



July 28, 2021

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Re: California Independent System Operator Corporation

Filing of Amendment to Adjacent Balancing Authority Operating Agreement with Balancing Authority Area of Northern California

Docket No. ER21-____-000

Dear Secretary Bose:

The California Independent System Operator Corporation (“CAISO”) submits for Commission filing and acceptance Amendment No. 1 (“Amendment”) to the Adjacent Balancing Authority Operating Agreement (“ABAOA”) between the CAISO and the Balancing Authority of Northern California (“BANC”).¹ This filing includes several incremental revisions to the ABAOA. The CAISO requests that the Commission accept the ABAOA as revised by the Amendment, effective on September 27, 2021, *i.e.*, 61 days from the date of this filing.

I. Background

The ABAOA sets forth the rates, terms, and conditions on which the CAISO and BANC, as balancing authorities registered with the North American Electric Reliability Corporation (“NERC”), operate the interconnection between their balancing authority areas and provide emergency assistance as required by the applicable NERC reliability standard. The Commission accepted the original version of the ABAOA between the CAISO and BANC, effective May 1, 2011.²

¹ The CAISO submits the Amendment pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d.

² See *Cal. Indep. Sys. Operator Corp.*, Commission Letter Order, Docket No. ER11-3387-000 (June 7, 2011). The ABAOA is designated as CAISO Rate Schedule No. 69.

II. Purposes of this Amendment

The CAISO and BANC propose to make incremental revisions to the ABAOA pursuant to this Amendment.³ Specifically, the ABAOA has been amended to:

- a) Replace references to NERC Reliability Standard EOP-001 with references to EOP-011, which superseded EOP-001 and is the relevant NERC Reliability Standard currently in effect;
- b) Clarify that emergency assistance is the delivery of energy and does not include capacity; and
- c) Clarify the points of interconnection descriptions and include illustrations clarify the balancing authority area boundaries.

III. Effective Date

The CAISO requests that the Commission accept the ABAOA, as revised by the Amendment, effective September 27, 2021, *i.e.*, 61 days from the date of this filing.

IV. Service

The CAISO has served copies of this filing upon BANC, the California Public Utilities Commission, the California Energy Commission, and all parties to the proceeding in which the Commission accepted the original ABAOA (Docket No. ER11-3387-000). In addition, the CAISO has posted the filing on the CAISO website.

V. Attachments

In addition to this transmittal letter, this filing includes the following attachments:

- | | | |
|-----|--------------|---|
| (1) | Attachment A | Amendment to the ABAOA; |
| (2) | Attachment B | Clean version of the ABAOA as revised by the Amendment; and |
| (3) | Attachment C | Marked version of the ABAOA as revised by the Amendment. |

³ See *Cal. Indep. Sys. Operator Corp.*, Commission Letter Order, Docket No. ER18-2422 (October 18, 2018) (accepting similar updated references to EOP-011 and removal of the references to capacity in the emergency assistance provision with respect to NV Energy).

VI. Correspondence

The CAISO requests that all correspondence, pleadings, and other communications concerning this filing be served upon the following:

John C. Anders*
Assistant General Counsel
California Independent System
Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: (916) 608-7287
Fax: (916) 608-7222
E-mail: janders@caiso.com

* Individual designated for service pursuant to Rule 203(b)(3),
18 C.F.R. § 203(b)(3).

VII. Conclusion

The CAISO requests that the Commission accept the ABAOA between the CAISO and BANC, as revised by the Amendment, effective September 27, 2021.

Respectfully submitted,

By: /s/ John C. Anders

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General Counsel
Sidney M. Mannheim
Assistant General Counsel
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Attorneys for the California Independent
System Operator Corporation

Attachment A – Amendment to Adjacent Balancing Authority Operating Agreement

between

Balancing Authority Area of Northern California

and

California Independent System Operator Corporation

July 28, 2021

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
AND
BALANCING AUTHORITY OF NORTHERN CALIFORNIA**

**FIRST AMENDMENT
TO THE
ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT**

This First Amendment is dated this 24th day of June, 2021, and is entered into, by and between:

(1) **Balancing Authority of Northern California** (“BANC”), a joint powers authority established pursuant to the laws of the State of California,

and

(2) **California Independent System Operator Corporation** (“CAISO”), a California nonprofit public benefit corporation having a principal executive office located at 250 Outcropping Way, Folsom, California 95630.

BANC and the CAISO are hereinafter referred to as the “Parties.”

Whereas:

- A.** The Parties are signatories to an Adjacent Balancing Authority Area Operating Agreement dated April 15, 2011 (the “Agreement”), which was filed with Federal Energy Regulatory Commission (“FERC”) dated April 19, 2011. FERC accepted the Agreement in their letter order dated June 7, 2011.
- B.** The Parties desire to amend the Agreement to update references to NERC Reliability Standard EOP-001 with EOP-011, which is the current NERC Reliability Standard in effect.
- C.** The Parties desire to amend the Agreement to clarify emergency assistance is the delivery of energy, not capacity.
- D.** The Parties desire to amend Schedule A to clarify the descriptions and the diagrams to clearly illustrate the balancing area boundaries and interconnections.
- E.** In all other respects, the Parties intend that the Agreement remain in full force and effect in accordance with its terms.

NOW THEREFORE, **THE PARTIES AGREE** as follows:

1. **Effective Date.** This First Amendment shall be effective on the date made effective by FERC.
2. **Termination.** This First Amendment shall remain in full force and effect until the termination of the Agreement.
3. **First Amendment to the Agreement.** The Agreement shall be amended as follows:

- 3.1 “Recitals: Section B) is deleted in its entirety and the following is substituted in its place:

“Federal Energy Regulatory Commission (“FERC”) approved mandatory NERC Reliability Standards for the Bulk-Power Systems of North America include Standard EOP-001, later amended and combined with other NERC Reliability Standards into EOP-011, which provides that each Balancing Authority is required to develop, maintain, and implement a set of plans to mitigate operating emergencies, and to coordinate such plans with other Balancing Authorities. The execution of operating agreements between Adjacent Balancing Authorities that contains provisions for emergency assistance is a requirement of the restoration plans reviewed by the applicable Reliability Coordinator.”

- 3.2 Recitals: Section D) is deleted in its entirety and the following is substituted in its place:

“The Parties intend by this Agreement to identify each Party’s responsibility to the other under the Requirements of the Reliability Standard EOP-011 by recognizing the continuing commitment of each Party to the other to cooperate to mitigate operating emergencies.”

- 3.3 Section 1.2: Specific Definitions is deleted in its entirety and the following is substituted in its place:

“1.2.1 BANC Operations Date: The date on which the BANC becomes operational as the Registered Balancing Authority for its Balancing Authority Area.

1.2.2 CAISO Tariff: CAISO operating agreement and tariff as amended from time to time.

1.2.3 EOP-001: Emergency Operations Planning Standard EOP-001, as it was retired.

1.2.4 EOP-011: Emergency Operations Planning Standard EOP-011, as amended or re-titled.

1.2.5 Scheduling Coordinator: An entity certified by the CAISO for the purposes of undertaking the functions of: submitting bids and self-schedules for energy, generation, transmission losses, and ancillary services; coordinating generation; tracking, billing, and settling trades with other Scheduling Coordinators; submitting forecast information; paying the CAISO's charges; and ensuring compliance with CAISO protocols."

3.4 Section 3.2 is deleted in its entirety and the following is substituted in its place:

"Each Party further agrees that it shall develop, maintain, implement, and annually review and update its emergency plans to mitigate operating emergencies and shall share and coordinate such plans with the other Party as required by EOP-011."

3.5 Section 3.3 is deleted in its entirety and the following is substituted in its place:

"To the extent possible, and in accordance with NERC mandatory Reliability Standards, each Party ("Delivering Party") shall assist the other Party ("Receiving Party") in an operating emergency by delivering emergency assistance to the requesting Receiving Party, including emergency energy transfers from such Delivering Party's Balancing Authority Area or from other remote Balancing Authorities over available transmission capacity, in accordance with Schedule B to this Agreement. Arrangements for deliveries of emergency energy transfers shall be through normal operating channels in accordance with CAISO operating procedures. Such emergency assistance shall be provided at the sole discretion of the entity supplying it and shall be recallable without advance notice as required to meet reliability requirements."

3.6 Section 6.2 is deleted in its entirety and the following is substituted in its place:

"Amendment: The Parties may amend or modify this Agreement only by written agreement. In the event the mandatory NERC Reliability Standards including EOP-011 are revised or replaced, the Parties shall meet within ninety (90) days of such change to discuss and determine whether such change will affect the terms and conditions of this Agreement and whether a modification or replacement of the Agreement is needed. An amendment that is subject to FERC approval shall not take effect until FERC has accepted such amendment for filing and has made it effective without any material modification or condition that is

unacceptable to either Party in that Party's sole discretion. If any material modification or condition is ordered by FERC that is unacceptable to a Party, such Party shall communicate its lack of consent to such modification or condition to the other Party within ten (10) business days after the date on which FERC issues its order, and the Parties shall use best efforts to negotiate mutually acceptable revisions to this Agreement to address the modification or condition. Revisions to Schedules other than with regard to the contact information in Schedule C shall be processed as an amendment to this Agreement."

- 3.7** Schedule A specifying the "Adjacent Balancing Authority Interconnection Points" is deleted in its entirety and the Schedule A attached to this First Amendment is substituted in its place.
- 3.8** Schedule B specifying the "Emergency Capacity and Energy" is deleted in its entirety and the Schedule B retitled "Emergency Energy" attached to this First Amendment is substituted in its place.
- 4.** This First Amendment constitutes the complete and final agreement of the Parties with respect to the purpose of this First Amendment as described in the Recitals hereto and supersedes all prior understandings, whether written or oral, with respect to such subject matter.
- 5.** Except as expressly modified in this First Amendment, the Agreement shall remain in full force and effect in accordance with its terms, and the unmodified provisions of the Agreement shall apply to any new rights and/or obligations established by this First Amendment.
- 6.** This First Amendment may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same agreement.



IN WITNESS WHEREOF, the Parties have caused this First Amendment to be duly executed by and through their respective authorized representatives as of the date hereinabove written.

California Independent System Operator Corporation

DocuSigned by:
Neil Millar
8230FA163EA04FB...

By: _____

Name: Neil Millar

Title: Vice President Infrastructure and Ops Planning

Date: 6/24/2021

Balancing Authority of Northern California

DocuSigned by:
James R Shetler
B91D79C08CAC422...

By: _____

Name: James R Shetler

Title: General Manager

Date: 6/23/2021

Schedule A

ADJACENT BALANCING AUTHORITY INTERCONNECTION POINTS [Sections 5.1, 5.2 and 6.2]

The Interconnection between the Balancing Authority of Northern California (“BANC”) and the California Independent System Operator Corporation (“CAISO”) is made up of ten (10) Interconnection points. These Interconnection points run normally closed, unless specified otherwise.

Standiford 115 kV Interconnection

This interconnection, comprised of four 115 kV transmission lines, connects both City and County of San Francisco (“CCSF”) and Pacific Gas and Electric Company (“PG&E”) facilities with the Modesto Irrigation District (“MID”) Standiford 115 kV substation.

- Warnerville - Standiford 115 kV #7 and Warnerville - Standiford 115 kV #8 lines.
- Moccasin-Newark 115 kV Line #3 and Moccasin-Newark 115 kV Line #4. Standiford taps from Moccasin-Newark 115 kV Line #3 and Moccasin-Newark 115 kV Line #4 (Normally open).

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Standiford 115 kV substation: Disconnect Switches (“DISCs”) 907C, 903C, 904C, and 908C, and bypass disconnect switches 917, 913, 914, and 918.

Note: Circuit Breakers (“CB”) 903 and 904 are and will be open breakers, and if this configuration is proposed to be changed, the Parties will confer and agree on any change to the Interconnection point in advance of the change in this configuration.

Transmission Owners:

- CCSF/ HHWP – (CAISO Balancing Authority (“CAISO BA”))
 - Moccasin Power House: Moccasin Switchyard (CB: 510 and 520)
 - Warnerville Substation: Warnerville Substation (CB: 620 and 640)
- US Government (owner), City of Riverbank (operator) – (CAISO BA)
 - Riverbank Substation
 - CB 52-3, 52-8
 - Switches: 1619, 1612, 1609, and 1611

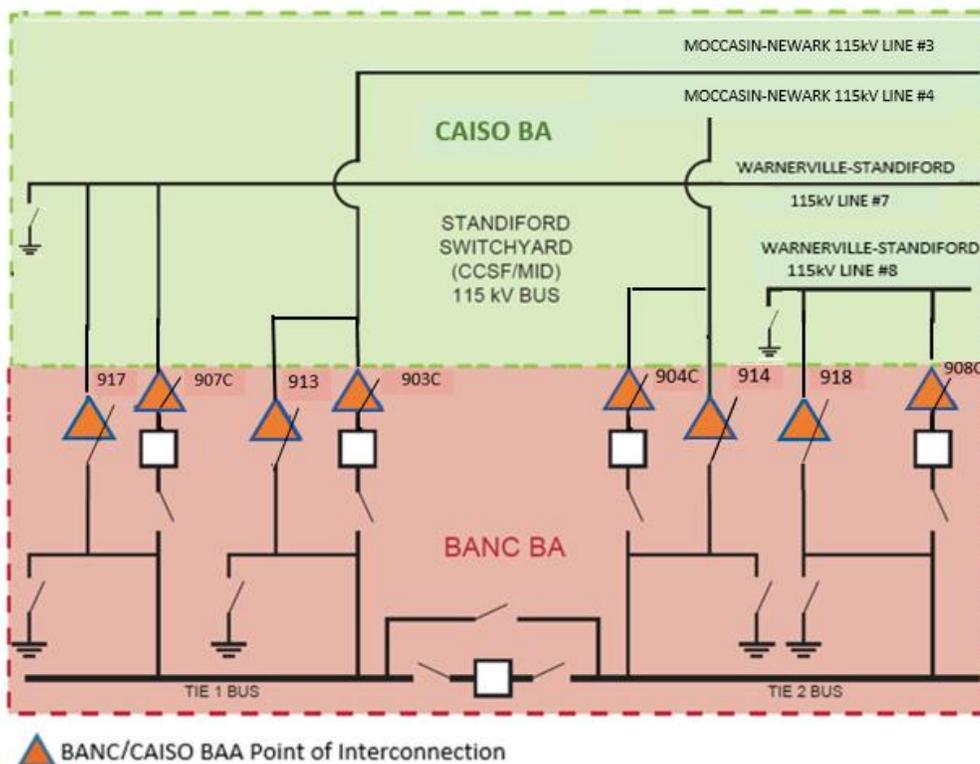
- MID – (BANC BA)
 - Standiford Substation CB 903, 904, 907, 908.
 - Switches 945, 955, 913, 914, 918, 913C, 914C, 917C, and 918C.
- PG&E – (CAISO BA)
 - All Newark Substation Equipment
 - CB 100 and CB 190
 - Switches 101, 103, 105, 107, 191, 193, 195, and 197

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority for the disconnect switches 907C, 903C, 904C, and 908C, and bypass disconnect switches 917, 913, 914, and 918 at the Standiford substation and for the Moccasin-Newark #3 and #4 115 kV lines and for the Warnerville-Standiford #7 and #8 115kV lines. However, the line terminal CBs at Standiford are physically controlled and operated by MID personnel.

CAISO is the Balancing Authority for the switches and breakers at the Newark Substation at the end of the Moccasin-Newark 115 kV lines.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining bays/breakers/switches at the Standiford substation.



COTP Terminus 500 kV Interconnection

This interconnection is comprised of two 500 kV transmission lines that connect PG&E facilities to Western Area Power Administration – Sierra Nevada Region’s (“WAPA”) Tracy 500 kV switchyard.

- Tesla – Tracy 500 kV line
- Tracy – Los Banos 500 kV line

Note: This configuration is sometimes referred to as the “Tesla Bypass” portion of the California-Oregon Transmission Project (“COTP”) and was designed for reliability purposes. By contract, no party is to be assessed charges or losses for use of the Tesla-Bypass facilities.

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Tracy 500 kV switchyard: DISCs 2191, 2097, 1191, and 1097

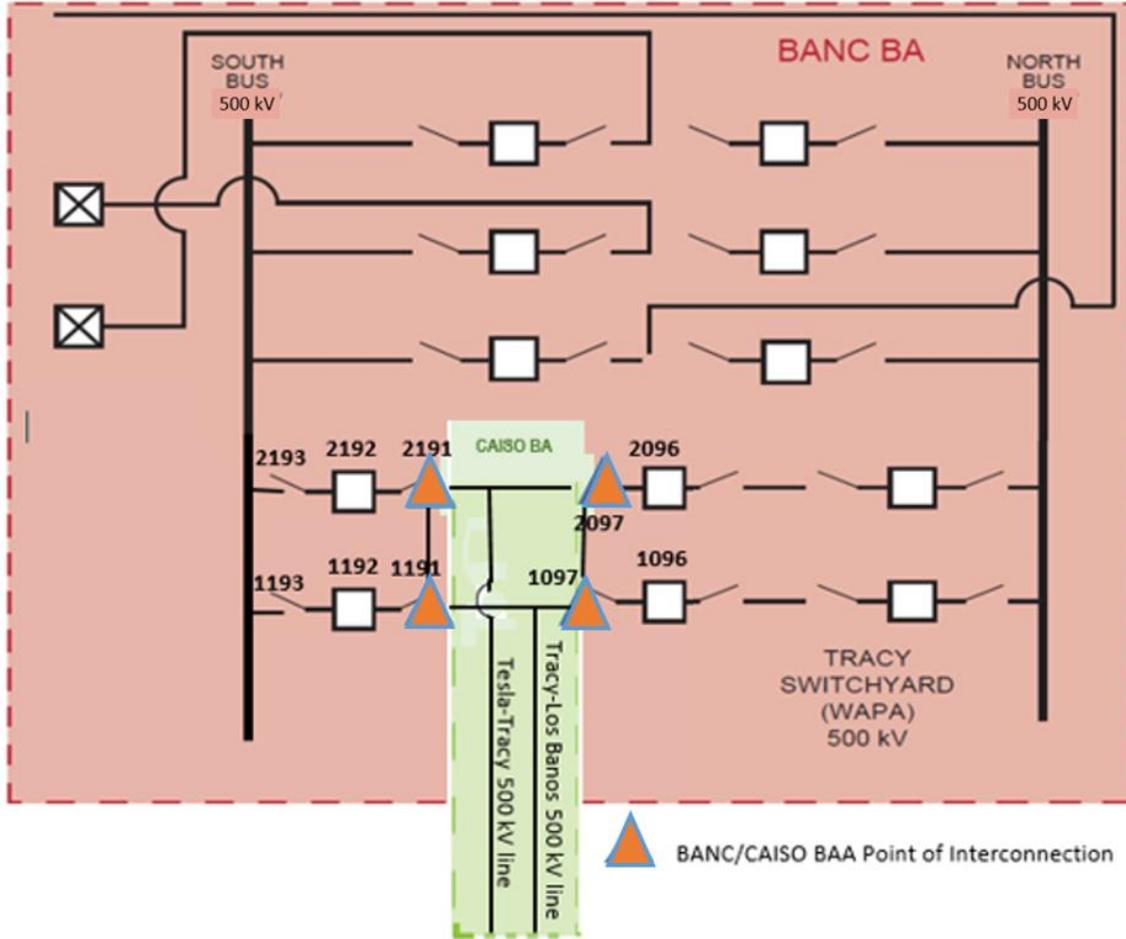
Transmission Owners:

- PG&E
 - All Los Banos 500 kV Substation Equipment
 - All Tesla 500 kV Substation Equipment
 - Tesla – Tracy 500 kV line from Tesla to Pole 007/037 is owned by PG&E, which is approximately 1.13 miles.
 - Tracy – Los Banos 500 kV line from Los Banos to Pole 007/037 is owned PG&E, which is approximately 56.25 miles.
- WAPA – (BANC BA)
 - All Tracy 500 kV Substation EquipmentTesla – Tracy 500 kV line from Tracy (near Tesla junction) to Pole 007/037, approximately 7.4 miles.
 - Tracy – Los Banos 500 kV line from Tracy (near Tesla junction) to Pole 007/037, approximately 7.4 miles.

Roles and Responsibilities:

As depicted on the one-line diagram below, the Tracy – Los Banos and Tesla – Tracy 500 kV lines are in the CAISO BA. However, the line terminal CBs at Tracy are physically controlled and operated by WAPA personnel.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining Bays/Breakers/Switches at the Tracy switchyard.



Round Mountain 230 kV Interconnection

This interconnection is comprised of one 230 kV transmission line that connects WAPA's Cottonwood 230kV switchyard (bus Section G) to PG&E's Round Mountain 230 kV switchyard.

- Round Mountain – Cottonwood No.1 230 kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Round Mountain 230 kV switchyard: line side DISC 243 and bypass DISC 245

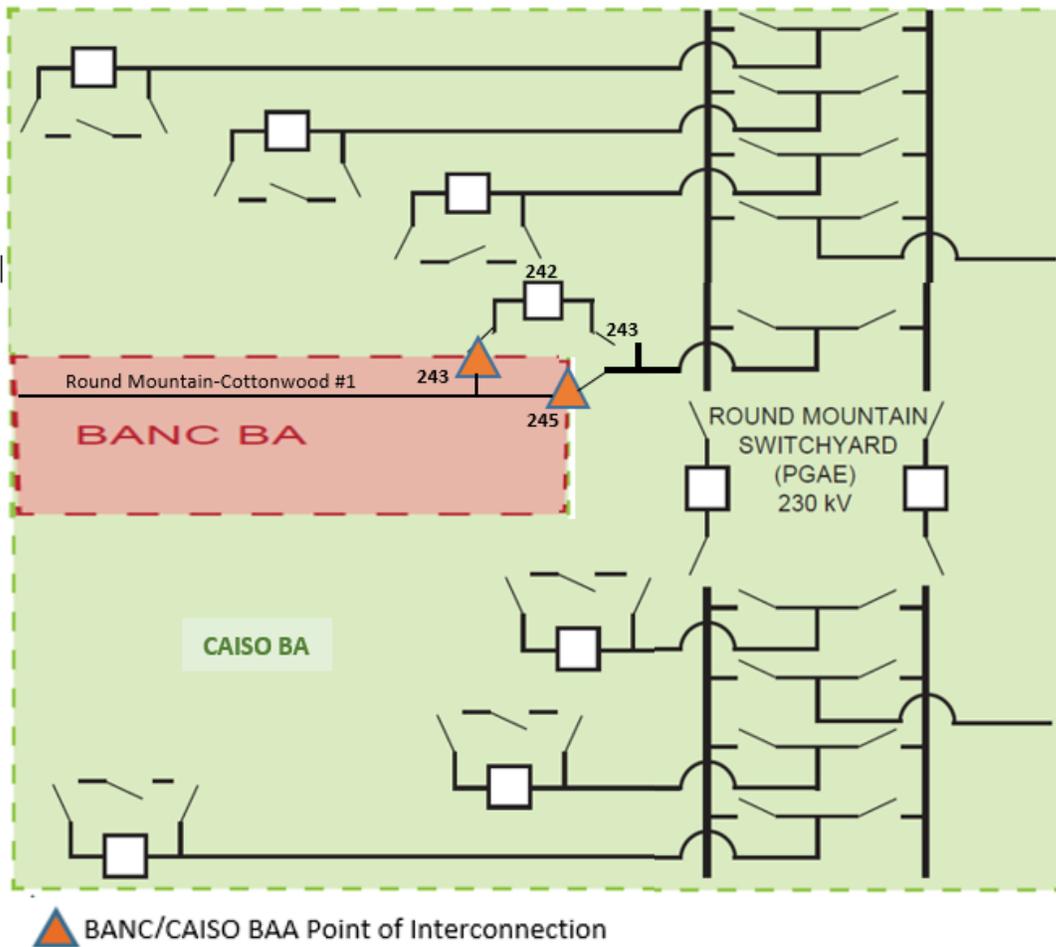
Transmission Owners:

- PG&E
 - Round Mountain Substation:
 - CB 242 and DISCs 243, 243 and 245 (terminal end of Round Mountain – Cottonwood No. 1 230 kV line)
 - Co-owned 500/230 kV transformers with WAPA
 - Cottonwood Substation
 - Including Cottonwood Bus Section G up to Selector Disconnects 377 and 379.
- WAPA – (BANC BA)
 - Cottonwood Substation:
 - Round Mountain – Cottonwood No.1 230 kV line
 - Cottonwood 230 kV bus Section G, from and including, CB 372 and DISCs 371 (shown as second 373), 373, and 375.
 - Round Mountain
 - Round Mountain – Cottonwood No.1 230 kV line
 - Revenue metering equipment at Round Mountain 230 kV
 - Co-owned 500/230 kV transformers with PG&E

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from DISCs 243 and 245 at the Round Mountain 230 kV switchyard. PG&E operates 230-kV CB 242 at Round Mountain.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Round Mountain – Cottonwood No.1 230 kV line (up to DISCs 243 and 245 at Round Mountain) and the remaining bays/breakers/switches on the 'G' bus section of the Cottonwood switchyard. That includes Cottonwood CB 372 and the associated bypass and isolation disconnects 373 and 375.



Cottonwood 230 kV Interconnection

This interconnection is comprised at the two bus-ties that connects PG&E's "F" bus section to WAPA's "G" bus section of the Cottonwood 230 kV switchyard.

- Cottonwood 230 kV substation F-G bus-tie

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Cottonwood 230 kV switchyard: DISCs 483 & 473
- Under the Transmission Exchange Agreement ("TEA"), where the 230-kV busses of the G Section meet the 230-kV busses of the F Section at circuit breaker nos. 472 and 482

Transmission Owners:

- PG&E
 - PG&E owns the Cottonwood bus structures, dead-end structures, bus conductors and jumpers on Section G. All selector switches on Bus Section G between Bus 1 and 2, except 377 and 379.
 - Cottonwood 230 kV:
 - Bus Section 'E' and 'F' and associated equipment.
 - Lines and all associated substation equipment on bus sections 'E' and 'F'
- WAPA
 - WAPA takes ownership of Cottonwood bus Section G transmission lines at the conductor side of each dead-end structure for each WAPA-owned transmission line.
 - Seven 230-kV line circuit breakers (All Section G breakers).
 - Five 230-kV disconnect switches, 373 (also known as 371), 373, 375, 377 and 379, associated with the Round Mountain-Cottonwood #1 230 kV Line.
 - One 230-kV ground switch (Round Mountain line)
 - Supervisory Control and Data Acquisition ("SCADA") system and communications equipment for Section G.
 - Two 230-kV meters (bus 1 and bus 2) and metering transformers.
 - Cottonwood 230 kV:
 - Lines and associated transmission line equipment on the bus Section G.

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority west of the DISC 483 and 473 at the Cottonwood 230 kV switchyard.

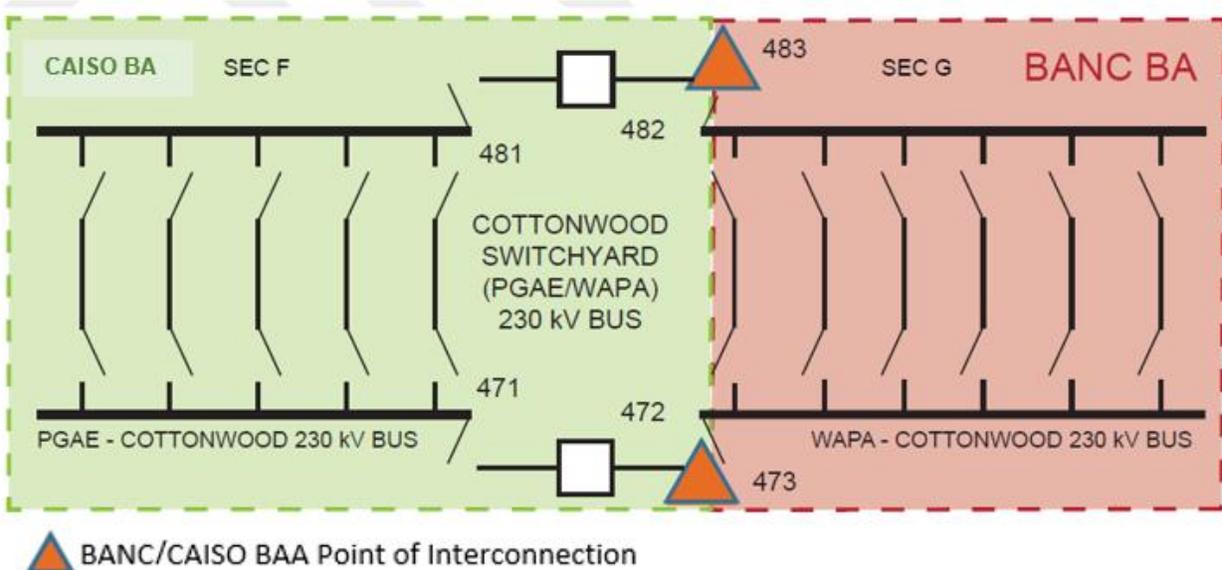
As depicted on the one-line diagram below, BANC is the Balancing Authority from DISC 483 and 473, including the meters, and the remaining Cottonwood “G” section 230 kV switchyard.

PG&E maintains the bus tie CBs 482 and 472 (and associated equipment) and performs all maintenance within the Cottonwood switchyard, including maintenance on Bus Section ‘G’ up to and including the selector switches including DISC 377 and 379.

PG&E operates all switches and line breakers including sectionalizing breakers 472 and 482 up to DISC 473 and 483 on Cottonwood Bus Section ‘E’ and ‘F’.

WAPA maintains WAPA-owned SCADA and WAPA-owned 230-kV Section G metering and metering transformers.

WAPA operates all switches and line breakers beyond DISC 473 and 483 for WAPA lines terminating on Cottonwood Bus Section ‘G’.



Tesla – Tracy 230 kV Interconnection

This interconnection is comprised of two 230 kV transmission lines that connect WAPA's Tracy 230 kV switchyard to PG&E's Tesla 230 kV switchyard.

- Tesla – Tracy 230 kV No.1 line
- Tesla – Tracy 230 kV No.2 line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Tracy 230 kV switchyard: DISCs 1881, 1885, 581, and 585

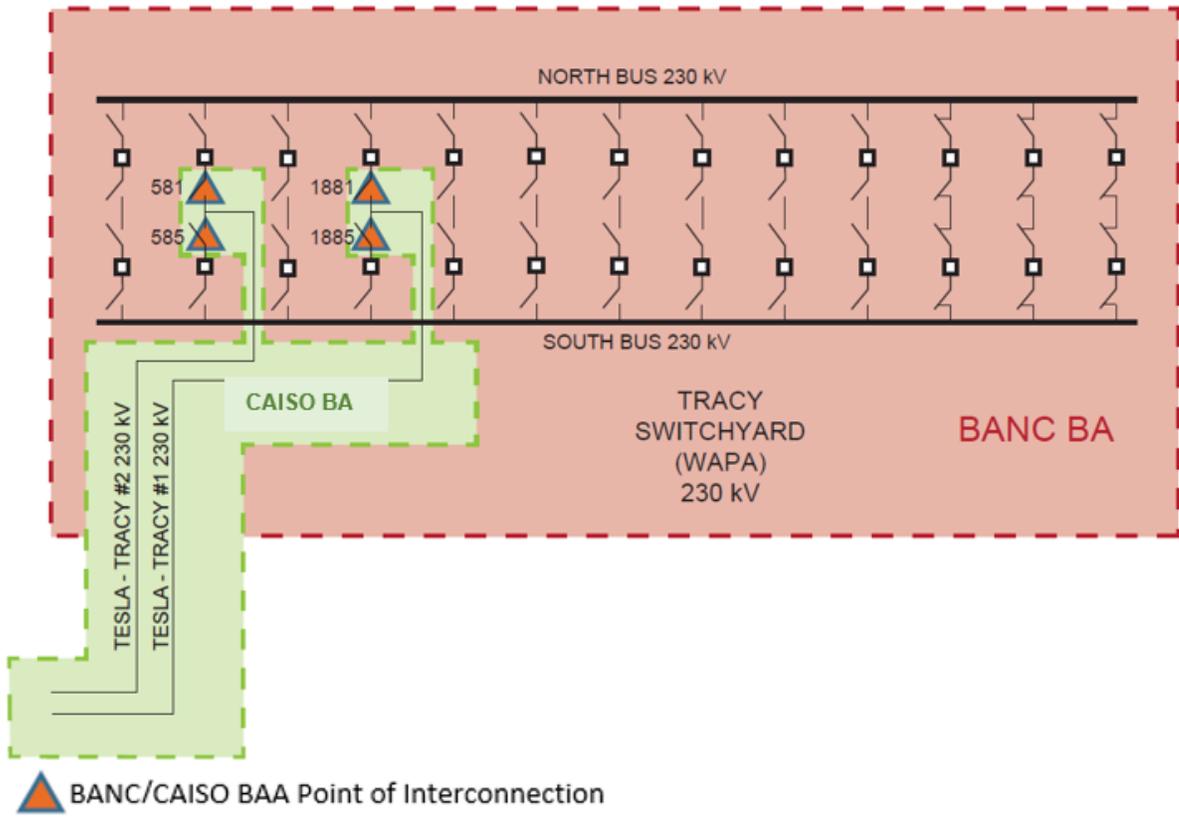
Transmission Owners:

- PG&E
 - PG&E owns the lines from Tesla 230 kV switchyard and owns the terminal breakers and equipment at Tesla 230 kV switchyard.
 - Tesla CB 312 and 322.
 - Switches 311, 313, 315, 317, 319, 321, 323, 325, 327, and 329 for the line terminals.
 - Tesla 230 kV switchyard
 - Tesla –Tracy No.1 and No.2 230 kV lines from Tesla to Pole 005/029
- WAPA
 - WAPA takes ownership of the lines at pole 005/029 outside the Tracy 230 kV switchyard. WAPA owns the terminal breakers and associated DISCs 1881, 1885, 581, and 585 at Tracy 230 kV switchyard.

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from the Tesla – Tracy No.1 and No.2 230 kV lines up to DISCs 1881, 1885, 581, and 585 at Tracy 230 kV switchyard. However, these switches and associated CBs (1882 & 1886 and 582 & 586) which are physically controlled and operated by WAPA personnel.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Tracy 230 kV switchyard.



Rancho Seco 230 kV Interconnection

This interconnection is comprised of two 230 kV transmission lines that connects Sacramento Municipal Utility District's ("SMUD") Rancho Seco to PG&E's Bellota 230 kV substation.

- Rancho Seco – Bellota 230 kV No.1 line
- Rancho Seco – Bellota 230 kV No.2 line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Rancho Seco 230 kV switchyard: Line DISCs 357 and 317.

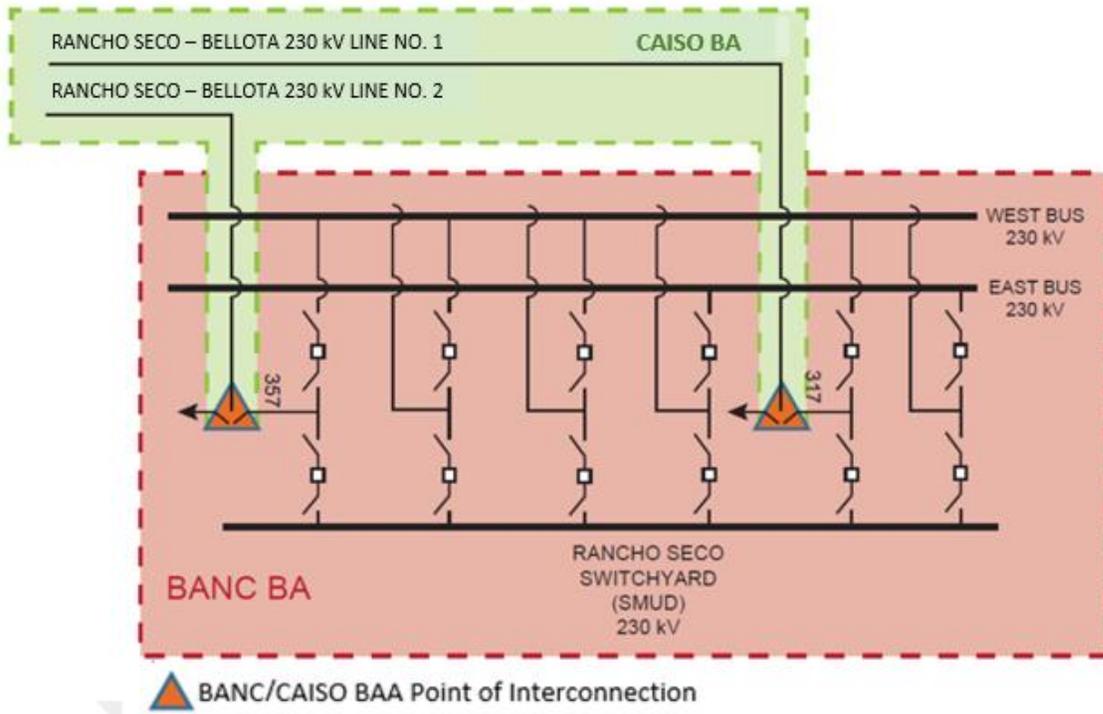
Transmission Owners:

- SMUD
 - Rancho Seco 230 kV switchyard up to the connections to the Rancho Seco-Bellota termination tower at the Rancho Seco switchyard.
 - Rancho Seco CB 310 and CB 350
 - Switches 213, 311, 313, and 317
 - Switches 253, 351, 353, and 357
- PG&E
 - Bellota 230 kV substation and the two lines that terminate at the termination tower at the Rancho Seco switchyard.
 - Bellota CBs 230 and 240
 - Bellota Switches 233, 235, 237, 239, 243, 245 247, and 249

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from the Rancho Seco – Bellota No.1 and No.2 230 kV lines up to DISCs 357 and 317 at Rancho Seco 230 kV switchyard, which are operated and controlled by Sacramento Municipal Utility District ("SMUD").

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Rancho Seco 230 kV switchyard.



Lake 230 kV Interconnection

This interconnection is comprised of a single very short (<0.25 mile) 230 kV transmission line connecting SMUD's Lake Switchyard to PG&E's Gold Hill Substation.

- Gold Hill-Lake 230 kV line

Note: This interconnection point utilizes a 55-ohm series reactor to provide additional electrical distance that mitigates for excessive through flows that would occur otherwise. The physical point of interconnection is at PG&E's 230 kV line termination structure at Gold Hill Switchyard.

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Gold Hill 230 kV substation: DISCs 233 and 235

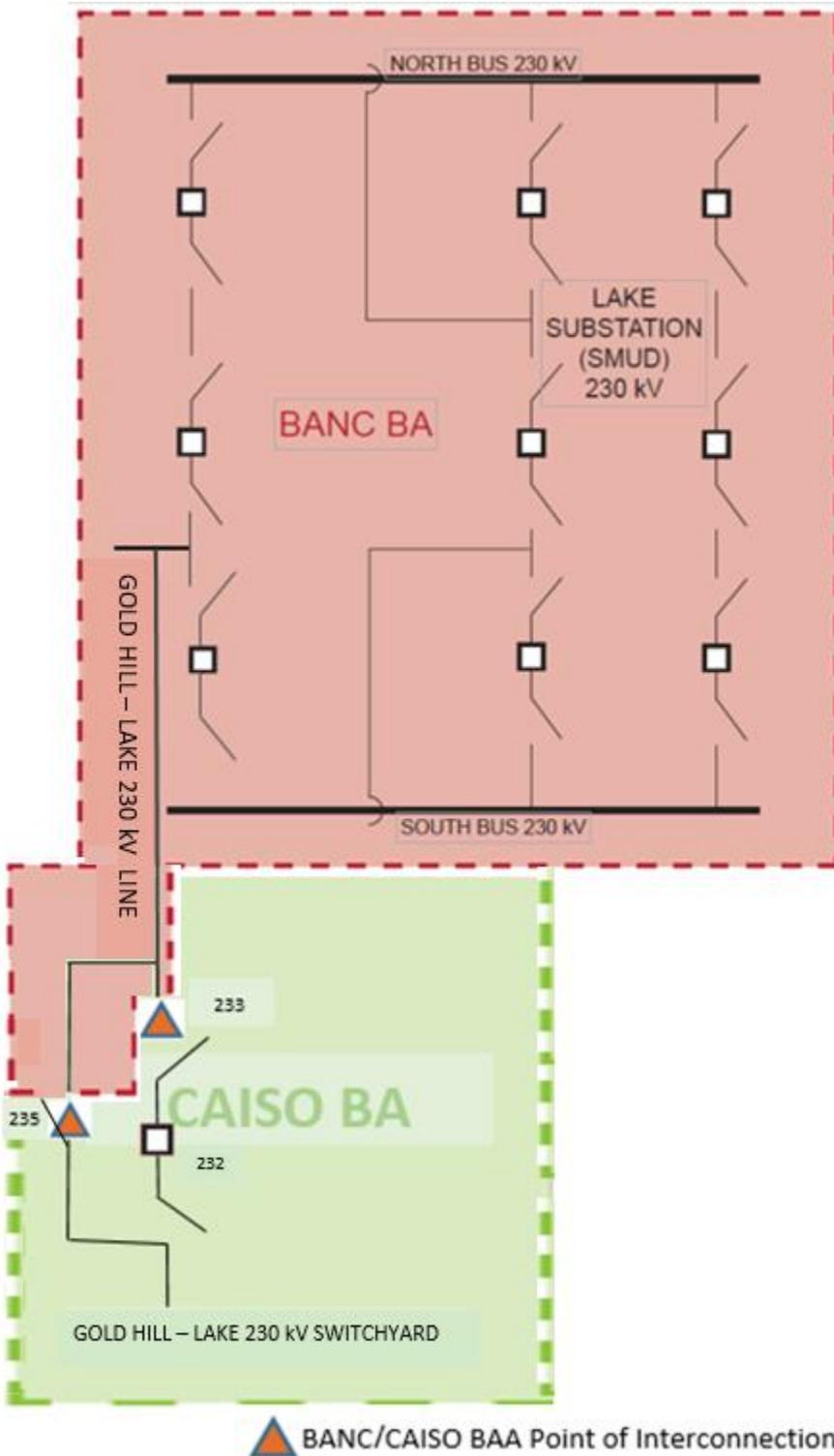
Transmission Owners:

- SMUD
 - Lake 230 kV switchyard, 55-ohm series reactor and Gold Hill-Lake 230-kV line up to the SMUD 230-kV termination structure at PG&E's Gold Hill switchyard
 - Lake Switchyard CB 5236, CB 5230. Switches 5195, 5233, 5235, 5237, 5229, and 5231.
- PG&E
 - Gold Hill 230 kV Substation up to the SMUD termination structure for the SMUD Gold Hill-Lake 230 kV line
 - Gold Hill CB 232
 - Gold Hill Switches 231, 233, 235, 237, and 239.

Roles and Responsibilities:

As depicted on the one-line diagram below, CAISO is the Balancing Authority for the Gold Hill 230 kV substation.

As depicted on the one-line diagram below, BANC is the Balancing Authority from the Gold Hill – Lake 230 kV line up to DISC 233 and DISC 235, at the Gold Hill 230 kV substation, which are operated and controlled by PG&E.



Westley 230 kV Interconnection

This interconnection is comprised of one 230 kV transmission line that connects PG&E's Tesla 230 kV Substation with the jointly owned MID/Turlock Irrigation District ("TID") Westley 230 kV switchyard.

- Tesla-Westley 230kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below, the Interconnection point is comprised of a single 230 kV line connecting Westley switchyard to Tesla Substation. MID is interconnected to the PG&E system through breakers 2355 and 2356 at the MID/TID Westley switchyard. The physical point of interconnection is the Westley Tap located approximately one-half mile west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100.

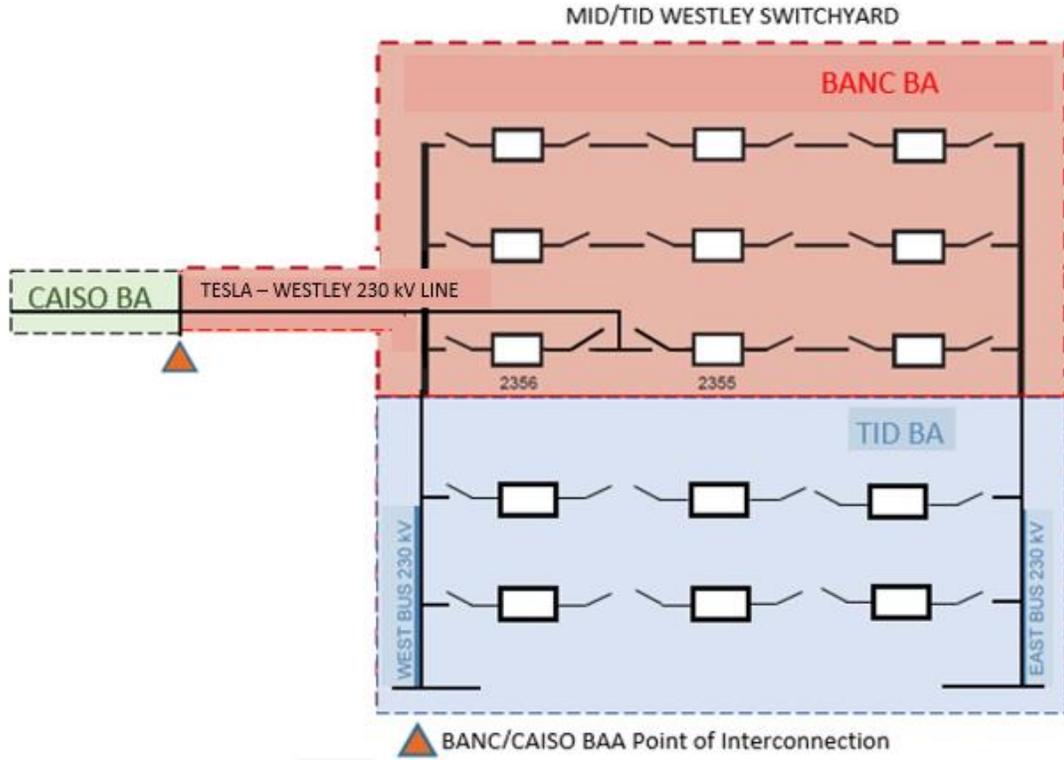
Transmission Owners:

- MID/TID
 - Westley 230 kV switchyard
 - Tesla-Westley 230 kV Line from Westley switchyard up to PG&E's Tower 022/100 one half mile west of the Westley switchyard.
- PG&E
 - PG&E – ownership is from Tesla 230 kV switchyard up to the Westley Tap located approximately 0.64 miles west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100.
 - Tesla 230 kV substation
 - Tesla CB 262.
 - Tesla Switches 263, 265, 267, and 269.
 - Tesla-Westley 230 kV line from Tesla to Tower 022/100

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from PG&E's Tesla 230 kV substation and up to the Westley Tap located approximately 0.64 miles west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Tesla- Westley 230 kV line from the Westley Tap, located approximately 0.64 miles west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100, up to circuit breakers 2355 and 2356 at MID/TID's Westley 230 kV switchyard and the remaining bays/breakers/switches within BANC's portion of the MID/TID Westley 230 kV switchyard.



LLNL 115 kV Interconnection

This interconnection is comprised of one transmission line that connects PG&E's Tesla 115 kV Substation to WAPA's Lawrence Livermore National Laboratory ("LLNL") U-424 115 kV switchyard.

- Tesla – Lawrence Lab 115 kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Lawrence Livermore Sub (Radiation) 115 kV switchyard: DISC 455

Transmission Owners:

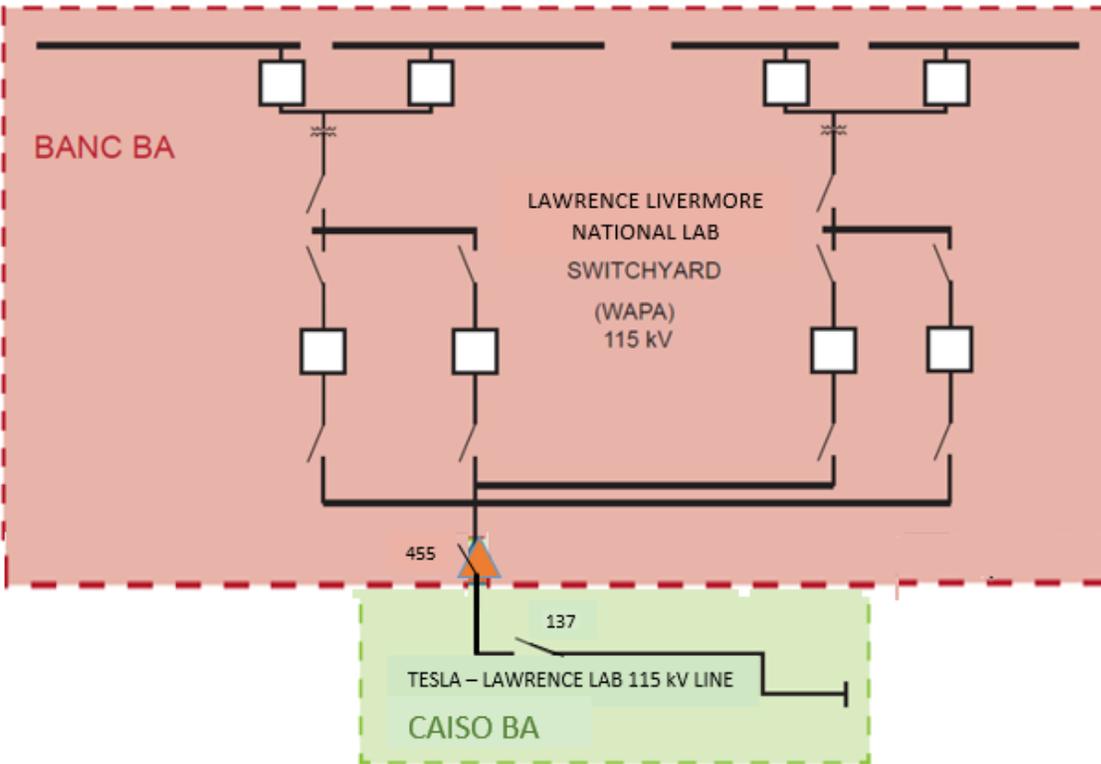
- WAPA/U.S. Department of Energy ("DOE")
 - Lawrence Livermore Sub (Radiation) 115 kV switchyard
 - Lawrence Livermore Sub (Radiation) Switchyard CB 752, CB 852, and Switches 455, 751, 753, 851, and 853.
- PG&E
 - PG&E ownership is from Tesla 115 kV substation
 - Tesla CB 142, Switch 143, 145, 147, and 149.
 - The Tesla-Lawrence Lab 115kV line up to DISC 455 at WAPA Lawrence Livermore Sub (Radiation) 115 kV switchyard.

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from PG&E's Tesla 115 kV substation and the Tesla – Lawrence Lab 115 kV line up to DISC 455 at the Lawrence Livermore Sub (Radiation) at the termination structure for the Tesla-Lawrence Lab 115 kV switchyard.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining bays/breakers/switches at WAPA's Lawrence Livermore Sub (Radiation) 115 kV switchyard.

DOE LLNL is responsible for maintaining the 115kV switchyard equipment at Lawrence Livermore Sub (Radiation). WAPA has operational control of Lawrence Livermore Sub (Radiation) CBs 652, 752, 852, and 952.



 BANC/CAISO BAA Point of Interconnection

Herdlyn 69 kV Interconnection

This interconnection is comprised of one transmission line that connects PG&E's Herdlyn 60 kV substation to WAPA's Tracy 69 kV switchyard.

Herdlyn

- Herdlyn-Tracy 69 kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Tracy 69 kV switchyard: DISCs 2451 and 2455

Transmission Owners:

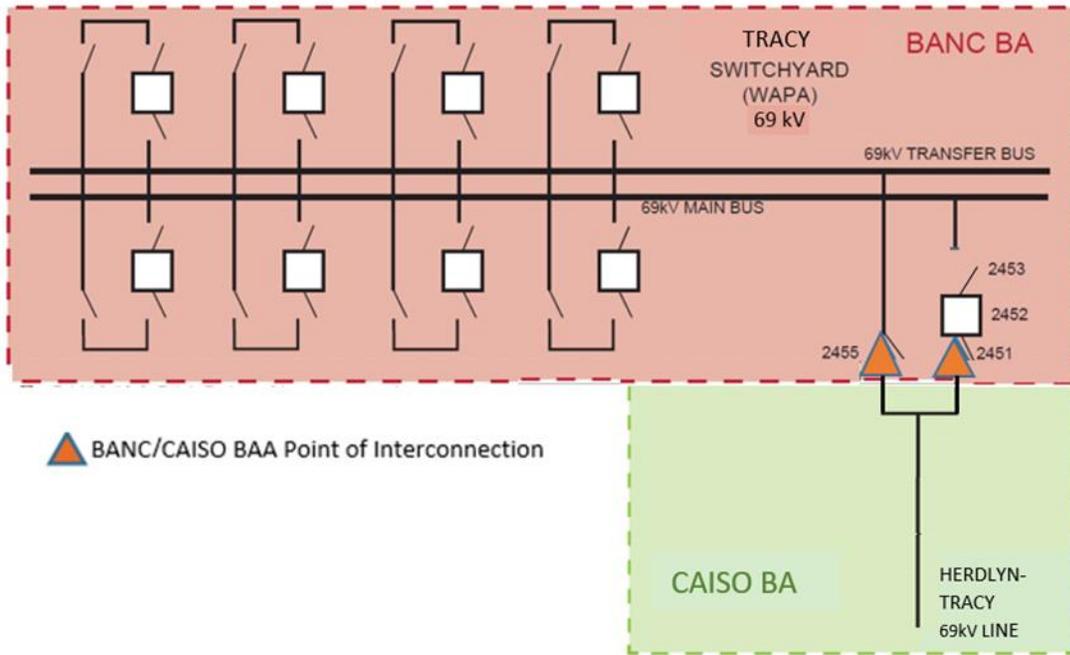
- WAPA
 - Tracy 69 kV switchyard, DISCs 2451 and 2455, CB 2452 and associated metering equipment
- PG&E
 - PG&E owns the Herdlyn-Tracy 69-kV line from Herdlyn 60 kV substation up to the metering equipment on the line side prior to disconnect switches 2451 and 2455 at WAPAs Tracy 69 kV switchyard.
 - Herdlyn 60 kV Substation
 - Herdlyn Bank # 2 and Switch 85

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from PG&E's Herdlyn 60 kV substation and up to disconnect switch 2451 and 2455 at the Tracy 69 kV switchyard.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining bays/breakers/switches at WAPAs Tracy 69 kV switchyard.

The Herdlyn tie is operated radial to WAPA's Tracy switchyard. The tie is normally closed at the Tracy 69-kV switchyard with open operating points within the PG&E system (normally open at PG&E's Vasco SW 39, and Balfour SW 37).



REVENUE METERING AND TELEMETRY AT INTERCONNECTION POINTS

BANC and CAISO metering shall meet any metering standards mutually agreed upon by the Parties for the purpose of operating their adjacent Balancing Authority Areas. BANC and the CAISO shall be entitled to witness testing of the involved interconnection metering. Any change or modification to such metering equipment by BANC, the CAISO or any other entity shall be coordinated between the Parties. BANC shall allow daily, once a day, read-only access by the CAISO to direct poll revenue data from the interconnection revenue metering in five (5) minute intervals at the metering points identified in this Schedule A. The CAISO shall allow daily, once a day, read-only access by the BANC to direct poll revenue data from the interconnection revenue metering in five (5) minute intervals at the metering points identified in this Schedule A.

BANC and the CAISO shall maintain arrangements that ensure that both Parties shall have access to the same real-time data from the points identified in this Schedule A between their Balancing Authority Area interconnections for the purpose of complying with North American Electric Reliability Corporation (“NERC”) reliability standards. The Parties understand that each Party wants to obtain MW and MVAR data from interconnection metering, which may include Remote Terminal Units (“RTUs”), at the points identified in this Schedule A between their Balancing Authority Area interconnections. The Parties agree to allow each other to directly poll real-time data from metering at the interconnection switchyards under the other Party’s operational control as a Balancing Authority. In the event that a second communication port of the RTU is not available for direct polling by a Party, the Party shall have the option to provide a RTU to the switchyard owner for the purpose of establishing a communication port available for direct polling by such Party.

This Schedule A shall remain in effect until it is superseded by mutual written agreement by the Parties or it is terminated, either by written notice from an individual party or by written consent by both Parties, in accordance with Section 2.1 of the Agreement.

Schedule B

EMERGENCY ENERGY [Sections 3.3 and 6.2]

In accordance with EOP-011, the Parties will, to the extent possible, assist each other in an emergency by scheduling energy. Such emergency assistance will be available at the sole discretion of the Party supplying it and will be recallable without advance notice as required to meet reliability requirements. The Parties will agree upon and log MW values, start, and end times, ramp rates and times, and integrated values for any emergency assistance provided.

The emergency assistance will be provided by a Party will be for system reliability. Such emergency assistance may be estimated prior to delivery and finalized in the settlement process.

The price paid for CAISO emergency assistance will be at the CAISO market price for the energy sold, plus all applicable charges, as specified in the CAISO Tariff provisions for emergency assistance. Such price may be estimated prior to delivery and finalized in the settlement process. Payment to the CAISO for emergency assistance provided by CAISO will be made by the Scheduling Coordinator representing BANC, in accordance with the settlement process, billing cycle, and payment timeline set forth in the CAISO Tariff.

The price paid for BANC emergency assistance will be at the price specified by BANC. In the event BANC does not specify the price for energy at the time of the request for emergency assistance and no other settlement price is established prior to the delivery of the emergency assistance, the default settlement price shall be the CAISO market price, plus all other applicable charges, as specified or as otherwise established in the CAISO Tariff for emergency assistance. If the default settlement price does not compensate BANC for the value of the emergency assistance delivered to the CAISO, BANC shall have the opportunity to justify a higher settlement price in accordance with the CAISO Tariff provisions for emergency assistance. Payment to BANC for emergency assistance provided by BANC will be made to the Scheduling Coordinator representing BANC, in accordance with the settlement process, billing cycle, and payment timeline set forth in the CAISO Tariff.

Nothing in this Agreement shall obligate BANC to be bound by CAISO Tariff provisions unless expressly provided for.

This Schedule B shall remain in effect until it is superseded by mutual written agreement by the Parties or it is terminated, either by written notice from an individual party or by written consent by both Parties, in accordance with Section 2.1 of the Agreement.

Attachment B – Clean Tariff

Amendment to Adjacent Balancing Authority Operating Agreement

between

Balancing Authority Area of Northern California

and

California Independent System Operator Corporation

July 28, 2021

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

Executed by

BALANCING AUTHORITY OF NORTHERN CALIFORNIA

and

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

This Adjacent Balancing Authority Operating Agreement, (“Agreement”) dated as of _____, 2011, is between the BALANCING AUTHORITY OF NORTHERN CALIFORNIA (“BANC”), a joint powers authority established pursuant to the laws of the State of California and the CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION (“CAISO”), a California nonprofit public benefit corporation having a principal executive office located at 250 Outcropping Way, Folsom California 95630. Each is referred to herein as a “Party” and collectively as the “Parties.”

Recitals

A) Each Party is a member of the Western Electricity Coordinating Council (“WECC”), an organization whose members are located in the Western Interconnection as defined in the WECC Bylaws and is registered with WECC as a Balancing Authority pursuant to the North American Electric Reliability Corporation (“NERC”) Reliability Functional Model and Registry Criteria.

B) Federal Energy Regulatory Commission (“FERC”) approved mandatory NERC Reliability Standards for the Bulk-Power Systems of North America include Standard EOP-001, later amended and combined with other NERC Reliability Standards into EOP-011, which provides that each Balancing Authority is required to develop, maintain, and implement a set of plans to mitigate operating emergencies, and to coordinate such plans with other Balancing Authorities. The execution of operating agreements between Adjacent Balancing Authorities that contains provisions for emergency assistance is a requirement of the restoration plans reviewed by the applicable Reliability Coordinator.

C) The Parties are adjacent Balancing Authorities by virtue of their transmission systems being interconnected at one or more points. The CAISO has responsibilities as a Balancing Authority and operates the CAISO Balancing Authority Area. BANC has responsibilities as a Balancing Authority and operates the BANC Balancing Authority Area through arrangements with the Sacramento Municipal Utility District (“SMUD”), in accordance with the Balancing Authority Operations Services Agreement between BANC and SMUD.

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

D) The Parties intend by this Agreement to identify each Party's responsibility to the other under the Requirements of the Reliability Standard EOP-011 by recognizing the continuing commitment of each Party to the other to cooperate to mitigate operating emergencies.

Therefore, the Parties mutually agree as follows:

1. Definitions

1.1 NERC Definitions

Except as defined in Section 1.2 or as otherwise defined in this Agreement, terms and expressions used in this Agreement shall have the same meanings as those contained in the NERC Glossary of Terms Used in Reliability Standards.

1.2 Specific Definitions

1.2.1 BANC Operations Date: The date on which the BANC becomes operational as the Registered Balancing Authority for its Balancing Authority Area.

1.2.2 CAISO Tariff: CAISO operating agreement and tariff as amended from time to time.

1.2.3 EOP-001: Emergency Operations Planning Standard EOP-001, as it was retired.

1.2.4 EOP-011: Emergency Operations Planning Standard EOP-011, as amended or re-titled.

1.2.5 Scheduling Coordinator: An entity certified by the CAISO for the purposes of undertaking the functions of: submitting bids and self-schedules for energy, generation, transmission losses, and ancillary services; coordinating generation; tracking, billing, and settling trades with other Scheduling Coordinators; submitting forecast information; paying the CAISO's charges; and ensuring compliance with CAISO protocols.

2. Term and Termination

2.1 This Agreement shall be effective on the later of the date of execution or the BANC Operations Date, provided that the provisions of Section 3.3 and Schedules A and B shall not be effective until the later of: (1) the date of execution, or (2) the date this Agreement is accepted for filing and made effective by FERC pursuant to a filing with FERC by the CAISO (the "Effective Date") without any material modification or condition that is unacceptable to either Party in that Party's sole discretion. If any material modification or condition is ordered by FERC that is unacceptable to a Party,

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

such Party shall communicate its lack of consent to such modification or condition to the other Party within ten (10) business days after the date on which FERC issues its order, and the Parties shall use best efforts to negotiate mutually acceptable revisions to this Agreement to address the modification or condition. Upon the occurrence of the Effective Date, this Agreement shall remain in effect until terminated by either Party upon thirty (30) days advance written notice to the other Party or upon written consent of both Parties. The CAISO shall file a notice of termination with FERC as soon as practicable but no later than thirty (30) days after its issuance or receipt of such advance written notice of termination or the date of the Parties' written consent. Termination will be effective upon acceptance of the notice of termination by FERC; provided, however, BANC will cease both to provide and to take any service under this Agreement as of: (i) thirty (30) days after issuance or receipt of an advance written notice of termination, or (ii) the date of the Parties' written consent, regardless of any action or inaction by FERC with respect to any application by the CAISO to terminate this Agreement.

3. Responsibilities of the Parties

3.1 The Parties agree to cooperate to mitigate any operating emergencies by adhering to: (1) the mandatory NERC Reliability Standards and WECC Regional Reliability Standards which relate to emergency operations, as may be amended from time to time, and (2) the directives of the applicable WECC Reliability Coordinator ("Reliability Coordinator").

3.2 Each Party further agrees that it shall develop, maintain, implement, and annually review and update its emergency plans to mitigate operating emergencies and shall share and coordinate such plans with the other Party as required by EOP-011.

3.3 To the extent possible, and in accordance with NERC mandatory Reliability Standards, each Party ("Delivering Party") shall assist the other Party ("Receiving Party") in an operating emergency by delivering emergency assistance to the requesting Receiving Party, including emergency energy transfers from such Delivering Party's Balancing Authority Area or from other remote Balancing Authorities over available transmission capacity, in accordance with Schedule B to this Agreement. Arrangements for deliveries of emergency energy transfers shall be through normal operating channels in accordance with CAISO operating procedures. Such emergency assistance shall be provided at the sole discretion of the entity supplying it and shall be recallable without advance notice as required to meet reliability requirements.

4. Coordination and Communication

4.1 In the event of an operating emergency that affects or may affect the reliable operation of interconnected transmission facilities, each Party shall coordinate its actions with the other Party, as such Party deems necessary or as directed by the appropriate Reliability Coordinator(s), to preserve or restore the interconnected transmission system to stable operations and to preserve or restore reliable, safe, and

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

efficient service as quickly as practicable. The Parties shall, without delay, individually notify the appropriate Reliability Coordinator(s) as to the nature and extent of the operating emergency.

4.2 Each Party operates and maintains, or provides for operation and maintenance of a 24-hour, 7-day control center with real-time scheduling and control functions. The appropriate control center staff shall be responsible for operational communications and shall have sufficient authority to commit and bind that Party on decisions relating to emergency operations. The Parties agree to exchange operational contact information for insuring reliable communication in a format to be agreed to by the Parties and completed as of the effective date of this Agreement.

5. Interconnection Points

5.1 The Parties are adjacent Balancing Authorities, and are interconnected at the points specified in Schedule A to this Agreement. In the event that new interconnection points are added, or existing points are modified or eliminated, Schedule A will be amended as necessary, to reflect any such changes that are mutually agreed upon by both Parties in a written agreement.

5.2 Schedule A is included for the sole purpose of identifying those interconnection points that result in the Parties being adjacent Balancing Authorities. This Agreement is not intended to act as an interconnection agreement between the Parties.

6. Miscellaneous Provisions

6.1 Exchange of Information and Confidentiality: When a Party ("Providing Party") provides information to the other Party ("Receiving Party") under this Agreement and marks such information as privileged or confidential commercial or financial information, critical energy infrastructure information, or trade secret information, the Receiving Party shall treat such information as confidential and protected from disclosure to the extent permitted by law. The Receiving Party shall promptly notify the Providing Party in writing of any request to release such information. The Parties agree to use such information only for purposes of performing each Party's obligations under this Agreement. The provisions of this Section 6.1 shall survive the termination of this Agreement.

6.2 Amendment: The Parties may amend or modify this Agreement only by written agreement. In the event the mandatory NERC Reliability Standards including EOP-011 are revised or replaced, the Parties shall meet within ninety (90) days of such change to discuss and determine whether such change will affect the terms and conditions of this Agreement and whether a modification or replacement of the Agreement is needed. An amendment that is subject to FERC approval shall not take effect until FERC has accepted such amendment for filing and has made it effective without any material modification or condition that is unacceptable to either Party in that Party's sole discretion. If any material modification or condition is ordered by FERC that is

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

unacceptable to a Party, such Party shall communicate its lack of consent to such modification or condition to the other Party within ten (10) business days after the date on which FERC issues its order, and the Parties shall use best efforts to negotiate mutually acceptable revisions to this Agreement to address the modification or condition. Revisions to Schedules other than with regard to the contact information in Schedule C shall be processed as an amendment to this Agreement.

6.3 Assignment and Successors: Neither this Agreement nor any rights or responsibilities under this Agreement may be assigned by either Party to a third party without the written consent of the other Party, and such consent will not be unreasonably delayed, conditioned, or withheld. Subject to the preceding sentence, this Agreement is binding upon and will inure to the benefit of the Parties and their successors in interest.

6.4 Notices: Any notice, demand, or request which may be given to or made upon either Party regarding this Agreement shall be made in writing and shall be deemed properly served, given, or made: (a) upon delivery if delivered in person, (b) five (5) days after deposit in the mail if sent by first class United States mail, postage prepaid, (c) upon receipt of confirmation by return facsimile if sent by facsimile, or (d) upon delivery if delivered by prepaid commercial courier service. A Party must update the information in Schedule C of this Agreement relating to its address as that information changes. Such updates to Schedule C shall not constitute an amendment to this Agreement.

6.5 Governing Law and Forum: This Agreement shall be deemed to be a contract made under and for all purposes shall be governed by and construed in accordance with the laws of the State of California, except that if a dispute concerns the operation of transmission lines or facilities, the law of the state where the transmission lines or facilities are located will control. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement shall be brought in any of the following forums, as appropriate: a court of the State of California or any federal court of the United States of America located in the State of California or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission. No provision of this Agreement shall be deemed to waive the right of any Party to protest, or challenge in any manner, whether this Agreement, or any action or proceeding arising under or relating to this Agreement, is subject to the jurisdiction of the Federal Energy Regulatory Commission.

6.6 No Warranties or Representations; Disclaimer: All information, including confidential information, provided by the Providing Party under this Agreement carries no warranty or representation of any kind, either express or implied. The Receiving Party receives the information "as is" and with all faults, errors, defects, inaccuracies, and omissions. The Providing Party makes no representations or warranties whatsoever with respect to the availability, timeliness, accuracy, reliability, or suitability of any information. The Receiving Party disclaims and waives all rights and remedies that it may otherwise have with respect to all warranties and liabilities of the Providing

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

Party, expressed or implied, arising by law or otherwise, with respect to any faults, errors, defects, inaccuracies or omissions in, or availability, timeliness, reliability, or suitability of the information. Each Party assumes any and all risk and responsibility for selection and use of, and reliance on, any information provided under this Agreement.

6.7 Liability: The Parties' duties and standard of care with respect to each other, and the benefits and rights conferred on each other, shall be no greater than as explicitly stated herein. Neither Party, its directors, officers, employees, nor agents, shall be liable to the other Party for any loss, damage, claim, cost, charge, or expense, whether direct, indirect, or consequential, arising from the Party's performance or nonperformance under this Agreement, except for a Party's gross negligence or willful misconduct subject to applicable law. Except as otherwise expressly provided herein, nothing in this Agreement shall be construed or deemed to confer any right or benefit on, or to create any duty to, or standard of care with reference to any third party, or any liability or obligation, contractual or otherwise, on the part of either Party.

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

6.9 Authority: Each individual signing this Agreement certifies that the Party represented has duly authorized such individual to sign, bind, and obligate such Party.

Accepted and agreed to by:

California Independent System Operator Corporation

Balancing Authority of Northern California

By _____

By _____

Name:

Name:

Title:

Title:

Date:

Date:

Schedule A

**ADJACENT BALANCING AUTHORITY INTERCONNECTION POINTS
[Sections 5.1, 5.2 and 6.2]**

The Interconnection between the Balancing Authority of Northern California (“BANC”) and the California Independent System Operator Corporation (“CAISO”) is made up of ten (10) Interconnection points. These Interconnection points run normally closed, unless specified otherwise.

Standiford 115 kV Interconnection

This interconnection, comprised of four 115 kV transmission lines, connects both City and County of San Francisco (“CCSF”) and Pacific Gas and Electric Company (“PG&E”) facilities with the Modesto Irrigation District (“MID”) Standiford 115 kV substation.

- Warnerville - Standiford 115 kV #7 and Warnerville - Standiford 115 kV #8 lines.
- Moccasin-Newark 115 kV Line #3 and Moccasin-Newark 115 kV Line #4. Standiford taps from Moccasin-Newark 115 kV Line #3 and Moccasin-Newark 115 kV Line #4 (Normally open).

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Standiford 115 kV substation: Disconnect Switches (“DISCs”) 907C, 903C, 904C, and 908C, and bypass disconnect switches 917, 913, 914, and 918.

Note: Circuit Breakers (“CB”) 903 and 904 are and will be open breakers, and if this configuration is proposed to be changed, the Parties will confer and agree on any change to the Interconnection point in advance of the change in this configuration.

Transmission Owners:

- CCSF/ HHWP – (CAISO Balancing Authority (“CAISO BA”))
 - Moccasin Power House: Moccasin Switchyard (CB: 510 and 520)
 - Warnerville Substation: Warnerville Substation (CB: 620 and 640)
- US Government (owner), City of Riverbank (operator) – (CAISO BA)
 - Riverbank Substation
 - CB 52-3, 52-8
 - Switches: 1619, 1612, 1609, and 1611
- MID – (BANC BA)
 - Standiford Substation CB 903, 904, 907, 908.
 - Switches 945, 955, 913, 914, 918, 913C, 914C, 917C, and 918C.

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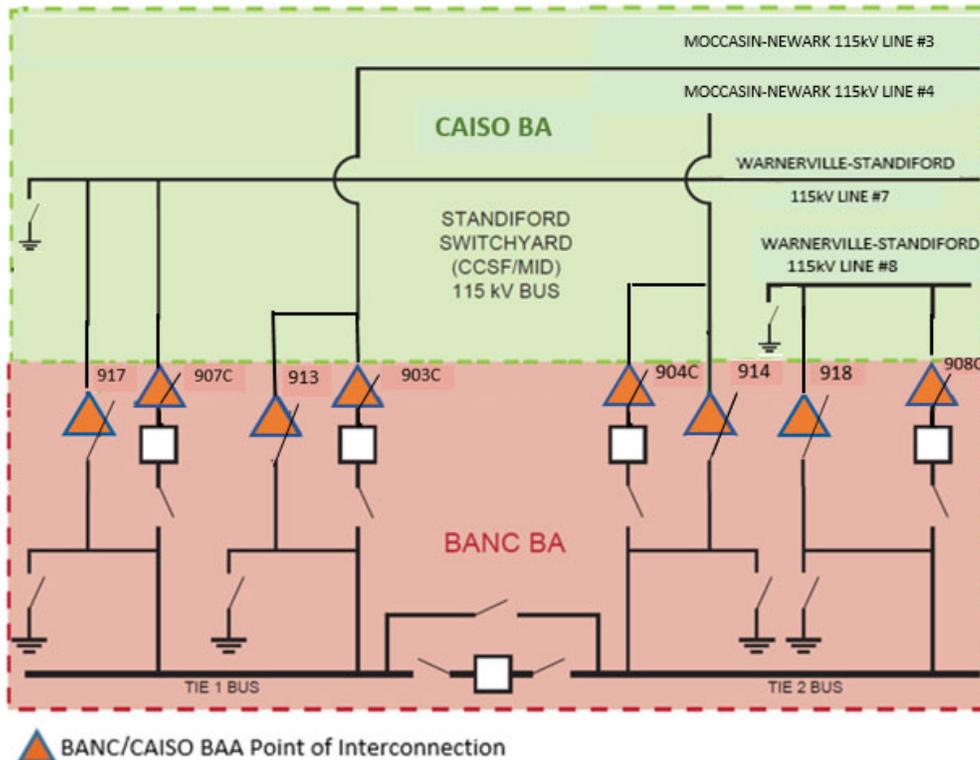
- PG&E – (CAISO BA)
 - All Newark Substation Equipment
 - CB 100 and CB 190
 - Switches 101, 103, 105, 107, 191, 193, 195, and 197

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority for the disconnect switches 907C, 903C, 904C, and 908C, and bypass disconnect switches 917, 913, 914, and 918 at the Standiford substation and for the Moccasin-Newark #3 and #4 115 kV lines and for the Warnerville-Standiford #7 and #8 115kV lines. However, the line terminal CBs at Standiford are physically controlled and operated by MID personnel.

CAISO is the Balancing Authority for the switches and breakers at the Newark Substation at the end of the Moccasin-Newark 115 kV lines.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining bays/breakers/switches at the Standiford substation.



COTP Terminus 500 kV Interconnection

This interconnection is comprised of two 500 kV transmission lines that connect PG&E facilities to Western Area Power Administration – Sierra Nevada Region’s (“WAPA”) Tracy 500 kV switchyard.

- Tesla – Tracy 500 kV line
- Tracy – Los Banos 500 kV line

Note: This configuration is sometimes referred to as the “Tesla Bypass” portion of the California-Oregon Transmission Project (“COTP”) and was designed for reliability purposes. By contract, no party is to be assessed charges or losses for use of the Tesla-Bypass facilities.

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Tracy 500 kV switchyard: DISCs 2191, 2097, 1191, and 1097

Transmission Owners:

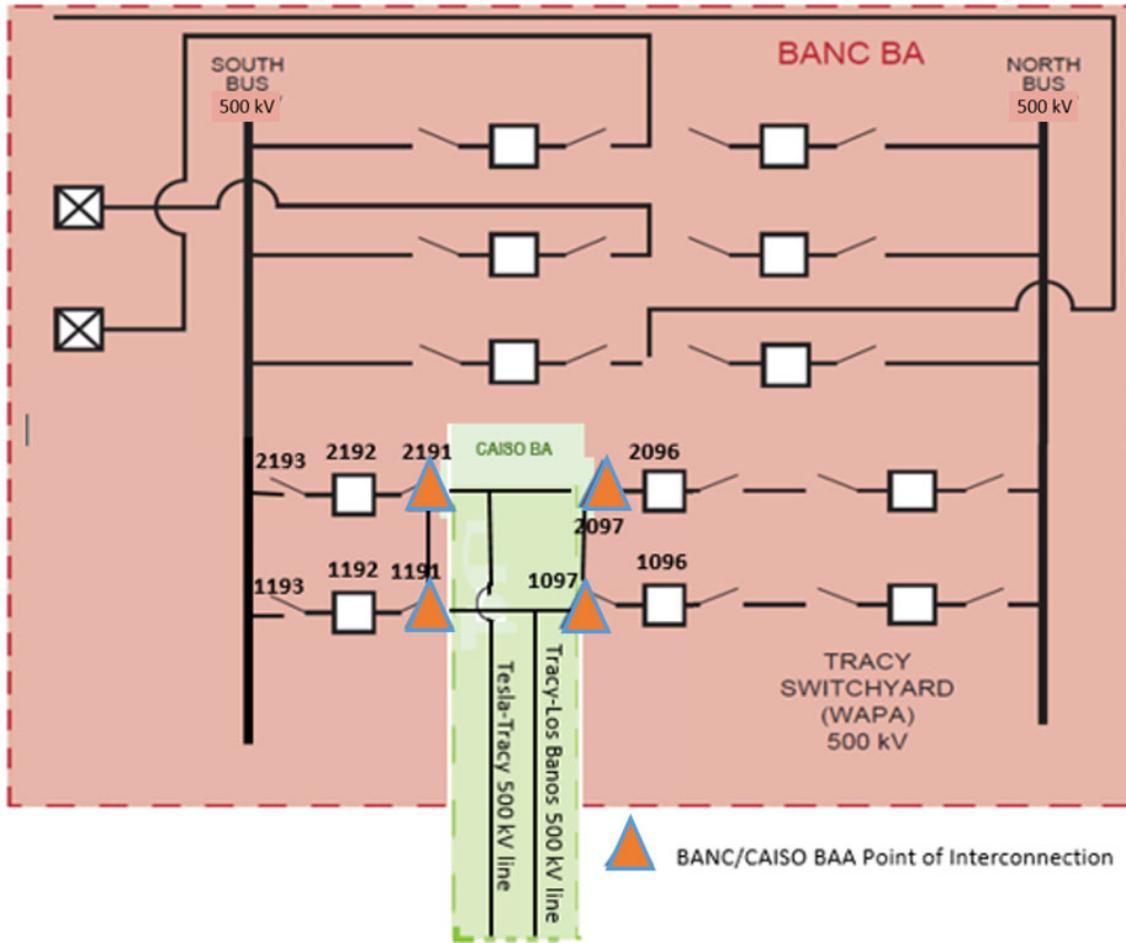
- PG&E
 - All Los Banos 500 kV Substation Equipment
 - All Tesla 500 kV Substation Equipment
 - Tesla – Tracy 500 kV line from Tesla to Pole 007/037 is owned by PG&E, which is approximately 1.13 miles.
 - Tracy – Los Banos 500 kV line from Los Banos to Pole 007/037 is owned PG&E, which is approximately 56.25 miles.
- WAPA – (BANC BA)
 - All Tracy 500 kV Substation EquipmentTesla – Tracy 500 kV line from Tracy (near Tesla junction) to Pole 007/037, approximately 7.4 miles.
 - Tracy – Los Banos 500 kV line from Tracy (near Tesla junction) to Pole 007/037, approximately 7.4 miles.

Roles and Responsibilities:

As depicted on the one-line diagram below, the Tracy – Los Banos and Tesla – Tracy 500 kV lines are in the CAISO BA. However, the line terminal CBs at Tracy are physically controlled and operated by WAPA personnel.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining Bays/Breakers/Switches at the Tracy switchyard.

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Round Mountain 230 kV Interconnection

This interconnection is comprised of one 230 kV transmission line that connects WAPA's Cottonwood 230kV switchyard (bus Section G) to PG&E's Round Mountain 230 kV switchyard.

- Round Mountain – Cottonwood No.1 230 kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Round Mountain 230 kV switchyard: line side DISC 243 and bypass DISC 245

Transmission Owners:

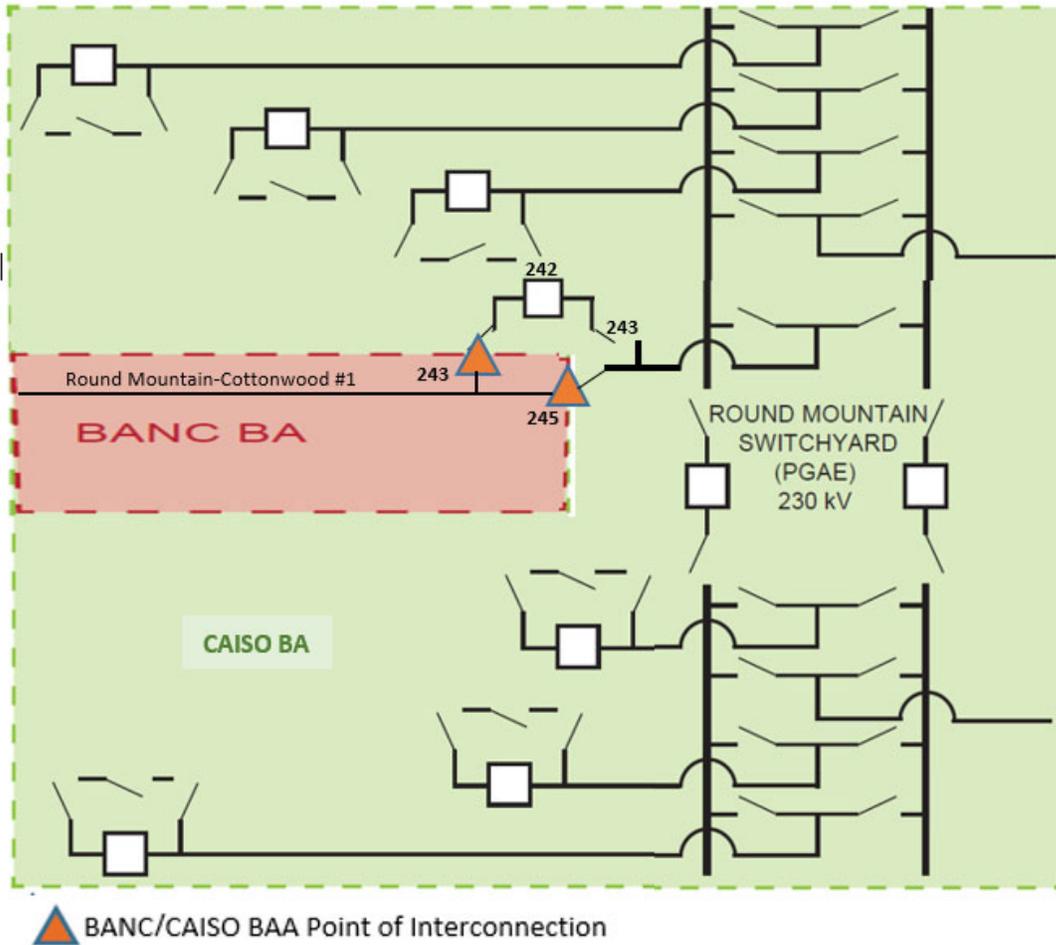
- PG&E
 - Round Mountain Substation:
 - CB 242 and DISCs 243, 243 and 245 (terminal end of Round Mountain – Cottonwood No. 1 230 kV line)
 - Co-owned 500/230 kV transformers with WAPA
 - Cottonwood Substation
 - Including Cottonwood Bus Section G up to Selector Disconnects 377 and 379.
- WAPA – (BANC BA)
 - Cottonwood Substation:
 - Round Mountain – Cottonwood No.1 230 kV line
 - Cottonwood 230 kV bus Section G, from and including, CB 372 and DISCs 371 (shown as second 373), 373, and 375.
 - Round Mountain
 - Round Mountain – Cottonwood No.1 230 kV line
 - Revenue metering equipment at Round Mountain 230 kV
 - Co-owned 500/230 kV transformers with PG&E

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from DISCs 243 and 245 at the Round Mountain 230 kV switchyard. PG&E operates 230-kV CB 242 at Round Mountain.

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Round Mountain – Cottonwood No.1 230 kV line (up to DISCs 243 and 245 at Round Mountain) and the remaining bays/breakers/switches on the 'G' bus section of the Cottonwood switchyard. That includes Cottonwood CB 372 and the associated bypass and isolation disconnects 373 and 375.



Cottonwood 230 kV Interconnection

This interconnection is comprised at the two bus-ties that connects PG&E's "F" bus section to WAPA's "G" bus section of the Cottonwood 230 kV switchyard.

- Cottonwood 230 kV substation F-G bus-tie

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Cottonwood 230 kV switchyard: DISCs 483 & 473
- Under the Transmission Exchange Agreement ("TEA"), where the 230-kV busses of the G Section meet the 230-kV busses of the F Section at circuit breaker nos. 472 and 482

Transmission Owners:

- PG&E
 - PG&E owns the Cottonwood bus structures, dead-end structures, bus conductors and jumpers on Section G. All selector switches on Bus Section G between Bus 1 and 2, except 377 and 379.
 - Cottonwood 230 kV:
 - Bus Section 'E' and 'F' and associated equipment.
 - Lines and all associated substation equipment on bus sections 'E' and 'F'
- WAPA
 - WAPA takes ownership of Cottonwood bus Section G transmission lines at the conductor side of each dead-end structure for each WAPA-owned transmission line.
 - Seven 230-kV line circuit breakers (All Section G breakers).
 - Five 230-kV disconnect switches, 373 (also known as 371), 373, 375, 377 and 379, associated with the Round Mountain-Cottonwood #1 230 kV Line.
 - One 230-kV ground switch (Round Mountain line)
 - Supervisory Control and Data Acquisition ("SCADA") system and communications equipment for Section G.
 - Two 230-kV meters (bus 1 and bus 2) and metering transformers.
 - Cottonwood 230 kV:
 - Lines and associated transmission line equipment on the bus Section G.

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority west of the DISC 483 and 473 at the Cottonwood 230 kV switchyard.

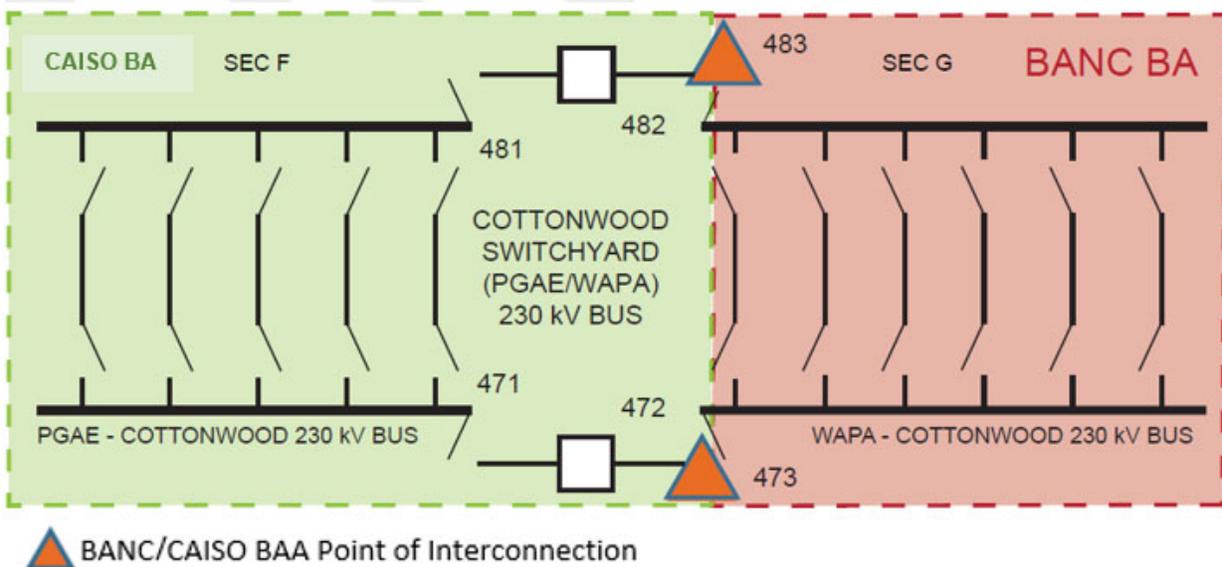
As depicted on the one-line diagram below, BANC is the Balancing Authority from DISC 483 and 473, including the meters, and the remaining Cottonwood “G” section 230 kV switchyard.

PG&E maintains the bus tie CBs 482 and 472 (and associated equipment) and performs all maintenance within the Cottonwood switchyard, including maintenance on Bus Section ‘G’ up to and including the selector switches including DISC 377 and 379.

PG&E operates all switches and line breakers including sectionalizing breakers 472 and 482 up to DISC 473 and 483 on Cottonwood Bus Section ‘E’ and ‘F’.

WAPA maintains WAPA-owned SCADA and WAPA-owned 230-kV Section G metering and metering transformers.

WAPA operates all switches and line breakers beyond DISC 473 and 483 for WAPA lines terminating on Cottonwood Bus Section ‘G’.



Tesla – Tracy 230 kV Interconnection

This interconnection is comprised of two 230 kV transmission lines that connect WAPA's Tracy 230 kV switchyard to PG&E's Tesla 230 kV switchyard.

- Tesla – Tracy 230 kV No.1 line
- Tesla – Tracy 230 kV No.2 line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Tracy 230 kV switchyard: DISCs 1881, 1885, 581, and 585

Transmission Owners:

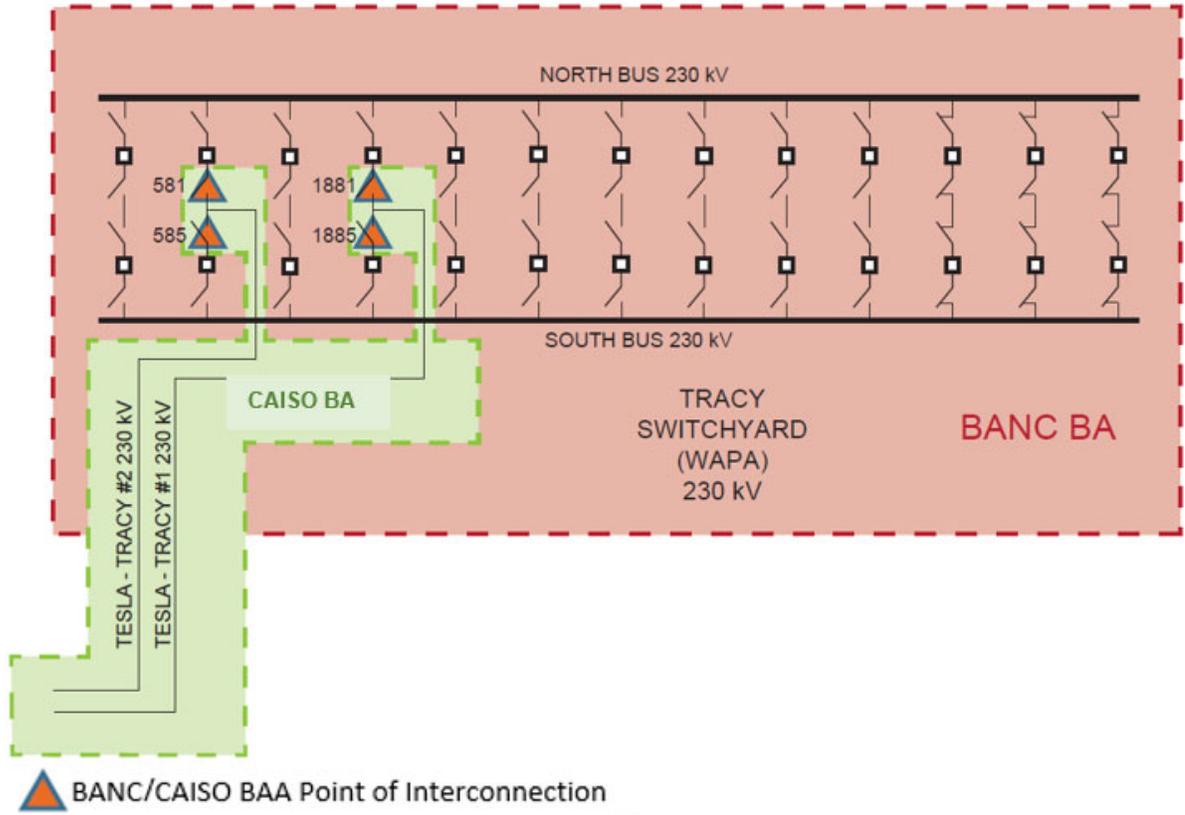
- PG&E
 - PG&E owns the lines from Tesla 230 kV switchyard and owns the terminal breakers and equipment at Tesla 230 kV switchyard.
 - Tesla CB 312 and 322.
 - Switches 311, 313, 315, 317, 319, 321, 323, 325, 327, and 329 for the line terminals.
 - Tesla 230 kV switchyard
 - Tesla –Tracy No.1 and No.2 230 kV lines from Tesla to Pole 005/029
- WAPA
 - WAPA takes ownership of the lines at pole 005/029 outside the Tracy 230 kV switchyard. WAPA owns the terminal breakers and associated DISCs 1881, 1885, 581, and 585 at Tracy 230 kV switchyard.

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from the Tesla – Tracy No.1 and No.2 230 kV lines up to DISCs 1881, 1885, 581, and 585 at Tracy 230 kV switchyard. However, these switches and associated CBs (1882 & 1886 and 582 & 586) which are physically controlled and operated by WAPA personnel.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Tracy 230 kV switchyard.

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Rancho Seco 230 kV Interconnection

This interconnection is comprised of two 230 kV transmission lines that connects Sacramento Municipal Utility District's ("SMUD") Rancho Seco to PG&E's Bellota 230 kV substation.

- Rancho Seco – Bellota 230 kV No.1 line
- Rancho Seco – Bellota 230 kV No.2 line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Rancho Seco 230 kV switchyard: Line DISCs 357 and 317.

Transmission Owners:

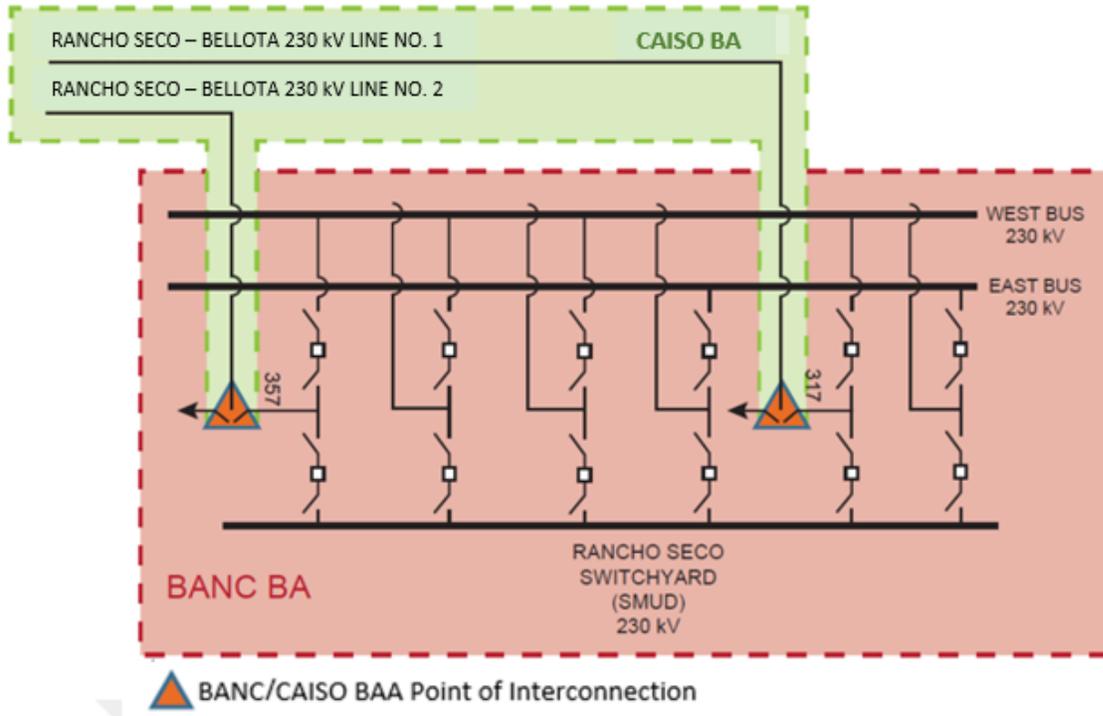
- SMUD
 - Rancho Seco 230 kV switchyard up to the connections to the Rancho Seco-Bellota termination tower at the Rancho Seco switchyard.
 - Rancho Seco CB 310 and CB 350
 - Switches 213, 311, 313, and 317
 - Switches 253, 351, 353, and 357
- PG&E
 - Bellota 230 kV substation and the two lines that terminate at the termination tower at the Rancho Seco switchyard.
 - Bellota CBs 230 and 240
 - Bellota Switches 233, 235, 237, 239, 243, 245 247, and 249

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from the Rancho Seco – Bellota No.1 and No.2 230 kV lines up to DISCs 357 and 317 at Rancho Seco 230 kV switchyard, which are operated and controlled by Sacramento Municipal Utility District ("SMUD").

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Rancho Seco 230 kV switchyard.

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Lake 230 kV Interconnection

This interconnection is comprised of a single very short (<0.25 mile) 230 kV transmission line connecting SMUD's Lake Switchyard to PG&E's Gold Hill Substation.

- Gold Hill-Lake 230 kV line

Note: This interconnection point utilizes a 55-ohm series reactor to provide additional electrical distance that mitigates for excessive through flows that would occur otherwise. The physical point of interconnection is at PG&E's 230 kV line termination structure at Gold Hill Switchyard.

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Gold Hill 230 kV substation: DISCs 233 and 235

Transmission Owners:

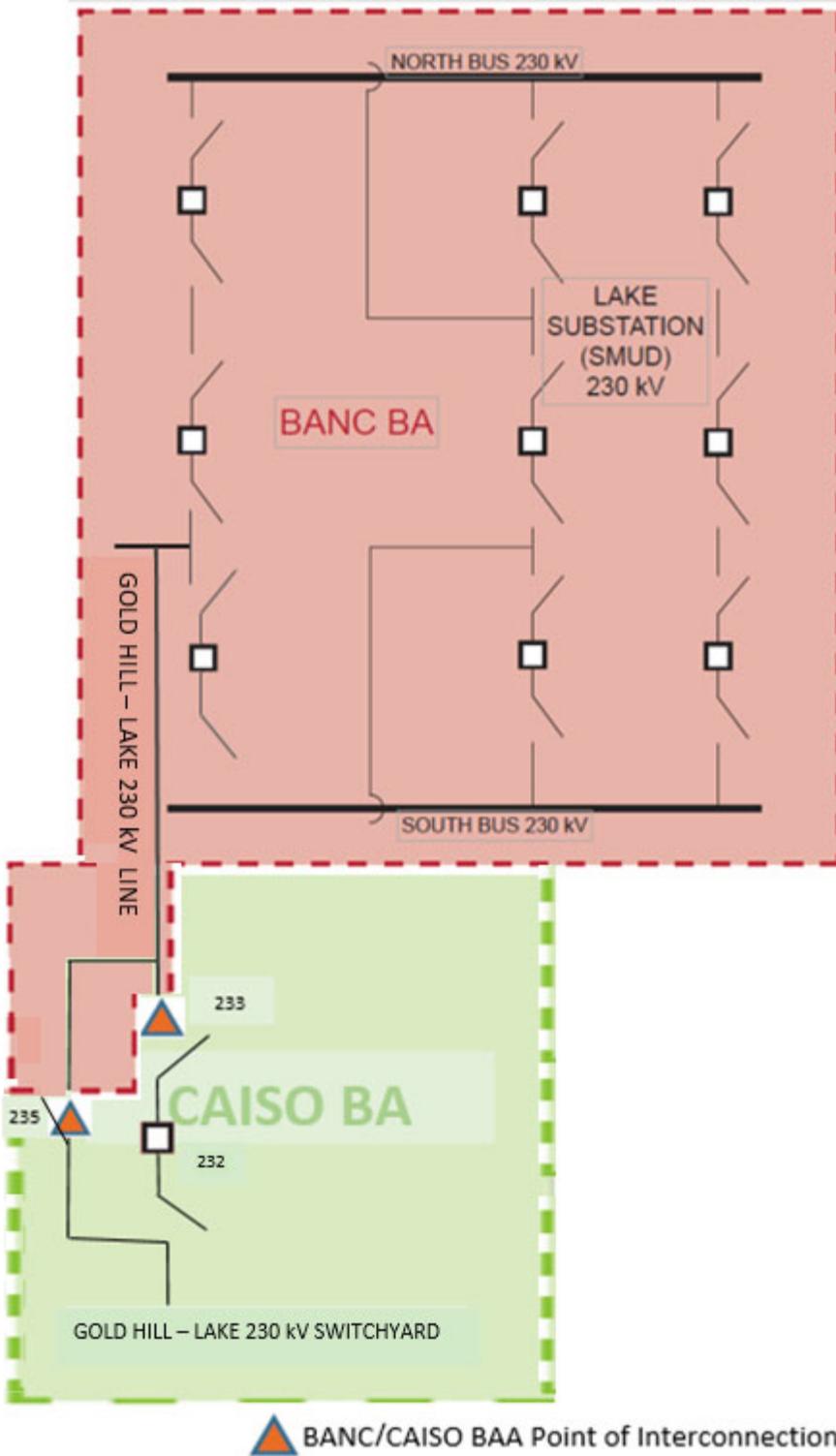
- SMUD
 - Lake 230 kV switchyard, 55-ohm series reactor and Gold Hill-Lake 230-kV line up to the SMUD 230-kV termination structure at PG&E's Gold Hill switchyard
 - Lake Switchyard CB 5236, CB 5230. Switches 5195, 5233, 5235, 5237, 5229, and 5231.
- PG&E
 - Gold Hill 230 kV Substation up to the SMUD termination structure for the SMUD Gold Hill-Lake 230 kV line
 - Gold Hill CB 232
 - Gold Hill Switches 231, 233, 235, 237, and 239.

Roles and Responsibilities:

As depicted on the one-line diagram below, CAISO is the Balancing Authority for the Gold Hill 230 kV substation.

As depicted on the one-line diagram below, BANC is the Balancing Authority from the Gold Hill – Lake 230 kV line up to DISC 233 and DISC 235, at the Gold Hill 230 kV substation, which are operated and controlled by PG&E.

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Westley 230 kV Interconnection

This interconnection is comprised of one 230 kV transmission line that connects PG&E's Tesla 230 kV Substation with the jointly owned MID/Turlock Irrigation District ("TID") Westley 230 kV switchyard.

- Tesla-Westley 230kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below, the Interconnection point is comprised of a single 230 kV line connecting Westley switchyard to Tesla Substation. MID is interconnected to the PG&E system through breakers 2355 and 2356 at the MID/TID Westley switchyard. The physical point of interconnection is the Westley Tap located approximately one-half mile west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100.

Transmission Owners:

- MID/TID
 - Westley 230 kV switchyard
 - Tesla-Westley 230 kV Line from Westley switchyard up to PG&E's Tower 022/100 one half mile west of the Westley switchyard.
- PG&E
 - PG&E – ownership is from Tesla 230 kV switchyard up to the Westley Tap located approximately 0.64 miles west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100.
 - Tesla 230 kV substation
 - Tesla CB 262.
 - Tesla Switches 263, 265, 267, and 269.
 - Tesla-Westley 230 kV line from Tesla to Tower 022/100

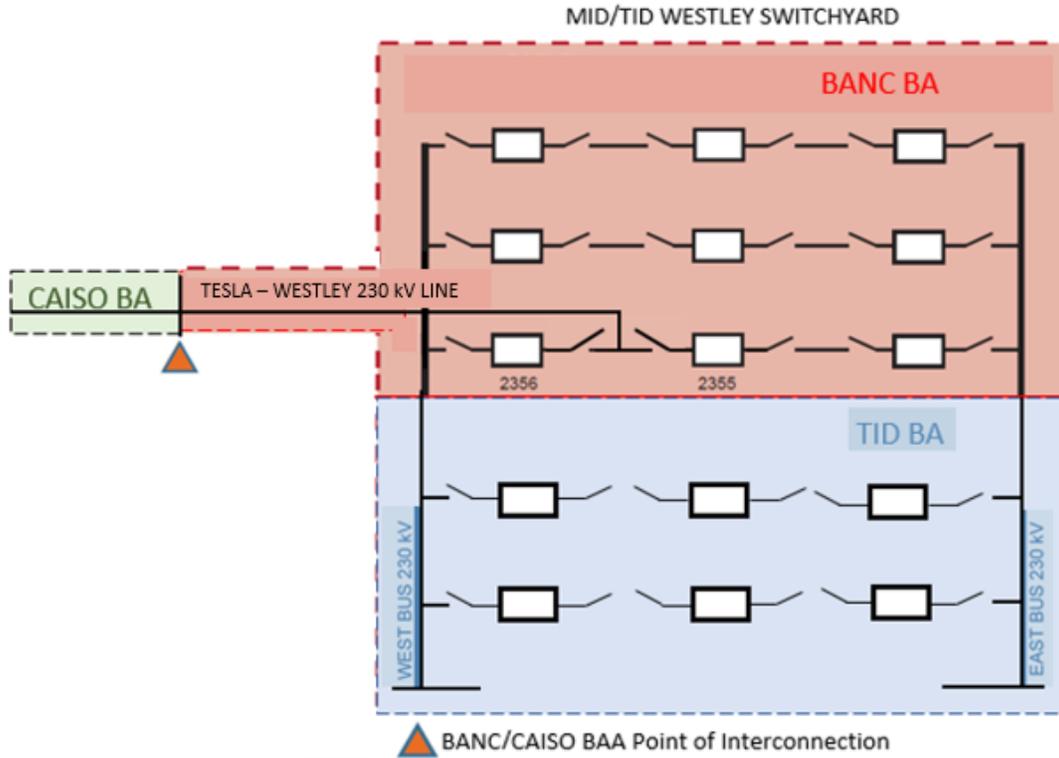
Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from PG&E's Tesla 230 kV substation and up to the Westley Tap located approximately 0.64 miles west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Tesla- Westley 230 kV line from the Westley Tap, located approximately 0.64 miles west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100, up to circuit breakers 2355 and 2356 at MID/TID's Westley 230 kV switchyard

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and the remaining bays/breakers/switches within BANC's portion of the MID/TID Westley 230 kV switchyard.



LLNL 115 kV Interconnection

This interconnection is comprised of one transmission line that connects PG&E's Tesla 115 kV Substation to WAPA's Lawrence Livermore National Laboratory ("LLNL") U-424 115 kV switchyard.

- Tesla – Lawrence Lab 115 kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Lawrence Livermore Sub (Radiation) 115 kV switchyard: DISC 455

Transmission Owners:

- WAPA/U.S. Department of Energy ("DOE")
 - Lawrence Livermore Sub (Radiation) 115 kV switchyard
 - Lawrence Livermore Sub (Radiation) Switchyard CB 752, CB 852, and Switches 455, 751, 753, 851, and 853.
- PG&E
 - PG&E ownership is from Tesla 115 kV substation
 - Tesla CB 142, Switch 143, 145, 147, and 149.
 - The Tesla-Lawrence Lab 115kV line up to DISC 455 at WAPA Lawrence Livermore Sub (Radiation) 115 kV switchyard.

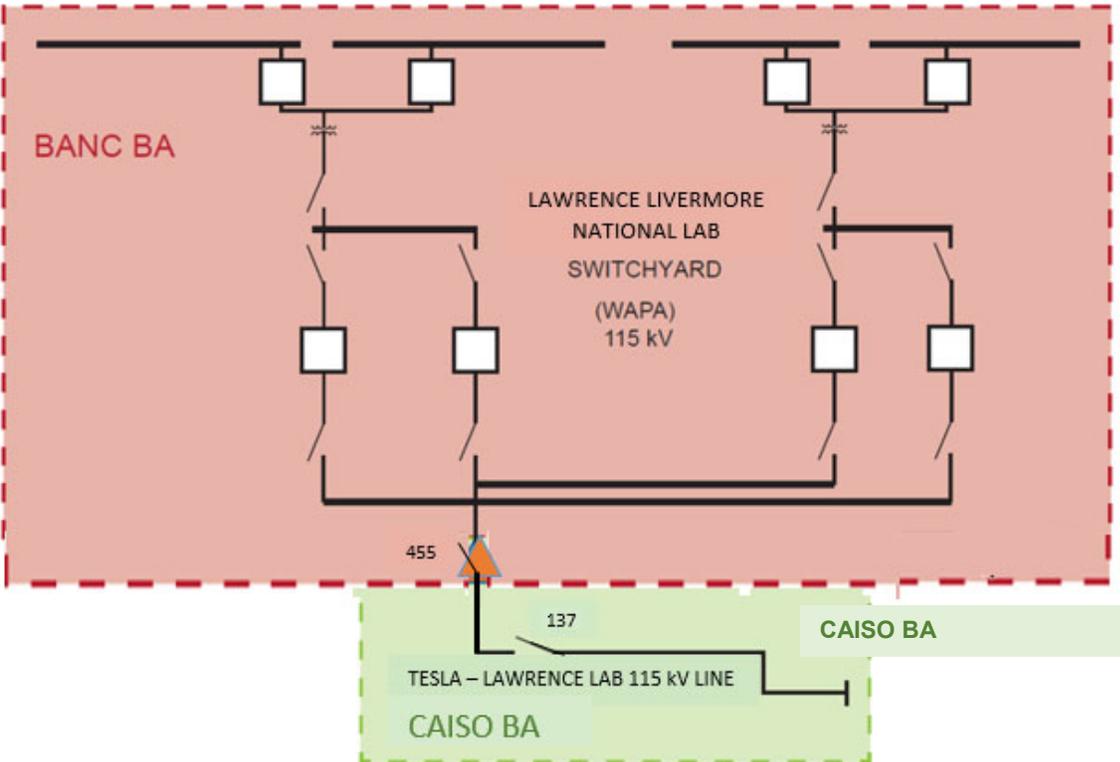
Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from PG&E's Tesla 115 kV substation and the Tesla – Lawrence Lab 115 kV line up to DISC 455 at the Lawrence Livermore Sub (Radiation) at the termination structure for the Tesla-Lawrence Lab 115 kV switchyard.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining bays/breakers/switches at WAPA's Lawrence Livermore Sub (Radiation) 115 kV switchyard.

DOE LLNL is responsible for maintaining the 115kV switchyard equipment at Lawrence Livermore Sub (Radiation). WAPA has operational control of Lawrence Livermore Sub (Radiation) CBs 652, 752, 852, and 952.

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▲ BANC/CAISO BAA Point of Interconnection

Herdlyn 69 kV Interconnection

This interconnection is comprised of one transmission line that connects PG&E's Herdlyn 60 kV substation to WAPA's Tracy 69 kV switchyard.

Herdlyn

- Herdlyn-Tracy 69 kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Tracy 69 kV switchyard: DISCs 2451 and 2455

Transmission Owners:

- WAPA
 - Tracy 69 kV switchyard, DISCs 2451 and 2455, CB 2452 and associated metering equipment
- PG&E
 - PG&E owns the Herdlyn-Tracy 69-kV line from Herdlyn 60 kV substation up to the metering equipment on the line side prior to disconnect switches 2451 and 2455 at WAPAs Tracy 69 kV switchyard.
 - Herdlyn 60 kV Substation
 - Herdlyn Bank # 2 and Switch 85

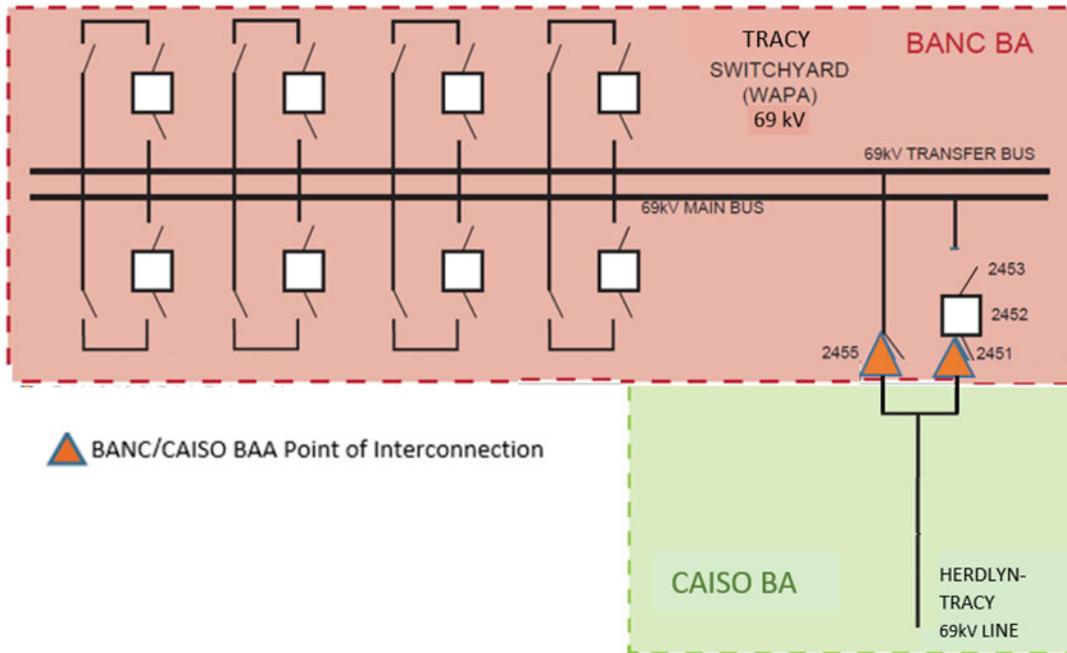
Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from PG&E's Herdlyn 60 kV substation and up to disconnect switch 2451 and 2455 at the Tracy 69 kV switchyard.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining bays/breakers/switches at WAPAs Tracy 69 kV switchyard.

The Herdlyn tie is operated radial to WAPA's Tracy switchyard. The tie is normally closed at the Tracy 69-kV switchyard with open operating points within the PG&E system (normally open at PG&E's Vasco SW 39, and Balfour SW 37).

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REVENUE METERING AND TELEMETRY AT INTERCONNECTION POINTS

BANC and CAISO metering shall meet any metering standards mutually agreed upon by the Parties for the purpose of operating their adjacent Balancing Authority Areas. BANC and the CAISO shall be entitled to witness testing of the involved interconnection metering. Any change or modification to such metering equipment by BANC, the CAISO or any other entity shall be coordinated between the Parties. BANC shall allow daily, once a day, read-only access by the CAISO to direct poll revenue data from the interconnection revenue metering in five (5) minute intervals at the metering points identified in this Schedule A. The CAISO shall allow daily, once a day, read-only access by the BANC to direct poll revenue data from the interconnection revenue metering in five (5) minute intervals at the metering points identified in this Schedule A.

BANC and the CAISO shall maintain arrangements that ensure that both Parties shall have access to the same real-time data from the points identified in this Schedule A between their Balancing Authority Area interconnections for the purpose of complying with North American Electric Reliability Corporation (“NERC”) reliability standards. The Parties understand that each Party wants to obtain MW and MVAR data from interconnection metering, which may include Remote Terminal Units (“RTUs”), at the points identified in this Schedule A between their Balancing Authority Area

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

interconnections. The Parties agree to allow each other to directly poll real-time data from metering at the interconnection switchyards under the other Party's operational control as a Balancing Authority. In the event that a second communication port of the RTU is not available for direct polling by a Party, the Party shall have the option to provide a RTU to the switchyard owner for the purpose of establishing a communication port available for direct polling by such Party.

This Schedule A shall remain in effect until it is superseded by mutual written agreement by the Parties or it is terminated, either by written notice from an individual party or by written consent by both Parties, in accordance with Section 2.1 of the Agreement.

Schedule B

**EMERGENCY ENERGY
[Sections 3.3 and 6.2]**

In accordance with EOP-011 the Parties will, to the extent possible, assist each other in an emergency by scheduling energy. Such emergency assistance will be available at the sole discretion of the Party supplying it and will be recallable without advance notice as required to meet reliability requirements. The Parties will agree upon and log MW values, start, and end times, ramp rates and times, and integrated values for any emergency assistance provided.

The emergency assistance will be provided by a Party will be for system reliability. Such emergency assistance may be estimated prior to delivery and finalized in the settlement process.

The price paid for CAISO emergency assistance will be at the CAISO market price for the energy sold, plus all applicable charges, as specified in the CAISO Tariff provisions for emergency assistance. Such price may be estimated prior to delivery and finalized in the settlement process. Payment to the CAISO for emergency assistance provided by CAISO will be made by the Scheduling Coordinator representing BANC, in accordance with the settlement process, billing cycle, and payment timeline set forth in the CAISO Tariff.

The price paid for BANC emergency assistance will be at the price specified by BANC. In the event BANC does not specify the price for energy at the time of the request for emergency assistance and no other settlement price is established prior to the delivery of the emergency assistance, the default settlement price shall be the CAISO market price, plus all other applicable charges, as specified or as otherwise established in the CAISO Tariff for emergency assistance. If the default settlement price does not compensate BANC for the value of the emergency assistance delivered to the CAISO, BANC shall have the opportunity to justify a higher settlement price in accordance with the CAISO Tariff provisions for emergency assistance. Payment to BANC for emergency assistance provided by BANC will be made to the Scheduling Coordinator representing BANC, in accordance with the settlement process, billing cycle, and payment timeline set forth in the CAISO Tariff.

Nothing in this Agreement shall obligate BANC to be bound by CAISO Tariff provisions unless expressly provided for.

This Schedule B shall remain in effect until it is superseded by mutual written agreement by the Parties or it is terminated, either by written notice from an individual party or by written consent by both Parties, in accordance with Section 2.1 of the Agreement.

Schedule C

**CONTACTS FOR NOTICES
[Sections 6.2 and 6.4]**

CAISO:

Name of Primary Representative: Regulatory Contracts
Title: N/A
Address: 250 Outcropping Way
City/State/Zip Code: Folsom, CA 95630
Email Address: RegulatoryContracts@caiso.com
Phone: (916) 608-7027
Fax No.: (916) 608-7292

Name of Alternate Representative: Christopher J. Sibley
Title: Manager, Regulatory Contracts
Address: 250 Outcropping Way
City/State/Zip Code: Folsom, CA 95630
Email Address: csibley@caiso.com
Phone: (916) 608-7030
Fax No.: (916) 608-7292

BANC

Name of Primary Representative: James R. Shetler
Title: General Manager
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 No.:

Name of Alternate Representative: Tony Braun
Title: General Counsel
Address: 555 Capitol Mall, Suite 570
City/State/Zip Code: Sacramento, CA 95814
Email Address: smith@braunlegal.com
Phone: (916) 326-4449
Fax No.: (916) 330-4337

This Attachment shall remain in effect until superseded by written notice from either of the Parties.

Attachment C – Marked Tariff

Amendment to Adjacent Balancing Authority Operating Agreement

between

Balancing Authority Area of Northern California

and

California Independent System Operator Corporation

July 28, 2021

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

Executed by

BALANCING AUTHORITY OF NORTHERN CALIFORNIA

and

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

This Adjacent Balancing Authority Operating Agreement, ("Agreement") dated as of _____, 2011, is between the BALANCING AUTHORITY OF NORTHERN CALIFORNIA ("BANC"), a joint powers authority established pursuant to the laws of the State of California and the CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION ("CAISO"), a California nonprofit public benefit corporation having a principal executive office located at 250 Outcropping Way, Folsom California 95630. Each is referred to herein as a "Party" and collectively as the "Parties."

Recitals

A) Each Party is a member of the Western Electricity Coordinating Council ("WECC"), an organization whose members are located in the Western Interconnection as defined in the WECC Bylaws and is registered with WECC as a Balancing Authority pursuant to the North American Electric Reliability Corporation ("NERC") Reliability Functional Model and Registry Criteria.

B) Federal Energy Regulatory Commission ("FERC") approved mandatory NERC Reliability Standards for the Bulk-Power Systems of North America include Standard EOP-001, later amended and combined with other NERC Reliability Standards into EOP-011, which provides that each Balancing Authority is required to develop, maintain, and implement a set of plans to mitigate operating emergencies, and to coordinate such plans with other Balancing Authorities. The execution of operating agreements between Adjacent Balancing Authorities that contains provisions for emergency assistance is a requirement of the restoration plans reviewed by the applicable Reliability Coordinator. EOP 001, which may be revised from time to time, directs Balancing Authorities to have operating agreements in place with adjacent Balancing Authorities that, at a minimum, contain provisions for emergency assistance, including provisions to obtain emergency assistance from remote Balancing Authorities.

C) The Parties are adjacent Balancing Authorities by virtue of their transmission systems being interconnected at one or more points. The CAISO has responsibilities as a Balancing Authority and operates the CAISO Balancing Authority Area. BANC has responsibilities as a Balancing Authority and operates the BANC Balancing Authority

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

Area through arrangements with the Sacramento Municipal Utility District ("SMUD"), in accordance with the Balancing Authority Operations Services Agreement between BANC and SMUD.

D) The Parties intend by this Agreement to identify each Party's responsibility to the other under the Requirements of the Reliability Standard EOP-0101 by recognizing the continuing commitment of each Party to the other to cooperate to mitigate operating emergencies.

Therefore, the Parties mutually agree as follows:

1. Definitions

1.1 NERC Definitions

Except as defined in Section 1.2 or as otherwise defined in this Agreement, terms and expressions used in this Agreement shall have the same meanings as those contained in the NERC Glossary of Terms Used in Reliability Standards.

1.2 Specific Definitions

1.2.1 BANC Operations Date: The date on which the BANC becomes operational as the Registered Balancing Authority for its Balancing Authority Area.

1.2.2 CAISO Tariff: CAISO operating agreement and tariff as amended from time to time.

1.2.3 EOP-001: Emergency Operations Planning Standard EOP-001, as it ~~may be modified from time to time~~ was retired.

1.2.4 EOP-011: Emergency Operations Planning Standard EOP-011, as amended or re-titled.

1.2.5 Scheduling Coordinator: An entity certified by the CAISO for the purposes of undertaking the functions of: submitting bids and self-schedules for energy, generation, transmission losses, and ancillary services; coordinating generation; tracking, billing, and settling trades with other Scheduling Coordinators; submitting forecast information; paying the CAISO's charges; and ensuring compliance with CAISO protocols.

2. Term and Termination

2.1 This Agreement shall be effective on the later of the date of execution or the BANC Operations Date, provided that the provisions of Section 3.3 and Schedules A and B shall not be effective until the later of: (1) the date of execution, or (2) the date this Agreement is accepted for filing and made effective by FERC pursuant to a filing

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

with FERC by the CAISO (the "Effective Date") without any material modification or condition that is unacceptable to either Party in that Party's sole discretion. If any material modification or condition is ordered by FERC that is unacceptable to a Party, such Party shall communicate its lack of consent to such modification or condition to the other Party within ten (10) business days after the date on which FERC issues its order, and the Parties shall use best efforts to negotiate mutually acceptable revisions to this Agreement to address the modification or condition. Upon the occurrence of the Effective Date, this Agreement shall remain in effect until terminated by either Party upon thirty (30) days advance written notice to the other Party or upon written consent of both Parties. The CAISO shall file a notice of termination with FERC as soon as practicable but no later than thirty (30) days after its issuance or receipt of such advance written notice of termination or the date of the Parties' written consent. Termination will be effective upon acceptance of the notice of termination by FERC; provided, however, BANC will cease both to provide and to take any service under this Agreement as of: (i) thirty (30) days after issuance or receipt of an advance written notice of termination, or (ii) the date of the Parties' written consent, regardless of any action or inaction by FERC with respect to any application by the CAISO to terminate this Agreement.

3. Responsibilities of the Parties

3.1 The Parties agree to cooperate to mitigate any operating emergencies by adhering to: (1) the mandatory NERC Reliability Standards and WECC Regional Reliability Standards which relate to emergency operations, as may be amended from time to time, and (2) the directives of the applicable WECC Reliability Coordinator ("Reliability Coordinator").

3.2 Each Party further agrees that it shall develop, maintain, implement, and annually review and update its emergency plans to mitigate operating emergencies and shall share and coordinate such plans with the other Party as required by EOP-0101 ~~as amended from time to time~~.

3.3 To the extent possible, and in accordance with NERC mandatory Reliability Standards, each Party ("Delivering Party") shall assist the other Party ("Receiving Party") in an operating emergency by delivering emergency assistance to the requesting Receiving Party, including emergency ~~capacity or~~ energy transfers from such Delivering Party's Balancing Authority Area or from other remote Balancing Authorities over available transmission capacity, in accordance with Schedule B to this Agreement. Arrangements for deliveries of emergency ~~capacity or~~ energy transfers shall be through normal operating channels in accordance with ~~EOP-004~~ CAISO operating procedures. Such emergency assistance shall be provided at the sole discretion of the entity supplying it and shall be recallable without advance notice as required to meet reliability requirements.

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

4. Coordination and Communication

4.1 In the event of an operating emergency that affects or may affect the reliable operation of interconnected transmission facilities, each Party shall coordinate its actions with the other Party, as such Party deems necessary or as directed by the appropriate Reliability Coordinator(s), to preserve or restore the interconnected transmission system to stable operations and to preserve or restore reliable, safe, and efficient service as quickly as practicable. The Parties shall, without delay, individually notify the appropriate Reliability Coordinator(s) as to the nature and extent of the operating emergency.

4.2 Each Party operates and maintains, or provides for operation and maintenance of a 24-hour, 7-day control center with real-time scheduling and control functions. The appropriate control center staff shall be responsible for operational communications and shall have sufficient authority to commit and bind that Party on decisions relating to emergency operations. The Parties agree to exchange operational contact information for insuring reliable communication in a format to be agreed to by the Parties and completed as of the effective date of this Agreement.

5. Interconnection Points

5.1 The Parties are adjacent Balancing Authorities, and are interconnected at the points specified in Schedule A to this Agreement. In the event that new interconnection points are added, or existing points are modified or eliminated, Schedule A will be amended as necessary, to reflect any such changes that are mutually agreed upon by both Parties in a written agreement.

5.2 Schedule A is included for the sole purpose of identifying those interconnection points that result in the Parties being adjacent Balancing Authorities. This Agreement is not intended to act as an interconnection agreement between the Parties.

6. Miscellaneous Provisions

6.1 Exchange of Information and Confidentiality: When a Party ("Providing Party") provides information to the other Party ("Receiving Party") under this Agreement and marks such information as privileged or confidential commercial or financial information, critical energy infrastructure information, or trade secret information, the Receiving Party shall treat such information as confidential and protected from disclosure to the extent permitted by law. The Receiving Party shall promptly notify the Providing Party in writing of any request to release such information. The Parties agree to use such information only for purposes of performing each Party's obligations under this Agreement. The provisions of this Section 6.1 shall survive the termination of this Agreement.

6.2 Amendment: The Parties may amend or modify this Agreement only by written agreement. In the event the mandatory NERC Reliability Standards including

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

EOP-0191 are revised or replaced, the Parties shall meet within ninety (90) days of such change to discuss and determine whether such change will affect the terms and conditions of this Agreement and whether a modification or replacement of the Agreement is needed. An amendment that is subject to FERC approval shall not take effect until FERC has accepted such amendment for filing and has made it effective without any material modification or condition that is unacceptable to either Party in that Party's sole discretion. If any material modification or condition is ordered by FERC that is unacceptable to a Party, such Party shall communicate its lack of consent to such modification or condition to the other Party within ten (10) business days after the date on which FERC issues its order, and the Parties shall use best efforts to negotiate mutually acceptable revisions to this Agreement to address the modification or condition. Revisions to Schedules other than with regard to the contact information in Schedule C shall be processed as an amendment to this Agreement.

6.3 Assignment and Successors: Neither this Agreement nor any rights or responsibilities under this Agreement may be assigned by either Party to a third party without the written consent of the other Party, and such consent will not be unreasonably delayed, conditioned, or withheld. Subject to the preceding sentence, this Agreement is binding upon and will inure to the benefit of the Parties and their successors in interest.

6.4 Notices: Any notice, demand, or request which may be given to or made upon either Party regarding this Agreement shall be made in writing and shall be deemed properly served, given, or made: (a) upon delivery if delivered in person, (b) five (5) days after deposit in the mail if sent by first class United States mail, postage prepaid, (c) upon receipt of confirmation by return facsimile if sent by facsimile, or (d) upon delivery if delivered by prepaid commercial courier service. A Party must update the information in Schedule C of this Agreement relating to its address as that information changes. Such updates to Schedule C shall not constitute an amendment to this Agreement.

6.5 Governing Law and Forum: This Agreement shall be deemed to be a contract made under and for all purposes shall be governed by and construed in accordance with the laws of the State of California, except that if a dispute concerns the operation of transmission lines or facilities, the law of the state where the transmission lines or facilities are located will control. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement shall be brought in any of the following forums, as appropriate: a court of the State of California or any federal court of the United States of America located in the State of California or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission. No provision of this Agreement shall be deemed to waive the right of any Party to protest, or challenge in any manner, whether this Agreement, or any action or proceeding arising under or relating to this Agreement, is subject to the jurisdiction of the Federal Energy Regulatory Commission.

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

6.6 No Warranties or Representations; Disclaimer: All information, including confidential information, provided by the Providing Party under this Agreement carries no warranty or representation of any kind, either express or implied. The Receiving Party receives the information “as is” and with all faults, errors, defects, inaccuracies, and omissions. The Providing Party makes no representations or warranties whatsoever with respect to the availability, timeliness, accuracy, reliability, or suitability of any information. The Receiving Party disclaims and waives all rights and remedies that it may otherwise have with respect to all warranties and liabilities of the Providing Party, expressed or implied, arising by law or otherwise, with respect to any faults, errors, defects, inaccuracies or omissions in, or availability, timeliness, reliability, or suitability of the information. Each Party assumes any and all risk and responsibility for selection and use of, and reliance on, any information provided under this Agreement.

6.7 Liability: The Parties’ duties and standard of care with respect to each other, and the benefits and rights conferred on each other, shall be no greater than as explicitly stated herein. Neither Party, its directors, officers, employees, nor agents, shall be liable to the other Party for any loss, damage, claim, cost, charge, or expense, whether direct, indirect, or consequential, arising from the Party’s performance or nonperformance under this Agreement, except for a Party’s gross negligence or willful misconduct subject to applicable law. Except as otherwise expressly provided herein, nothing in this Agreement shall be construed or deemed to confer any right or benefit on, or to create any duty to, or standard of care with reference to any third party, or any liability or obligation, contractual or otherwise, on the part of either Party.

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

6.9 Authority: Each individual signing this Agreement certifies that the Party represented has duly authorized such individual to sign, bind, and obligate such Party.

ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

Accepted and agreed to by:

California Independent System Operator Corporation

Balancing Authority of Northern California

By _____

By _____

Name:

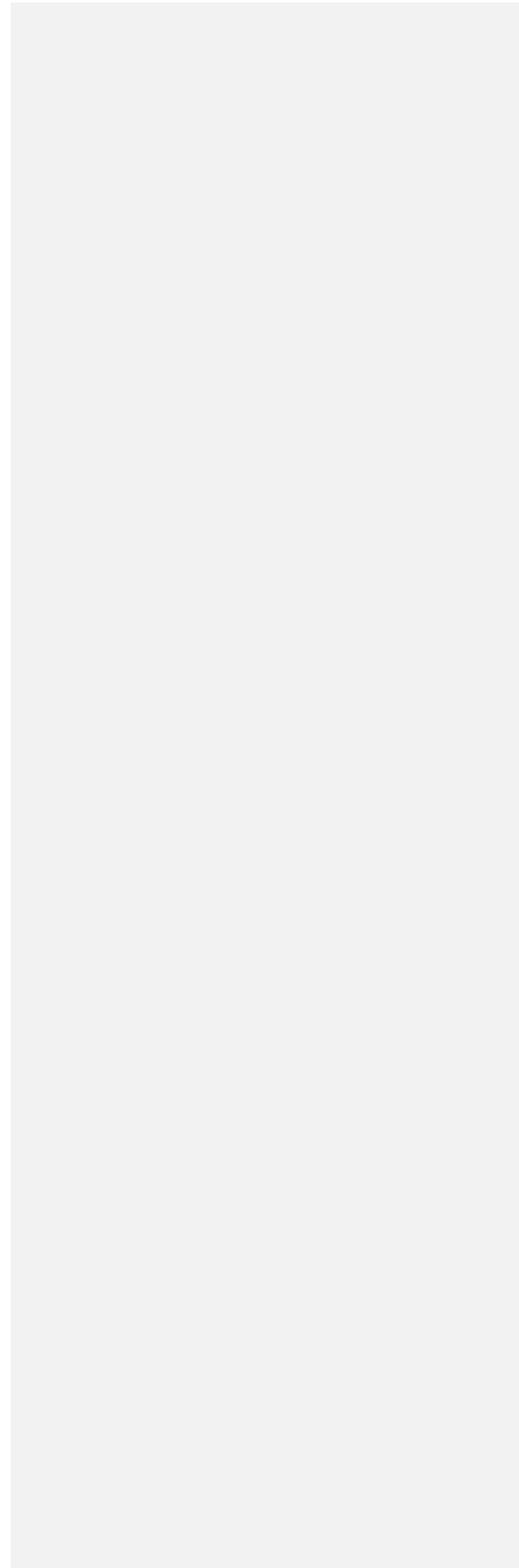
Name:

Title:

Title:

Date:

Date:



ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT

Schedule A

ADJACENT BALANCING AUTHORITY INTERCONNECTION POINTS
[Sections 5.1, 5.2 and 6.2]

The point(s) of interconnection of the Parties' Balancing Authority Areas are defined by the following boundaries:

CAISO and BANC have ten (10) interconnections comprised of the following:

- One (1) interconnection with the City and County of San Francisco (CCSF): the 115 kV interconnection at the Standiford Substation and;
- Nine (9) interconnections with Pacific Gas & Electric (PG&E): 1) the 500 kV California Oregon Transmission Project (COTP) Terminus interconnection located near the Tesla Substation, 2) the 230 kV interconnection at the Round Mountain, 3) the 230 kV interconnection at Cottonwood, 4) the 230 kV interconnection at Tesla, 5) the 230 kV interconnection at Rancho Seco, 6) the 230 kV interconnection at Lake , 7) the 230 kV interconnection at Westley Junction, 8) the 115 kV interconnection at Lawrence Livermore National Laboratory (LLNL), 9) the 69 kV interconnection at Herdlyn.

With City and County of San Francisco (CCSF)

**1. Standiford 115 kV Interconnection
(Standiford-Warnerville #7 & #8, Standiford-Newark/Moccasin #3 & #4 115 kV Lines)**

This interconnection point is comprised of four 115 kV lines connecting Standiford Substation to Warnerville (CCSF), Newark (PG&E), Oakdale (Modesto Irrigation District) and Moccasin (CCSF) Substations. Modesto Irrigation District (MID) is interconnected to the CCSF system through breakers 907, 903, 904, and 908 at MID's Standiford Substation. The physical points of interconnection are disconnect switches 907C, 903C, 904C and 908C at the Standiford Substation. Breakers 903 and 904 are and will be open breakers, and if this configuration is proposed to be changed, the Parties will confer and agree on any change to the interconnection point in advance of the change in this configuration.

With Pacific Gas & Electric Company (PG&E)

**1. COTP Terminus 500 kV Interconnection
(Tracy-Tesla and Tracy-Los Banos 500 kV Lines)**

This interconnection point is comprised of a double circuit 500 kV line with one circuit connecting the Tracy Substation (COTP) to the Tesla Substation (PG&E) and the other connecting Tracy Substation to Los Banos Substation (PG&E). COTP is interconnected to the PG&E system through breakers 2102, 2096, 1192 and 1096 at Western's Tracy Substation. The physical point of interconnection is

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~~Tower 36, approximately eight miles outside the Tracy Substation connecting COTP lines with PG&E's lines originating from Tesla and Los Banos~~

~~2. Round Mountain Interconnection (Round Mountain – Cottonwood 230 kV Bus Tie)~~

~~Western is interconnected to the PG&E system through breaker 242 at PG&E's Round Mountain Substation. One Western and one PG&E 500 kV line enters and two PG&E 500 kV lines and one Western 230 kV line leave the Round Mountain Substation. Round Mountain Substation is located in Round Mountain, California. The physical points of interconnection are disconnect switches 243 and 245 at the Round Mountain Substation.~~

~~3. Cottonwood Interconnection ("G" 230 kV Bus Tie)~~

~~This Interconnection point is comprised of two 230 kV breakers connecting Western's bus with PG&E's bus. Cottonwood Substation is located in Cottonwood, California. The physical point of interconnection is disconnect switch 471 on the "G" 230 kV bus 1 and disconnect switch 481 on the "G" 230 kV bus 2 bus at Cottonwood Substation.~~

~~4. Tracy Tesla 230 kV Interconnection (Tracy Tesla 230 kV Lines)~~

~~This Interconnection point is comprised of two 230 kV lines connecting Tracy Substation to PG&E's Tesla Substation. Western is interconnected to the ISO system through breakers 382 and 582 at Western's Tracy Substation. The physical point of interconnection are disconnect switches 381, 385, 581, and 585 at the Tracy Substation.~~

~~5. Rancho Seco 230 kV Interconnection (Rancho Seco – Bellota #1 and #2 230 kV Lines)~~

~~This Interconnection point is comprised of a 27 mile double circuit 230 kV transmission line strung on a 500 kV tower. The transmission lines connect SMUD's Rancho Seco Substation in southern Sacramento to PG&E's Bellota Substation in the eastern Stockton area. The physical point of interconnection is disconnect switches 357 and 317 at Rancho Seco Substation. The Rancho Seco Bellota #2 230 kV line is tapped to serve a PG&E retail load customer (EBMUD).~~

~~6. Lake 230 kV Interconnection (Lake – Gold Hill 230 kV Line)~~

~~This Interconnection point is comprised of a single very short (<0.25 mile) 230 kV transmission line connecting SMUD's Lake Substation to PG&E's Gold Hill Substation. The two substations are adjacent and located in Folsom, California.~~

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~~This Interconnection point utilizes a 55-ohm series reactor to provide additional electrical distance. The physical point of interconnection is PG&E's 230 kV line termination structure at Gold Hill Substation.~~

~~7. Westley 230 kV Interconnection (Westley-Tesla 230 kV Tie)~~

~~This Interconnection point is comprised of a single 230 kV line connecting Westley Substation to Tesla Substation. MID is interconnected to the PG&E system through breakers 2355 and 2356 at MID's Westley Substation. The physical point of interconnection is the Westley Junction located approximately one-half mile west of the Westley Substation.~~

~~8. LLNL 115 kV Interconnection (LLNL 115 kV Bus Tie)~~

~~Western is interconnected to PG&E through line disconnect switch 455 at Western's Lawrence Livermore National Laboratory ("LLNL") U 424 Substation. One PG&E 115 kV line enters and one Western 115 kV line leaves the LLNL U 424 Substation. LLNL U 424 Substation is located east of Tracy in Livermore, California. The physical point of interconnection is line disconnect switch 455 at LLNL U 424 Substation.~~

~~9. Herdlyn 69 kV Interconnection (Herdlyn 69 kV Bus Tie)~~

~~The Western system is connected to the PG&E system at the Tracy Herdlyn 69 kV line disconnect switch that is located within the Tracy Substation and is owned and operated by Western. Although a physical interconnection exists between the BANC Balancing Authority (BA) Area and the ISO-BA Area and the metered load of the area is added to the ISO-BA, the Parties agree that the interchange need not be scheduled for this small and difficult to forecast area.~~

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The Interconnection between the Balancing Authority of Northern California (“BANC”) and the California Independent System Operator Corporation (“CAISO”) is made up of ten (10) Interconnection points. These Interconnection points run normally closed, unless specified otherwise.

Standiford 115 kV Interconnection

This interconnection, comprised of four 115 kV transmission lines, connects both City and County of San Francisco (“CCSF”) and Pacific Gas and Electric Company (“PG&E”) facilities with the Modesto Irrigation District (“MID”) Standiford 115 kV substation.

- Warnerville - Standiford 115 kV #7 and Warnerville - Standiford 115 kV #8 lines.
- Moccasin-Newark 115 kV Line #3 and Moccasin-Newark 115 kV Line #4. Standiford taps from Moccasin-Newark 115 kV Line #3 and Moccasin-Newark 115 kV Line #4 (Normally open).

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Standiford 115 kV substation: Disconnect Switches (“DISCs”) 907C, 903C, 904C, and 908C, and bypass disconnect switches 917, 913, 914, and 918.

Note: Circuit Breakers (“CB”) 903 and 904 are and will be open breakers, and if this configuration is proposed to be changed, the Parties will confer and agree on any change to the Interconnection point in advance of the change in this configuration.

Transmission Owners:

- CCSF/ HHWP – (CAISO Balancing Authority (“CAISO BA”))
 - Moccasin Power House: Moccasin Switchyard (CB: 510 and 520)
 - Warnerville Substation: Warnerville Substation (CB: 620 and 640)
- US Government (owner), City of Riverbank (operator) – (CAISO BA)
 - Riverbank Substation
 - CB 52-3, 52-8
 - Switches: 1619, 1612, 1609, and 1611
- MID – (BANC BA)
 - Standiford Substation CB 903, 904, 907, 908.
 - Switches 945, 955, 913, 914, 918, 913C, 914C, 917C, and 918C.
- PG&E – (CAISO BA)
 - All Newark Substation Equipment
 - CB 100 and CB 190

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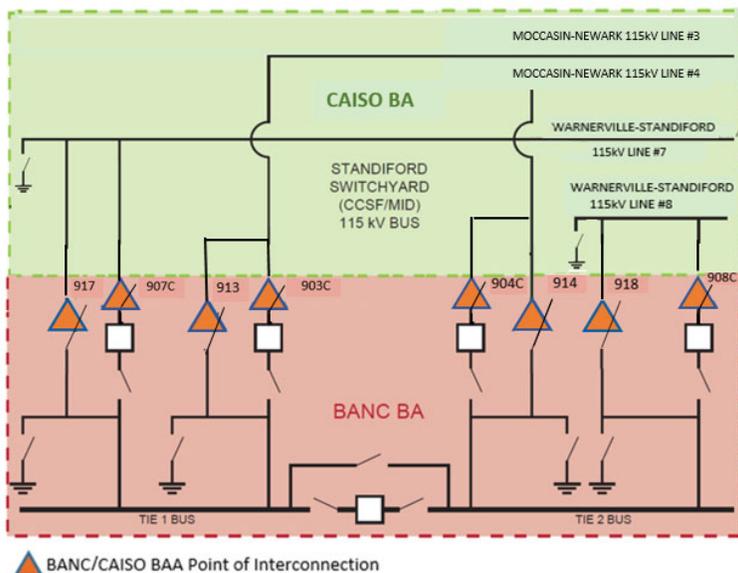
- Switches 101, 103, 105, 107, 191, 193, 195, and 197

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority for the disconnect switches 907C, 903C, 904C, and 908C, and bypass disconnect switches 917, 913, 914, and 918 at the Standiford substation and for the Moccasin-Newark #3 and #4 115 kV lines and for the Warnerville-Standiford #7 and #8 115kV lines. However, the line terminal CBs at Standiford are physically controlled and operated by MID personnel.

CAISO is the Balancing Authority for the switches and breakers at the Newark Substation at the end of the Moccasin-Newark 115 kV lines.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining bays/breakers/switches at the Standiford substation.



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COTP Terminus 500 kV Interconnection

This interconnection is comprised of two 500 kV transmission lines that connect PG&E facilities to Western Area Power Administration – Sierra Nevada Region’s (“WAPA”) Tracy 500 kV switchyard.

- Tesla – Tracy 500 kV line
- Tracy – Los Banos 500 kV line

Note: This configuration is sometimes referred to as the “Tesla Bypass” portion of the California-Oregon Transmission Project (“COTP”) and was designed for reliability purposes. By contract, no party is to be assessed charges or losses for use of the Tesla-Bypass facilities.

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Tracy 500 kV switchyard: DISCs 2191, 2097, 1191, and 1097

Transmission Owners:

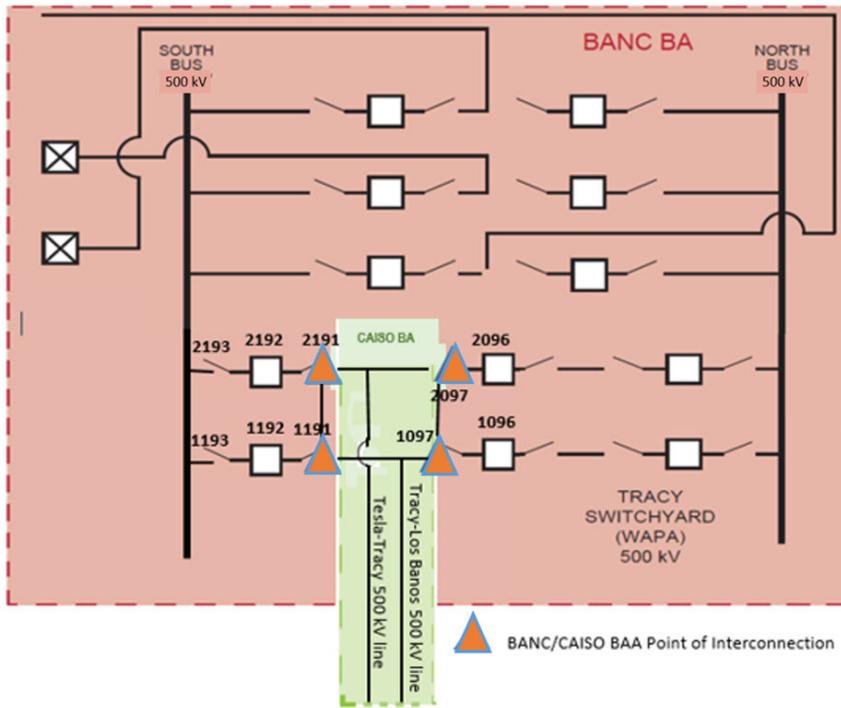
- PG&E
 - All Los Banos 500 kV Substation Equipment
 - All Tesla 500 kV Substation Equipment
 - Tesla – Tracy 500 kV line from Tesla to Pole 007/037 is owned by PG&E, which is approximately 1.13 miles.
 - Tracy – Los Banos 500 kV line from Los Banos to Pole 007/037 is owned PG&E, which is approximately 56.25 miles.
- WAPA – (BANC BA)
 - All Tracy 500 kV Substation EquipmentTesla – Tracy 500 kV line from Tracy (near Tesla junction) to Pole 007/037, approximately 7.4 miles.
 - Tracy – Los Banos 500 kV line from Tracy (near Tesla junction) to Pole 007/037, approximately 7.4 miles.

Roles and Responsibilities:

As depicted on the one-line diagram below, the Tracy – Los Banos and Tesla – Tracy 500 kV lines are in the CAISO BA. However, the line terminal CBs at Tracy are physically controlled and operated by WAPA personnel.

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As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining Bays/Breakers/Switches at the Tracy switchyard.



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Round Mountain 230 kV Interconnection

This interconnection is comprised of one 230 kV transmission line that connects WAPA's Cottonwood 230kV switchyard (bus Section G) to PG&E's Round Mountain 230 kV switchyard.

- o Round Mountain – Cottonwood No.1 230 kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Round Mountain 230 kV switchyard: line side DISC 243 and bypass DISC 245

Transmission Owners:

- o PG&E
 - Round Mountain Substation:
 - CB 242 and DISCs 243, 243 and 245 (terminal end of Round Mountain – Cottonwood No. 1 230 kV line)
 - Co-owned 500/230 kV transformers with WAPA
 - Cottonwood Substation
 - Including Cottonwood Bus Section G up to Selector Disconnects 377 and 379.
- o WAPA – (BANC BA)
 - Cottonwood Substation:
 - Round Mountain – Cottonwood No.1 230 kV line
 - Cottonwood 230 kV bus Section G, from and including, CB 372 and DISCs 371 (shown as second 373), 373, and 375.
 - Round Mountain
 - Round Mountain – Cottonwood No.1 230 kV line
 - Revenue metering equipment at Round Mountain 230 kV
 - Co-owned 500/230 kV transformers with PG&E

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from DISCs 243 and 245 at the Round Mountain 230 kV switchyard. PG&E operates 230-kV CB 242 at Round Mountain.

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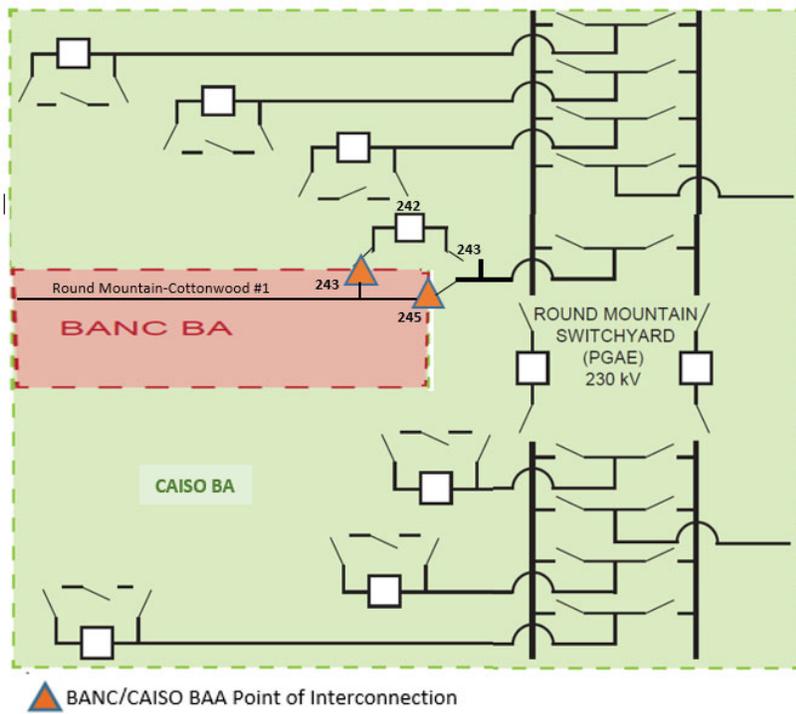
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As depicted on the one-line diagram below, BANC is the Balancing Authority for the Round Mountain – Cottonwood No.1 230 kV line (up to DISCs 243 and 245 at Round Mountain) and the remaining bays/breakers/switches on the 'G' bus section of the Cottonwood switchyard. That includes Cottonwood CB 372 and the associated bypass and isolation disconnects 373 and 375.



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Cottonwood 230 kV Interconnection

This interconnection is comprised at the two bus-ties that connects PG&E's "F" bus section to WAPA's "G" bus section of the Cottonwood 230 kV switchyard.

- Cottonwood 230 kV substation F-G bus-tie

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Cottonwood 230 kV switchyard: DISCs 483 & 473
- Under the Transmission Exchange Agreement ("TEA"), where the 230-kV busses of the G Section meet the 230-kV busses of the F Section at circuit breaker nos. 472 and 482

Transmission Owners:

- PG&E
 - PG&E owns the Cottonwood bus structures, dead-end structures, bus conductors and jumpers on Section G. All selector switches on Bus Section G between Bus 1 and 2, except 377 and 379.
 - Cottonwood 230 kV:
 - Bus Section 'E' and 'F' and associated equipment.
 - Lines and all associated substation equipment on bus sections 'E' and 'F'
- WAPA
 - WAPA takes ownership of Cottonwood bus Section G transmission lines at the conductor side of each dead-end structure for each WAPA-owned transmission line.
 - Seven 230-kV line circuit breakers (All Section G breakers).
 - Five 230-kV disconnect switches, 373 (also known as 371), 373, 375, 377 and 379, associated with the Round Mountain-Cottonwood #1 230 kV Line.
 - One 230-kV ground switch (Round Mountain line)
 - Supervisory Control and Data Acquisition ("SCADA") system and communications equipment for Section G.
 - Two 230-kV meters (bus 1 and bus 2) and metering transformers.
 - Cottonwood 230 kV:
 - Lines and associated transmission line equipment on the bus Section G.

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Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority west of the DISC 483 and 473 at the Cottonwood 230 kV switchyard.

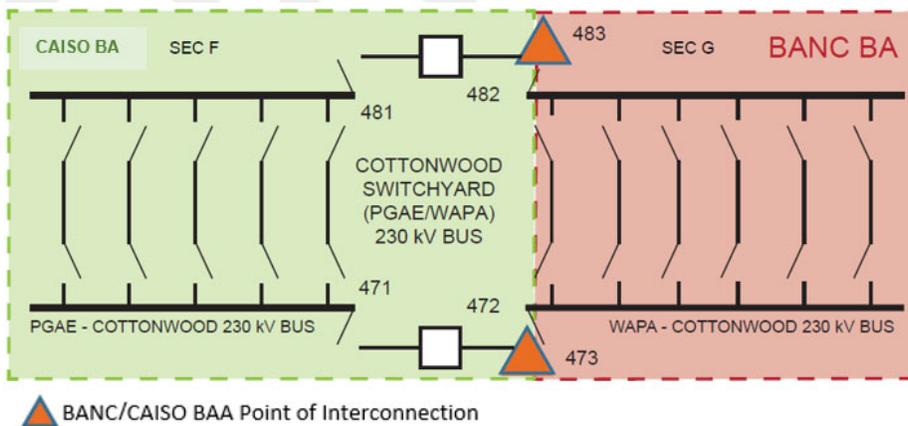
As depicted on the one-line diagram below, BANC is the Balancing Authority from DISC 483 and 473, including the meters, and the remaining Cottonwood "G" section 230 kV switchyard.

PG&E maintains the bus tie CBs 482 and 472 (and associated equipment) and performs all maintenance within the Cottonwood switchyard, including maintenance on Bus Section 'G' up to and including the selector switches including DISC 377 and 379.

PG&E operates all switches and line breakers including sectionalizing breakers 472 and 482 up to DISC 473 and 483 on Cottonwood Bus Section 'E' and 'F'.

WAPA maintains WAPA-owned SCADA and WAPA-owned 230-kV Section G metering and metering transformers.

WAPA operates all switches and line breakers beyond DISC 473 and 483 for WAPA lines terminating on Cottonwood Bus Section 'G'.



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Tesla – Tracy 230 kV Interconnection

This interconnection is comprised of two 230 kV transmission lines that connect WAPA's Tracy 230 kV switchyard to PG&E's Tesla 230 kV switchyard.

- o Tesla – Tracy 230 kV No.1 line
- o Tesla – Tracy 230 kV No.2 line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Tracy 230 kV switchyard: DISCs 1881, 1885, 581, and 585

Transmission Owners:

- o PG&E
 - PG&E owns the lines from Tesla 230 kV switchyard and owns the terminal breakers and equipment at Tesla 230 kV switchyard.
 - Tesla CB 312 and 322.
 - Switches 311, 313, 315, 317, 319, 321, 323, 325, 327, and 329 for the line terminals.
 - Tesla 230 kV switchyard
 - Tesla –Tracy No.1 and No.2 230 kV lines from Tesla to Pole 005/029
- o WAPA
 - WAPA takes ownership of the lines at pole 005/029 outside the Tracy 230 kV switchyard. WAPA owns the terminal breakers and associated DISCs 1881, 1885, 581, and 585 at Tracy 230 kV switchyard.

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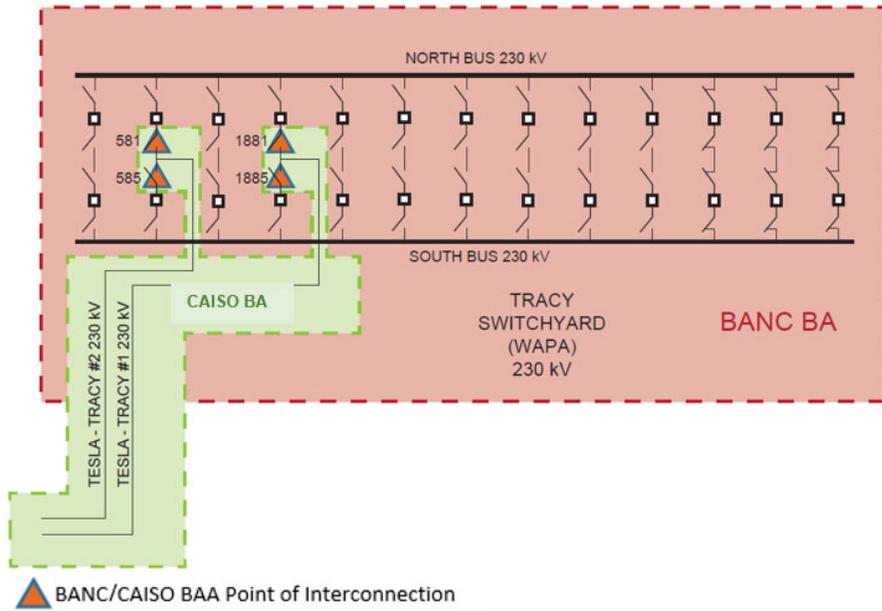
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Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from the Tesla – Tracy No.1 and No.2 230 kV lines up to DISCs 1881, 1885, 581, and 585 at Tracy 230 kV switchyard. However, these switches and associated CBs (1882 & 1886 and 582 & 586) which are physically controlled and operated by WAPA personnel.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Tracy 230 kV switchyard.

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Rancho Seco 230 kV Interconnection

This interconnection is comprised of two 230 kV transmission lines that connects Sacramento Municipal Utility District's ("SMUD") Rancho Seco to PG&E's Bellota 230 kV substation.

- Rancho Seco – Bellota 230 kV No.1 line
- Rancho Seco – Bellota 230 kV No.2 line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Rancho Seco 230 kV switchyard: Line DISCs 357 and 317.

Transmission Owners:

- SMUD
 - Rancho Seco 230 kV switchyard up to the connections to the Rancho Seco-Bellota termination tower at the Rancho Seco switchyard.
 - Rancho Seco CB 310 and CB 350
 - Switches 213, 311, 313, and 317
 - Switches 253, 351, 353, and 357
- PG&E
 - Bellota 230 kV substation and the two lines that terminate at the termination tower at the Rancho Seco switchyard.
 - Bellota CBs 230 and 240
 - Bellota Switches 233, 235, 237, 239, 243, 245 247, and 249

Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from the Rancho Seco – Bellota No.1 and No.2 230 kV lines up to DISCs 357 and 317 at Rancho Seco 230 kV switchyard, which are operated and controlled by Sacramento Municipal Utility District ("SMUD").

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Rancho Seco 230 kV switchyard.

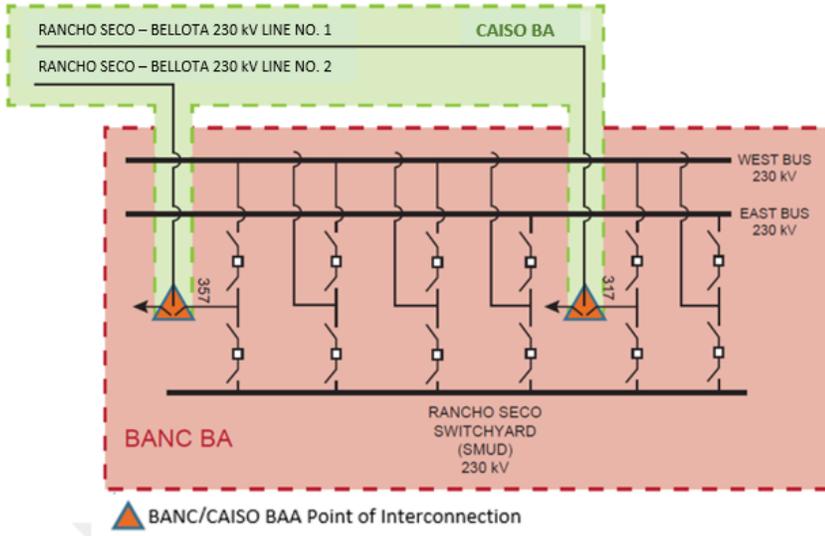
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Lake 230 kV Interconnection

This interconnection is comprised of a single very short (<0.25 mile) 230 kV transmission line connecting SMUD's Lake Switchyard to PG&E's Gold Hill Substation.

- Gold Hill-Lake 230 kV line

Note: This interconnection point utilizes a 55-ohm series reactor to provide additional electrical distance that mitigates for excessive through flows that would occur otherwise. The physical point of interconnection is at PG&E's 230 kV line termination structure at Gold Hill Switchyard.

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Gold Hill 230 kV substation: DISCs 233 and 235

Transmission Owners:

- SMUD
 - Lake 230 kV switchyard, 55-ohm series reactor and Gold Hill-Lake 230-kV line up to the SMUD 230-kV termination structure at PG&E's Gold Hill switchyard
 - Lake Switchyard CB 5236, CB 5230. Switches 5195, 5233, 5235, 5237, 5229, and 5231.
- PG&E
 - Gold Hill 230 kV Substation up to the SMUD termination structure for the SMUD Gold Hill-Lake 230 kV line
 - Gold Hill CB 232
 - Gold Hill Switches 231, 233, 235, 237, and 239.

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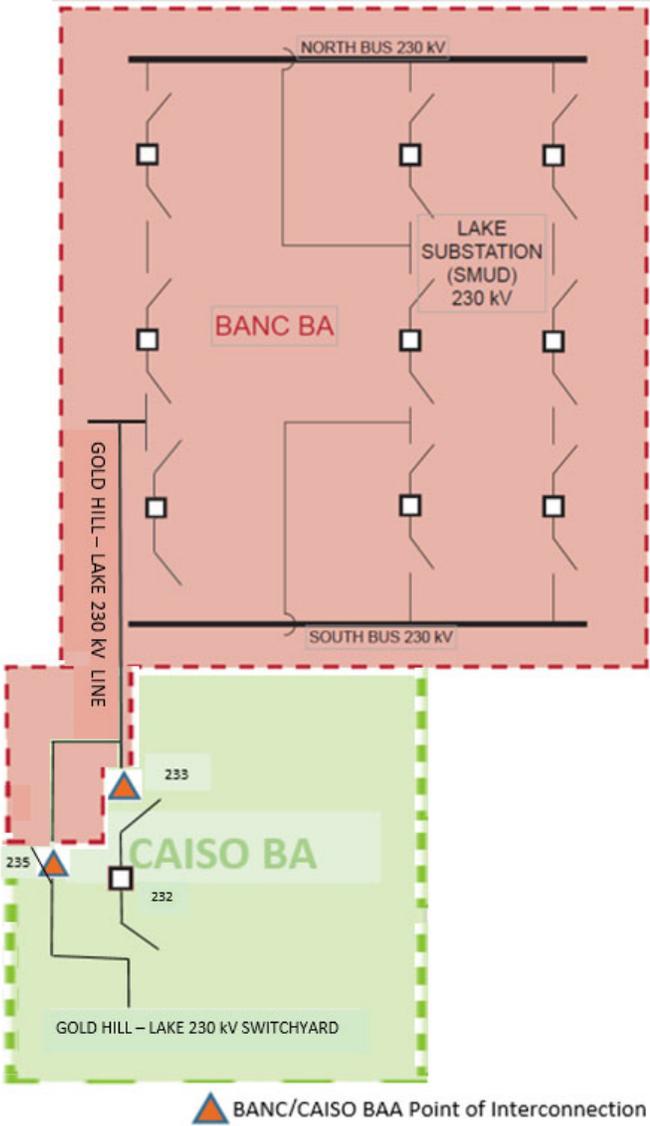
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Roles and Responsibilities:

As depicted on the one-line diagram below, CAISO is the Balancing Authority for the Gold Hill 230 kV substation.

As depicted on the one-line diagram below, BANC is the Balancing Authority from the Gold Hill – Lake 230 kV line up to DISC 233 and DISC 235, at the Gold Hill 230 kV substation, which are operated and controlled by PG&E.

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Westley 230 kV Interconnection

This interconnection is comprised of one 230 kV transmission line that connects PG&E's Tesla 230 kV Substation with the jointly owned MID/Turlock Irrigation District ("TID") Westley 230 kV switchyard.

- Tesla-Westley 230kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below, the Interconnection point is comprised of a single 230 kV line connecting Westley switchyard to Tesla Substation. MID is interconnected to the PG&E system through breakers 2355 and 2356 at the MID/TID Westley switchyard. The physical point of interconnection is the Westley Tap located approximately one-half mile west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100.

Transmission Owners:

- MID/TID
 - Westley 230 kV switchyard
 - Tesla-Westley 230 kV Line from Westley switchyard up to PG&E's Tower 022/100 one half mile west of the Westley switchyard.
- PG&E
 - PG&E – ownership is from Tesla 230 kV switchyard up to the Westley Tap located approximately 0.64 miles west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100.
 - Tesla 230 kV substation
 - Tesla CB 262.
 - Tesla Switches 263, 265, 267, and 269.
 - Tesla-Westley 230 kV line from Tesla to Tower 022/100

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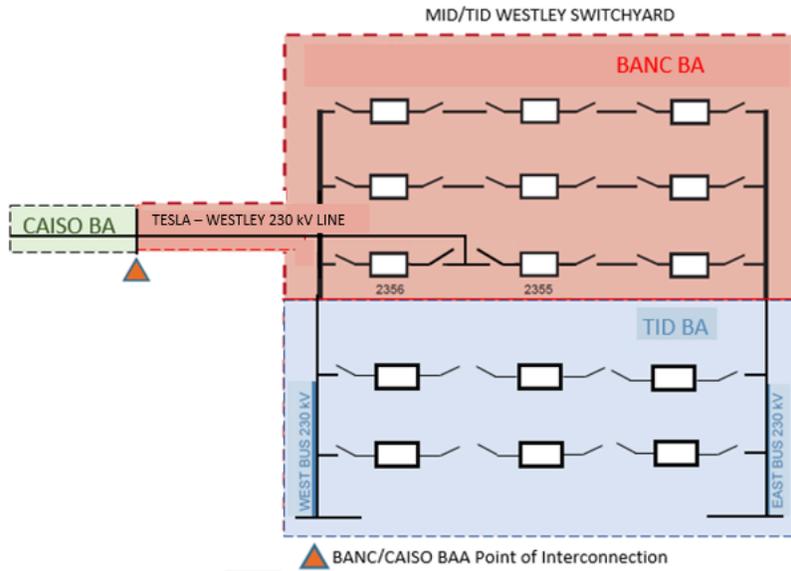
Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from PG&E's Tesla 230 kV substation and up to the Westley Tap located approximately 0.64 miles west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the Tesla- Westley 230 kV line from the Westley Tap, located approximately 0.64 miles west of the MID/TID Westley 230 kV switchyard at PG&E's Tower 022/100, up to circuit breakers 2355 and 2356 at MID/TIDs Westley 230 kV switchyard

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and the remaining bays/breakers/switches within BANC's portion of the MID/TID Westley 230 kV switchyard.



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LLNL 115 kV Interconnection

This interconnection is comprised of one transmission line that connects PG&E's Tesla 115 kV Substation to WAPA's Lawrence Livermore National Laboratory ("LLNL") U-424 115 kV switchyard.

- Tesla – Lawrence Lab 115 kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Lawrence Livermore Sub (Radiation) 115 kV switchyard: DISC 455

Transmission Owners:

- WAPA/U.S. Department of Energy ("DOE")
 - Lawrence Livermore Sub (Radiation) 115 kV switchyard
 - Lawrence Livermore Sub (Radiation) Switchyard CB 752, CB 852, and Switches 455, 751, 753, 851, and 853.
- PG&E
 - PG&E ownership is from Tesla 115 kV substation
 - Tesla CB 142, Switch 143, 145, 147, and 149.
 - The Tesla-Lawrence Lab 115kV line up to DISC 455 at WAPA Lawrence Livermore Sub (Radiation) 115 kV switchyard.

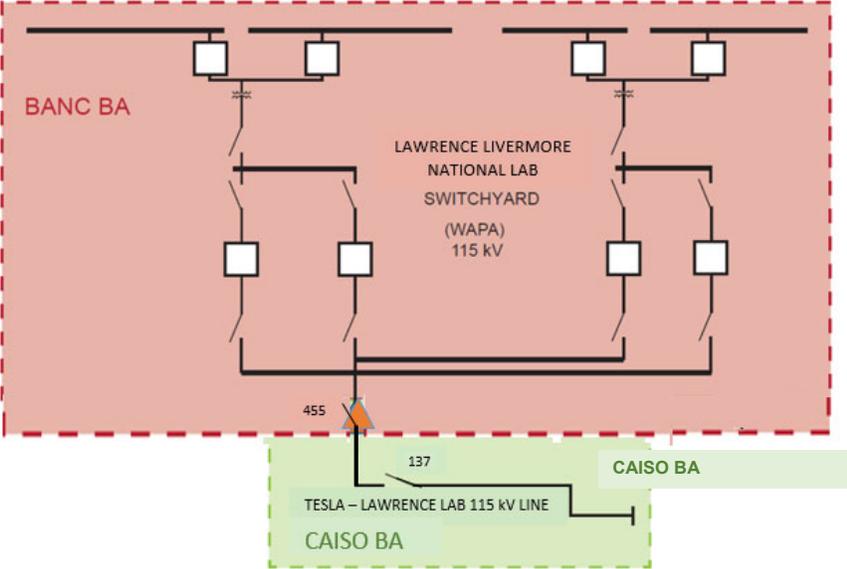
Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from PG&E's Tesla 115 kV substation and the Tesla – Lawrence Lab 115 kV line up to DISC 455 at the Lawrence Livermore Sub (Radiation) at the termination structure for the Tesla-Lawrence Lab 115 kV switchyard.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining bays/breakers/switches at WAPA's Lawrence Livermore Sub (Radiation) 115 kV switchyard.

DOE LLNL is responsible for maintaining the 115kV switchyard equipment at Lawrence Livermore Sub (Radiation). WAPA has operational control of Lawrence Livermore Sub (Radiation) CBs 652, 752, 852, and 952.

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▲ BANC/CAISO BAA Point of Interconnection

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Herdlyn 69 kV Interconnection

This interconnection is comprised of one transmission line that connects PG&E's Herdlyn 60 kV substation to WAPA's Tracy 69 kV switchyard.

Herdlyn

- Herdlyn-Tracy 69 kV line

Balancing Authority Area Boundary Point of Interconnection:

As depicted on the one-line diagram below:

- Tracy 69 kV switchyard: DISCs 2451 and 2455

Transmission Owners:

- WAPA
 - Tracy 69 kV switchyard, DISCs 2451 and 2455, CB 2452 and associated metering equipment
- PG&E
 - PG&E owns the Herdlyn-Tracy 69-kV line from Herdlyn 60 kV substation up to the metering equipment on the line side prior to disconnect switches 2451 and 2455 at WAPAs Tracy 69 kV switchyard.
 - Herdlyn 60 kV Substation
 - Herdlyn Bank # 2 and Switch 85

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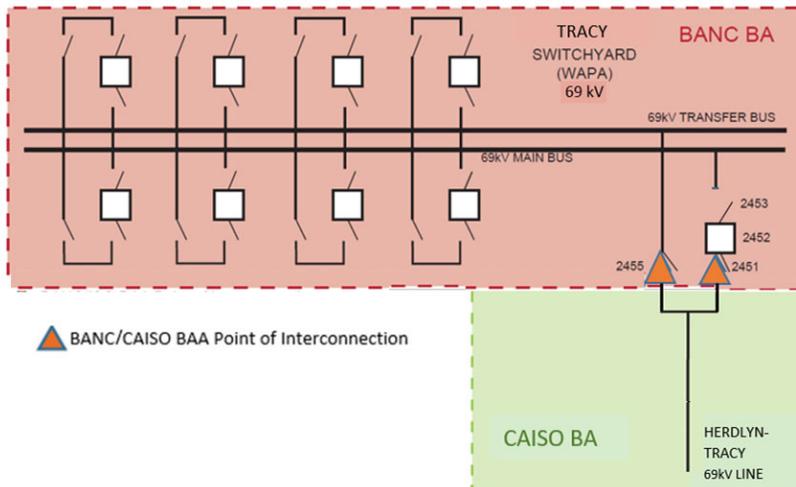
Roles and Responsibilities:

As depicted on the one-line diagram below, the CAISO is the Balancing Authority from PG&E's Herdlyn 60 kV substation and up to disconnect switch 2451 and 2455 at the Tracy 69 kV switchyard.

As depicted on the one-line diagram below, BANC is the Balancing Authority for the remaining bays/breakers/switches at WAPAs Tracy 69 kV switchyard.

The Herdlyn tie is operated radial to WAPA's Tracy switchyard. The tie is normally closed at the Tracy 69-kV switchyard with open operating points within the PG&E system (normally open at PG&E's Vasco SW 39, and Balfour SW 37).

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REVENUE METERING AND TELEMETRY AT INTERCONNECTION POINTS

BANC and CAISO metering shall meet any metering standards mutually agreed upon by the Parties for the purpose of operating their adjacent Balancing Authority Areas. BANC and the CAISO shall be entitled to witness testing of the involved interconnection metering. Any change or modification to such metering equipment by BANC, the CAISO or any other entity shall be coordinated between the Parties. BANC shall allow daily, once a day, read-only access by the CAISO to direct poll revenue data from the interconnection revenue metering in five (5) minute intervals at the metering points identified in this Schedule A. The CAISO shall allow daily, once a day, read-only access by the BANC to direct poll revenue data from the interconnection revenue metering in five (5) minute intervals at the metering points ~~identified~~ identified in this Schedule A.

BANC and the CAISO shall maintain arrangements that ensure that both Parties shall have access to the same real-time data from the points identified in this Schedule A between their Balancing Authority Area interconnections for the purpose of complying with North American Electric Reliability Corporation ("NERC") reliability standards. The Parties understand that each Party wants to obtain MW and MVAR data from interconnection metering, which may include Remote Terminal Units ("RTUs"), at the

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points identified in this Schedule A between their Balancing Authority Area interconnections. The Parties agree to allow each other to directly poll real-time data from metering at the interconnection ~~substations-switchyards~~ under the other Party's operational control as a Balancing Authority. In the event that a second communication port of the RTU is not available for direct polling by a Party, the Party shall have the option to provide a RTU to the ~~substation-switchyard~~ owner for the purpose of establishing a communication port available for direct polling by such Party.

This Schedule A shall remain in effect until it is superseded by mutual written agreement by the Parties or it is terminated, either by written notice from an individual party or by written consent by both Parties, in accordance with Section 2.1 of the Agreement.

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Schedule B

EMERGENCY ~~CAPACITY AND~~ ENERGY
[Sections 3.3 and 6.2]

In accordance with EOP-0101 the Parties will, to the extent possible, assist each other in an emergency by scheduling energy ~~and/or capacity~~. Such emergency assistance will be available at the sole discretion of the Party supplying it and will be recallable without advance notice as required to meet reliability requirements. The Parties will agree upon and log MW values, start, and end times, ramp rates and times, and integrated values for any emergency assistance provided.

The emergency assistance will be provided by a Party will be for system reliability. Such emergency assistance may be estimated prior to delivery and finalized in the settlement process.

The price paid for CAISO emergency assistance will be at the CAISO market price for the energy ~~and/or capacity~~ sold, plus all applicable charges, as specified in the CAISO Tariff provisions for emergency assistance. Such price may be estimated prior to delivery and finalized in the settlement process. Payment to the CAISO for emergency assistance provided by CAISO will be made by the Scheduling Coordinator representing BANC, in accordance with the settlement process, billing cycle, and payment timeline set forth in the CAISO Tariff.

The price paid for BANC emergency assistance will be at the price specified by BANC. In the event BANC does not specify the price for energy ~~or capacity~~ at the time of the request for emergency assistance and no other settlement price is established prior to the delivery of the emergency assistance, the default settlement price shall be the CAISO market price, plus all other applicable charges, as specified or as otherwise established in the CAISO Tariff for emergency assistance. If the default settlement price does not compensate BANC for the value of the emergency assistance delivered to the CAISO, BANC shall have the opportunity to justify a higher settlement price in accordance with the CAISO Tariff provisions for emergency assistance. Payment to BANC for emergency assistance provided by BANC will be made to the Scheduling Coordinator representing BANC, in accordance with the settlement process, billing cycle, and payment timeline set forth in the CAISO Tariff.

Nothing in this Agreement shall obligate BANC to be bound by CAISO Tariff provisions unless expressly provided for.

This Schedule B shall remain in effect until it is superseded by mutual written agreement by the Parties or it is terminated, either by written notice from an individual party or by written consent by both Parties, in accordance with Section 2.1 of the Agreement.

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Schedule C

CONTACTS FOR NOTICES
[Sections 6.2 and 6.4]

CAISO:

Name of Primary Representative: Regulatory Contracts
Title: N/A
Address: 250 Outcropping Way
City/State/Zip Code: Folsom, CA 95630
Email Address: RegulatoryContracts@caiso.com
Phone: (916) 608-7027
Fax No.: (916) 608-7292

Name of Alternate Representative: Christopher J. Sibley
Title: Manager, Regulatory Contracts
Address: 250 Outcropping Way
City/State/Zip Code: Folsom, CA 95630
Email Address: csibley@caiso.com
Phone: (916) 608-7030
Fax No.: (916) 608-7292

BANC

Name of Primary Representative: James R. Shetler
Title: General Manager
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 No.:

Name of Alternate Representative: Tony Braun
Title: General Counsel
Address: 555 Capitol Mall, Suite 570
City/State/Zip Code: Sacramento, CA 95814
Email Address: smith@braunlegal.com
Phone: (916) 326-4449
Fax No.: (916) 330-4337

This Attachment shall remain in effect until superseded by written notice from either of the Parties.