution reached in accordance with this Section, then the Parties may submit the dispute for arbitration before a single arbitrator in accordance with the provisions of this Section and in accordance with the Commercial Arbitration Rules of the American Arbitration Association (Rules).

11.3 Fees

The fees and expenses of any arbitrator will be shared equally by the Parties.

11.4 Notice of Arbitration

Any Party desiring arbitration will serve on the other Party and the San Francisco, California office of the American Arbitration Association, in accordance with the Rules, its notice of intent to arbitrate (Arbitration Notice). In no event may a dispute be commenced under this Section regarding the terms, conditions and performance of this Agreement later than three (3) months before the applicable statutes of limitations would run upon institution of legal or equitable proceedings based on such dispute, controversy, or claim. In order to meet the time period for filing a claim under California Government Code Section 911.2, the time period for filing a claim shall be tolled from the date of filing an Arbitration Notice pursuant to this Subsection.

11.5 Appointment of Arbitrator

If the Parties cannot agree on an arbitrator, then the Parties shall make application to the San Francisco, California office of the American Arbitration Association for the appointment of a single arbitrator who shall serve as the arbitrator under this Section.

11.6 Conduct of the Arbitrator

The arbitrator selected to act hereunder shall be qualified by education, experience, and training to pass upon the particular controversy in dispute. The arbitrator shall fix a reasonable time and place for a hearing, at which time each of the Parties hereto may submit such evidence as each Party may see fit with respect to the controversy in issue. The arbitrator will determine all questions of fact and law relating to any dispute, controversy or claim that arises under, out of, or in relation to the Agreement. The arbitration shall be held and completed no later than three (3) months following the Arbitration Notice provided in Section 11.4. The arbitrator shall determine the matters submitted to him or her pursuant to the provisions of this Agreement and render a decision thereon no later than sixty (60) calendar days after the arbitration has been completed.

11.7 Finality and Enforcement of Decision

Any decision or award of an arbitrator shall govern, and the decision in writing shall be final, non-appealable, and binding on the Parties, subject to vacation only as expressly set forth under the provisions of Part 3 of Title 9 of the California Code of Civil Procedure

(and/or any other section or sections of the California Code of Civil Procedure that are subsequently adopted to replace or amend Part 3 of Title 9). Each of the Parties hereto agrees that the arbitrator's award may be enforced against it or its assets wherever they may be found and that a judgment upon an arbitrator's award may be entered in any court having jurisdiction thereof. The arbitration award may be confirmed and judgment entered in accordance with the provisions of Part 3 of Title 9 of the California Code of Civil Procedure (and/or any other section or sections of the California Code of Civil Procedure that are subsequently adopted to replace or amend Part 3 of Title 9).

11.8 Damages and Equitable Relief

With the exception of consequential damages, the arbitrator shall have the power to award damages, or equitable relief, including specific performance.

11.9 Continuing Performance Obligations

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

12 AMENDMENT

Except as specified above and in the attached exhibits, which shall be amended in accordance with the terms set forth therein, this Agreement may only be amended or otherwise modified with the written agreement of the Parties.

13 GOVERNING LAW

The rights and obligations of the Parties and the interpretation and performance of this Agreement shall be governed by the laws of the State of California.

14 NO THIRD PARTY BENEFICIARIES

No right or obligation contained in this Agreement shall inure to the benefit of any person or entity not a Party to this Agreement. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any third party, including members of BANC.

15 ASSIGNMENTS

BANC or Sutter may make an assignment of its rights and obligations under this Agreement only after obtaining the written consent of the other Party, which consent shall not be unreasonably

withheld. A Party's assignee shall expressly assume, in writing, the duties and obligations of such Party under this Agreement and shall immediately furnish or cause to be furnished to the other Party a true and correct copy of the documents evidencing such assignment and assumption of duties and obligations. The assigning Party shall give notice to and provide the other Party with a copy of the documents evidencing such proposed assignment no less than thirty (30) calendar days prior to the proposed effective date of the assignment. Each Party shall give notice of its consent or denial of consent within such thirty (30) day period in accordance with Section 22 of this Agreement.

16 NO EXCLUSIVE REMEDY

Subject to the provisions of Section 11 (Dispute Resolution), no remedy in this Agreement conferred upon or reserved to any Party is intended to be exclusive of any other remedy or remedies available under this Agreement or existing at law, in equity, by statute, or otherwise, but each and every such remedy shall be cumulative and shall be in addition to every other remedy under this Agreement or now or hereafter existing at law or in equity or otherwise provided by statute. The pursuit by any Party of any specific remedy shall not be deemed to be an election of that remedy to the exclusion of any other or others, whether provided hereunder or at law, in equity, by statute, or otherwise.

17 UNCONTROLLABLE FORCE

- **16.1** No Party shall be considered to be in default in the performance of any of its obligations when a failure to perform is due to an Uncontrollable Force.
- 16.2 No Party shall be considered to be in default in respect to any obligation hereunder if prevented from fulfilling such obligation by reason of an Uncontrollable Force. The term "Uncontrollable Force" for the purpose of this Agreement shall mean any cause beyond the control of the Party affected, including but not limited to flood, earthquake, storm, lightning, fire, epidemic, war, riot, civil disturbance, labor disturbance, sabotage, and restraint by court or public authority, which by exercise of due diligence and foresight, such Party could not reasonably have been expected to avoid. Any Party rendered unable to fulfill any obligation by reason of an Uncontrollable Force shall exercise commercially reasonable efforts to remove such inability with all reasonable dispatch.
- 16.3 Nothing contained herein shall be construed to require a Party to settle any strike or labor dispute in which it may be involved.
- 16.4 In the event a Party is rendered unable to fulfill any of its obligations under this Agreement by reason of an Uncontrollable Force, such Party shall give prompt written notice of such fact to the other Party and shall seek to remove such inability with all reasonable dispatch.

18 JUDGEMENTS AND DETERMINATIONS

When the terms of this Agreement provide that an action may or must be taken, or that the existence of a condition may be established, based on a judgment or determination of a Party, such action or judgment shall be exercised or such determination shall be made in good faith and where applicable in accordance with Good Utility Practice, and shall not be arbitrary or capricious.

19 NON-WAIVER

Any waiver at any time by a Party of its rights with respect to any default or other matter arising in connection with this Agreement shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay short of the statutory period of limitations in asserting or enforcing any right shall not constitute or be deemed a waiver.

20 SEVERABILITY

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

21 NO DEDICATION OF FACILITIES

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

22 NOTICES

Any notice, demand, or request in accordance with this Agreement, shall be in writing and shall be deemed properly served, given, or made if delivered in person or sent by first class United States mail, postage prepaid, by confirmed electronic facsimile or by prepaid commercial courier service to a Party via its representative or alternate representative at the address set forth in Appendix 1, unless otherwise provided in this Agreement. Any Party may at any time change the designation or address of a person, or persons, specified in Appendix 1 or Appendix 2 upon written notice to the other Party designated for such notice. Such written notice shall further be provided to the BANC Compliance Officer and the BANC General Counsel. Such changes to Appendix 1 or Appendix 2 shall not constitute an amendment to this Agreement.

23 PRESERVATION OF OBLIGATIONS

Upon termination of this Agreement, all unsatisfied obligations of each Party shall be preserved until satisfied.

24 APPENDICES AND EXHIBITS MADE PART OF AGREEMENT

Referenced Appendices and Exhibits shall become a part of this Agreement; however, may be amended as provided above and individually therein. The initial Appendices 1 and 2 and Exhibit A are attached hereto, and shall be in force and effect in accordance with their respective terms until superseded by a subsequent appendix or exhibit or modified in accordance with this Agreement and the terms thereof.

25 MULTIPLE COUNTERPARTS

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

26 SIGNATURE CLAUSE

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

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

Balancing Authority of Northern California

By:	
	James R. Shetler
Title:	General Manager
Date:	
CCFC	Sutter Energy, LLC
By:	
Name:	
Title:	

Appendix 1 – Notices

CCFC Sutter Energy, LLC

Name of Primary	
Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	
Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax:	
Balancing Authority o	f Northern California
Name of Primary	
Representative:	James R. Shetler
Title:	General Manager
Company:	Balancing Authority of Northern California
Address:	P.O. Box 15830, MS D109
City/State/Zip Code:	Sacramento, CA 95852-1830
Email Address:	jimshetler@thebanc.org
Phone:	(916) 870-3774
Fax:	
Name of Alternative Representative:	C. Anthony Braun
Title:	General Counsel
Company:	Braun Blaising Smith Wynne, P.C.
Address:	015 I Street Suite 1480

This Appendix 1 may be updated as needed by either Party without formal amendment to this Agreement. Any changes will be provided to all individuals listed herein. Email may be used to communicate the revisions.

Sacramento, CA 95814

braun@braunlegal.com

916-326-5812

916-330-4337

City/State/Zip Code:

Email Address:

Phone:

Fax:

Appendix 2 – Operations Contacts

CCFC Sutter Energy, I	LLC
	· · ·
Balancing Authority of	Northern California (BANC Operator – SMUD System Operations)
Balancing Authority of	Northern California (BANC Operator – SMUD System Operations)
Balancing Authority of Real-Time	Northern California (BANC Operator – SMUD System Operations)
Real-Time Operations:	Northern California (BANC Operator – SMUD System Operations)
Real-Time Operations: Balancing Area Desk	
Real-Time Operations: Balancing Area Desk (Shift Senior):	916-732-6730
Real-Time Operations: Balancing Area Desk (Shift Senior): Generation (AGC) Desk	
Real-Time Operations: Balancing Area Desk (Shift Senior): Generation (AGC) Desk (Real-Time Outages):	916-732-6730 916-732-6225
Real-Time Operations: Balancing Area Desk (Shift Senior): Generation (AGC) Desk (Real-Time Outages): Outage Coordination:	916-732-6730 916-732-6225 To Be Added
Real-Time Operations: Balancing Area Desk (Shift Senior): Generation (AGC) Desk (Real-Time Outages): Outage Coordination: Interchange Authority:	916-732-6730 916-732-6225 To Be Added 916-732-6739
Real-Time Operations: Balancing Area Desk (Shift Senior): Generation (AGC) Desk (Real-Time Outages): Outage Coordination: Interchange Authority: Transmission Desk:	916-732-6730 916-732-6225 To Be Added 916-732-6739 916-732-5964
Real-Time Operations: Balancing Area Desk (Shift Senior): Generation (AGC) Desk (Real-Time Outages): Outage Coordination: Interchange Authority:	916-732-6730 916-732-6225 To Be Added 916-732-6739
Real-Time Operations: Balancing Area Desk (Shift Senior): Generation (AGC) Desk (Real-Time Outages): Outage Coordination: Interchange Authority: Transmission Desk: Fax:	916-732-6730 916-732-6225 To Be Added 916-732-6739 916-732-5964
Real-Time Operations: Balancing Area Desk (Shift Senior): Generation (AGC) Desk (Real-Time Outages): Outage Coordination: Interchange Authority: Transmission Desk: Fax: Day Schedule	916-732-6730 916-732-6225 To Be Added 916-732-6739 916-732-5964
Real-Time Operations: Balancing Area Desk (Shift Senior): Generation (AGC) Desk (Real-Time Outages): Outage Coordination: Interchange Authority: Transmission Desk: Fax: Day Schedule Operations:	916-732-6730 916-732-6225 To Be Added 916-732-6739 916-732-5964 916-732-6313
Real-Time Operations: Balancing Area Desk (Shift Senior): Generation (AGC) Desk (Real-Time Outages): Outage Coordination: Interchange Authority: Transmission Desk: Fax: Day Schedule	916-732-6730 916-732-6225 To Be Added 916-732-6739 916-732-5964

This Appendix 2 may be updated as needed by either Party without formal amendment to this Agreement. Any changes will be provided to all individuals listed herein. Email may be used to communicate the revisions.

916-732-6697 (Norm Szczepanski)

Operations:

EXHIBIT A: Description of "Phase 1 Operation Enabling Agreements"

[This Exhibit will include evidence of the provision of necessary services to Sutter/SEC described in Section 5 of this Agreement. Such evidence may be provided through written description, including contract reference numbers or the contracts themselves.]

SMUD-Sutter Station Service

SMUD-Sutter LOA

CAISO Informational Filing – Pseudo PGA

WAPA-Sutter LOA for Transfer of SEC – NITS Suspension

WAPA-Sutter LOA for Work to be Performed by WAPA to Transfer SEC to BANC BA

BANC-CAISO DTBAOA - Removal of SEC from DTBAOA Schedule 2

Amendments

This Exhibit A may be supplemented from time-to-time as determined by the Parties without formal amendment to this Agreement. Any changes to this Exhibit A shall described in writing and transmitted to all Parties to the Agreement within seven (7) business days.