

To: Honorable Public Utilities Board

Submitted by:     / S /      
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Acting AGM – Engineering & Operations

From: Sameh Seleman, P.E.  
Engineering Manager

Approved by:     / S /      
Tim Haines  
General Manager

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Senior Electrical Engineer

Subject: By Motion, Authorize the General Manager to Transfer Funds Within the Capital Improvement Budget and Execute a Transmission Facilities Agreement with Pacific Gas and Electric Company for the Line Current Differential Relaying Transmission Protection Project Between Jenney Substation and Oakland Station J in an Amount Not to Exceed \$ 7,511,477, with a Contingency of \$308,523, For a Total Amount Not to Exceed \$7,820,000 and Find the Action Exempt from the California Environmental Quality Act

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### RECOMMENDATION

*By motion*, find AMP’s action is not a CEQA project pursuant to CEQA Guidelines Section 15378, is exempt from the California Environmental Quality Act pursuant to CEQA Guidelines Sections 15061(b)(3) and 15378 for the reasons outlined in the administrative report, and authorize the General Manager to transfer funds within the capital improvement budget and to execute a transmission facilities agreement with Pacific Gas and Electric Company for the line current differential relaying transmission protection project between Jenney substation and Oakland Station J in an amount not to exceed \$7,511,477, with a contingency of \$308,523, for a total amount not to exceed \$7,820,000.

### BACKGROUND

Alameda Municipal Power (AMP) utilizes line current differential relaying protection for 115 kilovolt (kV) transmission lines using either copper or fiber optic communication channels for high-speed transmission line protection. This protection scheme is critically important in protecting the transmission line assets, especially for the submersible cable that crosses under the Oakland-Alameda estuary towards Pacific Gas and Electric Company (PG&E) Stations C and J in Oakland.

AMP’s existing line current differential protection schemes using fiber optic channel communication are between AMP’s Jenney and Cartwright substations, Cartwright and the Northern California Power Agency (NCPA) Combustion Turbine (CT) substations, and NCPA-CT and PG&E Station C. The existing copper communication channel is between Jenney substation and PG&E Station J, which is no longer in service.

The leased copper wire from AT&T used for the pilot wire communication channel of the line current differential relaying between Jenney and Station J became unavailable about 15 years

ago. The GE electromechanical relay that was used in conjunction with the line current differential relaying is obsolete, prone to misoperation, and no longer supported by the manufacturer. In the interim, AMP and PG&E have replaced the transmission line protection relays between Jenney and Station J with microprocessor-based Schweitzer Engineering Laboratories (SEL) distance and overcurrent relays, which are slower and less reliable than line current differential relay protection. Distance and overcurrent relays are typically applicable for back-up line protection only.

The Public Utilities Board approved \$7 million dollars for the capital project as part of the June 2025 Budget approval. The Board asked why the project was being carried out now, given the current protection scheme has been in place for many years and has not resulted in a major failure. AMP staff responded that the current arrangement relies on a backup protection scheme that was never intended to be permanent and does not meet today's standards for protecting critical, hard-to-replace infrastructure and reliable service standards.

## DISCUSSION

The absence of high-speed transmission protection between Jenney and Station J will have ongoing reliability, and possibly financial, impacts on AMP such as

1. Damage to AMP 115 kV submarine cables between East Transition Station to Tidewater Terminating Station during line faults. The cost of replacing damaged cables is estimated between \$10–20 million but could be higher due to permitting requirements. During the replacement, AMP would have to operate in single source for at least three to six months, thereby exposing system reliability.
2. According to PG&E, distance relays installed at Station J were set to overreach Zone 1 to protect AMP submersible cables that crossed the Oakland-Alameda estuary. The relay may trip the breaker even if the fault is outside of its zone of protection. A high fault on AMP's 115 kV bus and 12 kV system at Jenney may cause PG&E's distance relay to operate, tripping the breaker feeding Jenney, and leaving thousands of AMP customers without power.

Distance relaying is not very reliable. Any of the conditions below may cause relay-breaker misoperation:

1. Infeed
2. Fault resistance
3. Unequal measure impedances during fault
4. Evolving fault
5. Power swings
6. Short lines
7. Simultaneous faults

AMP and PG&E engineers have agreed to a high-speed line current differential protection between Jenney and Station J to mitigate potential problems in the transmission line in the event of line faults. Staff explored various means to restore the line current differential protection scheme, including installing or leasing direct path fiber optic line from AT&T.

However, the absence of underground infrastructure and high costs of crossing the Oakland-Alameda estuary and Interstate-880 make this a non-viable option.

In 2019, AMP staff approached PG&E regarding alternative options to have the line current differential current protection implemented. PG&E engineers have offered to utilize their existing fiber optic communication lines infrastructure between Station C and Station J for this project. AMP staff has carefully studied feasibility and initiated the project with PG&E. AMP has an existing fiber optic infrastructure from Jenney through Oakland Station C, making this project more viable and less expensive.

#### *Project Justification*

Staff recommends approval of a transmission facilities agreement (TFA) with PG&E for the line current differential project for the following reasons:

1. This project will provide a higher level of system reliability, protection, and control of the 115 kV transmission lines between Jenney and Station J.
2. Using the PG&E fiber optic communication channel is more economical than installing new direct fiber infrastructures crossing the Oakland-Alameda estuary and Interstate-880.

#### NEXT STEPS

If approved, AMP will pay PG&E the construction estimate upfront and the one-time cost of ownership charge once facilities are complete as stipulated in the TFA. AMP staff will collaborate with PG&E engineers during the design, construction, and commissioning of the new line current differential transmission protection between the two substations.

#### FINANCIAL IMPACT

AMP has allocated \$7 million in the Capital Improvement fund for this important project in fiscal year (FY) 2026. This project will require an additional \$820,000 for PG&E project costs, a one-time charge for Cost of Ownership, and contingencies.

AMP's Budget Policy requires Public Utilities Board approval for transfers greater than \$100,000. Staff recommend authorizing the General Manager to transfer two capital improvement budget funds amounting to \$468,000 and \$ 352,000 intended for "10 MW Load (Pacific Fusion)" and "WETA Harbor Bay Charging Ferry Terminal", respectively. Pacific Fusion has selected New Mexico as the site of their new laboratory facilities and the Water Emergency Transportation Authority (WETA) Harbor Bay Charging Ferry Terminal is projected to start construction in 2027 and be completed in 2028.

AMP expects approximately \$300,000 in additional costs needed to complete the project including consulting, capitalized labor, and SEL equipment purchases. AMP will budget for these amounts in FY 2027.

ENVIRONMENTAL IMPACT

Alameda Municipal Power finds the transmission facilities agreement with PG&E is not a project as defined by CEQA Guidelines Section 15378, which excludes “Continuing administrative or maintenance activities, such as purchases for supplies.” AMP’s action involves entering into an agreement for the protection of the line current differential relaying transmission between Jenney Substation and Oakland Station J. Alameda Municipal Power further finds that it can be seen with certainty that there is no possibility that the activity will result in a direct or reasonably foreseeable indirect change in the environment.

Alameda Municipal Power further finds that its actions are exempt from CEQA, including but not limited to CEQA Guidelines Section 15061(b)(3). More specifically, Alameda Municipal Power finds its actions are subject to the commonsense exemption because it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment. Alameda Municipal Power’s actions involve entering into an agreement for the protection of the line current differential relaying transmission between Jenney Substation and Oakland Station J.

LINK TO STRATEGIC PLAN AND METRICS

Business Resiliency: Strategy 1, AMP will develop an asset management plan to guide efficient capital and maintenance expenditures which improve system operations and resiliency.

EXHIBIT

- A. Transmission Facilities Agreement
- B. PG&E Scope of Work

**TRANSMISSION FACILITIES AGREEMENT FOR ALAMEDA MUNICIPAL POWER**  
**OAKLAND J-ALAMEDA 115 KV LINE PROTECTION UPGRADE WORK**

At the request of **Alameda Municipal Power ("AMP" or "Customer") Pacific Gas and Electric Company ("PG&E")**, a California corporation (collectively, "**Parties**") agrees to furnish at AMP's expense, certain Facilities and perform certain work described in Exhibit A-1 ("Special Facilities"). The Facilities are furnished to serve AMP's electric service requirements at PG&E Oakland J Substation and PG&E Oakland C Substation located at Oakland, State of California, as described in that Exhibit. This Transmission Facilities Agreement ("TFA"), inclusive of its Exhibits, is entered into pursuant to the Interconnection Agreement Between Pacific Gas and Electric Company and the Northern California Power Agency ("NCPA"), Service Agreement No. 292 under PG&E's FERC Electric Tariff Volume No. 5 ("NCPA IA") and is subject to all terms and conditions thereof. For purposes of this Agreement, if any term or condition of this Agreement conflicts with the NCPA IA, this TFA shall govern.

1. This TFA includes:

Exhibit A, Detail of Special Facilities Charges. Exhibit A may be revised or superseded by written agreement of the Parties and without formal amendment of the remainder of this TFA.

2. Definition of Special Facilities:

Special Facilities are those Facilities described in Exhibit A required to meet the Customers application for the interconnection of Customer's project with PG&E's electric system. The Special Facilities charges in Exhibit A shall apply only to the project elements which are in addition to or in substitution for the standard facilities which PG&E normally provides for transmission interconnection. Charges related to future maintenance and operations of such Special Facilities will apply.

3. AMP shall pay PG&E pursuant to the payment schedule set forth in Exhibit A, Section II, a charge equal to the sum of the amounts which are specified [subject to true-up as provided in Sec. 4 of this agreement] in Exhibit A [currently estimated at \$4,017,810.06]. Under

this Agreement, AMP shall pay PG&E \$4,017,810.06 (“Payment”) for the 2025-2026 Fiscal Year of the Project following the execution and the filing of this Agreement with FERC.

4. PG&E will attempt to notify Customer at least 30 calendar days prior to the anticipated date that Customer’s Payment (and any future payments) is exhausted based upon the aggregated costs of PG&E’s work or as soon thereafter as is reasonably feasible. With such notice, PG&E shall provide Customer with an accounting of work performed against funds from Customer’s Payment expended, along with an updated estimate of the additional funds necessary to complete the work. Within 15 calendar days of receiving such a notice, Customer shall send PG&E the additional amount that PG&E estimates will be required to complete the work (“Supplemental Payment”). If the Supplemental Payment is not received within the 15 calendar days of PG&E’s notice, PG&E may, at its option, elect to halt work activities under this Agreement until this payment is received. If PG&E elects to continue providing the work without having received such Supplemental Payment, Customer remains responsible for payment for the costs of the work rendered by PG&E, including any cost overruns that exceed the initial \$4,017,810.06 estimate. Once PG&E completes the Work, PG&E will provide Customer with an accounting of work performed against Customer’s Payment(s) received, and will refund any outstanding balance (if funds provided by Customer are left unused) or invoice Customer (if PG&E has drawn on all funds previously provided by Customer and the costs of the work rendered exceeded the total amount of funds) within 60 calendar days of completion of the Work. Customer shall pay such invoice within 30 calendar days of receipt of such invoice.

5. Where AMP has requested Special Facilities, AMP also shall pay PG&E any applicable monthly rates and charges plus an ownership charge, under either (a) or (b) below as specified in Exhibit A:

(a) A Cost-of-Ownership Charge representing PG&E's continuing monthly cost of financing (if PG&E has financed the facilities), owning, operating, and maintaining Special Facilities; or

(b) An Equivalent One-Time Charge equal to the present value of the monthly Cost-of-Ownership Charge in perpetuity.

The Cost-of-Ownership Charge shall commence on the date Special Facilities are first available for AMP's use as such date is established in PG&E's records. PG&E will notify AMP, in writing of such commencement date. The Equivalent One-Time Charge (if applicable) shall be payable by AMP to PG&E on demand.

6. The Cost-of-Ownership Charge for interconnections provided under this TFA is determined by PG&E in accordance with PG&E's applicable percentage rates, which are calculated using PG&E's most recent transmission owner revenue requirement on file with and accepted by the FERC. PG&E charges the following Cost-of-Ownership rates for transmission facilities: customer-financed, transmission-level rate = 0.61% monthly.

7. Where it is necessary to install Facilities on AMP's premises, AMP hereby grants to PG&E:

(a) the right to make such installation on AMP's premises along the shortest practical route thereon with sufficient legal clearance from all structures above and below ground now or hereafter erected or installed on AMP's premises; and

(b) the right of ingress and egress from AMP's premises at all reasonable hours for any purposes reasonably connected with the installation operation and maintenance of Facilities.

8. When formal rights of way or easements are required on or over property of AMP's or the property of third parties for the installation of Facilities, AMP agrees that PG&E shall use all reasonable efforts to obtain such rights of way or easements, which shall be at AMP's expense or, if AMP and PG&E agree, AMP shall obtain any necessary permanent rights of way or easements, satisfactory to and without cost to PG&E.

9. To the extent that modification is required of other agreements between AMP and PG&E regarding current or planned transmission projects in the vicinity of or impacted by the Facilities to be installed in connection with this TFA, AMP and PG&E shall make good faith efforts to agree on such modifications, recognizing that such modifications may be a necessary element of the overall scheme of generation and transmission facilities sought to be installed by

PG&E and also recognizing that PG&E has already expended effort and costs to fulfill such other agreements.

10. PG&E shall not be responsible for any reasonable delay in completion of the installation of Facilities resulting from shortage of labor or materials, strike, labor disturbance, war, riot, weather conditions, governmental rule, regulation or order, including orders or judgments of any court or regulatory agency, delay in obtaining necessary rights of way and easements, acts of God, delays resulting from PG&E's responsibility to coordinate certain electric interconnections or modifications with the California Independent System Operator Corporation, or any other cause or condition beyond the control of PG&E, nor shall PG&E be liable for direct, incidental, indirect, special, punitive, or consequential damages for such delay. PG&E shall have the right, if for one of the above reasons it is unable to obtain materials or labor for all of its construction requirements, to allocate materials and labor to construction projects which it deems, in its sole discretion, most important to serve the needs of its customers, and any delay in construction, hereunder resulting from such allocation shall be deemed to be a cause beyond PG&E's control.

11. New electric extensions and connections, capacity upgrades to existing facilities, conduits and substructures, and the maintenance of facilities, conduits and substructures provided under this TFA shall be installed and made in accordance with fundamental design, installation, ownership, and maintenance provisions of Applicable Requirements and Good Utility Practice as defined in Section 7, Interconnections, of the NCPA IA, and Interconnection facilities for Points of Interconnection at transmission voltage shall be installed and maintained in accordance with PG&E's Transmission Interconnection Handbook. All charges, payments and refunds shall be made solely under the provisions of this TFA.

12. Charges paid by AMP:

If PG&E is prevented from completing the installation of Facilities for reasons beyond its reasonable control after twelve (12) months following the date of this TFA, PG&E shall have the right to supersede the applicable Exhibit or Exhibits to this TFA upon at least thirty (30) days' written notice to AMP. PG&E shall have the right to adjust any amounts paid or required to be

paid by AMP hereunder that may be due based on that portion of the Facilities then completed, if any, utilizing the estimated costs developed by PG&E for the applicable Exhibit or Exhibits to this TFA. Such superseding Exhibit or Exhibits shall be in substantially the same form as the applicable Exhibit or Exhibits to this TFA and be approved in writing by the Parties hereto. If AMP does not approve the superseding Exhibit or Exhibits within thirty (30) days of PG&E's notice, the applicable Exhibit or Exhibits to this TFA shall terminate, and the provisions of Section 14 herein shall be applied to that portion of Facilities then completed. AMP also shall reimburse PG&E for any actual documented expenses it may have incurred for engineering, surveying, right of way acquisition and other work associated with that portion of Facilities not installed.

13. This TFA shall become effective when it is executed by the Parties hereto. Except as provided for in Section 12 herein, this TFA shall remain in force until one of the following events occurs:

- (a) The NCPA IA or its successor, terminates without a successor, or
- (b) AMP fails to pay the monthly Cost-of-Ownership Charge prescribed in the applicable Exhibit to this TFA, if applicable; or
- (c) The Parties agree in writing to terminate this TFA.

Either Party shall provide the other Party at least thirty (30) days' written notice of termination pursuant to subpart (b) and an opportunity to cure before termination becomes effective pursuant to this Section 13.

14. Upon termination of the TFA for any reason:

- (a) AMP shall pay to PG&E a Facilities Termination Charge, defined as the estimated Installed cost, plus the estimated removal cost less the estimated salvage value for any Facilities which can be removed, all as determined by PG&E in accordance with its standard accounting practices. PG&E shall deduct Total Cost as set forth in Exhibit A, Section 3, line E (the "Initial Charge") from the Facilities Termination Charge. Any remaining balance of the Equivalent One-Time Charge previously paid, if any, will be refunded by PG&E to AMP, and

any deductions in the Equivalent One-Time Charge shall be calculated using the number of months that the TFA was in force and effect, multiplied by the monthly charge of the Net Cost of Special Facilities set forth the table in Section 4 of Exhibit A. If the Initial Charge paid is greater than the Facility Termination Charge, PG&E shall refund the difference, without interest to AMP within a reasonable time; and

(b) PG&E shall be entitled to remove and shall have a reasonable time in which to remove any portion of the Facilities located on AMP's premises.

(c) Pursuant to FERC's rules and regulations, PG&E will make a filing and obtain FERC acceptance prior to billing AMP for any Facility Termination Charge.

15. Special Facilities shall be owned by PG&E unless otherwise agreed in writing by the Parties.

16. Mobile-Sierra. Notwithstanding any provision of this Agreement, neither Party shall seek, nor shall they support any third party in seeking, to prospectively or retroactively revise the rates, terms or conditions of service of this Agreement through application or complaint to FERC pursuant to the provisions of Section 205, 206 or 306 of the Federal Power Act, or any other provisions of the Federal Power Act, absent prior written agreement of the Parties. Further, absent the prior agreement in writing by both Parties, the standard of review for changes to the rates, terms or conditions of this Agreement proposed by a Party, a non-Party or the FERC acting sua sponte shall be the "public interest" application of the "just and reasonable" standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956).

17. No transfer or assignment of either Party's rights, benefits or duties under this TFA shall be effective without the prior written consent of the other Party, which consent shall not be withheld unreasonably; provided, however, that this Section 17 shall not apply to interests that arise by reason of any deed of trust, mortgage, indenture or security agreement granted or executed by either Party. No partial assignment of either Party's rights, benefits or duties shall be permitted under this TFA unless otherwise agreed to by the Parties. Any successor to or transferee or assignee of the rights or obligations of a Party, whether by voluntary transfer,

judicial sale, foreclosure sale or otherwise, shall be subject to all terms and conditions of this TFA to the same extent as though such successor, transferee, or assignee were an original party.

18. Any dispute arising from this TFA shall be resolved in accordance with Appendix B of the NCPA IA.

19. AMP's liability for the ITCC taxes under this Letter Agreement shall equal the product of (i) the gross income realized by PG&E for income tax purposes with respect to the payments or property transfers made by AMP to PG&E under this Agreement for the construction of Special Facilities multiplied by (ii) the "Gross-up Percentage" (as defined below). The "Gross-up Percentage" shall equal the gross-up percentage determined in accordance with "method 5," as described in CPUC Decision 87-09-026 for taxable contributions-in-aid-of-construction paid to PG&E in the year the Gross Income Amount is includable in PG&E's taxable income. The "Gross-up Percentage" shall be presumed to be the percentage set forth in PG&E's electric tariffs accepted by the CPUC for taxable contributions in aid of construction.

20. This TFA may be executed in any number of counterparts, each of which shall be an original and all of which together shall constitute one instrument.

21. This TFA may be amended or modified only by the written agreement of the Parties, except as otherwise specifically provided herein.

22. This TFA, inclusive of its exhibits and, by reference, the NCPA IA, constitutes the complete and final expression of the rights and obligations of the Parties in connection with the subject matter of this TFA and is intended as a complete and exclusive statement of the terms of their agreement which supersedes all prior and contemporaneous offers, promises, representations, negotiations, discussions, communications, and contracts which may have been made in connection with the subject matter of this TFA. The exhibits to this TFA, as they may be revised from time to time, are attached to this TFA and are incorporated by reference as if herein fully set forth.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by authorized representatives this \_\_\_ day of \_\_\_\_\_ 2026 but effective as set forth above.

**ALAMEDA MUNICIPAL POWER**

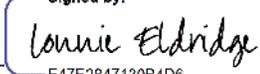
By: \_\_\_\_\_

Printed Name: Timothy Haines

Title: General Manager

Date: \_\_\_\_\_

Approved as to form:  
Signed by:

By:   
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Printed Name: Lonnie Eldridge

Title: Special Counsel, City of Alameda

Date: 12/30/2025

**PACIFIC GAS AND ELECTRIC COMPANY**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Attachments

Exhibit A

## Exhibit A

## Detail of Special Facilities Charges

Oakland J-Alameda 115 kV Line Protection Upgrade Work

At the request of the ALAMEDA MUNICIPAL POWER ("AMP"), PACIFIC GAS AND ELECTRIC COMPANY ("PG&E") hereby agrees to furnish at AMP's expense certain Special Facilities necessary to serve AMP's electric service requirements at PG&E's Oakland C 115 kV Substation, located at Oakland, State of California. The Special Facilities are described in Exhibit A-1.

**1. Scope and Cost Estimate**

The location and requested Work are described as follows:

**Locations: PG&E Oakland J Substation and PG&E Oakland C Substation****Description of Work:**

AMP has requested PG&E to 1) upgrade the existing Oakland J-Alameda 115kV line protective relaying at PG&E Oakland J Substation CB 122, and 2) provide a fiber communication path between the PG&E Oakland C Substation and the PG&E Oakland J Substation for the line current differential relay communication. The purpose of this work is to provide high speed protection for Oakland J-Alameda 115kV line. Prior to the beginning of this Project, AMP has already established a fiber communication path between Jenney Substation and Oakland C Substation.

PG&E will perform the necessary procedures to ensure that the installation and activation of two SEL-411L line current differential relays at Oakland J Substation, and the establishing of a fiber communication path between Oakland C Substation and Oakland J Substation, comply with PG&E's Interconnection Handbook. Procedures will include, but not be limited to, the following tasks: PG&E's identification and assignment of a project team, project kick-off, schedule walk-down, preliminary engineering scoping,

project walk-down, identification of clearance requirements, environmental review, permitting, and final development and approval of scope documentation.

Similarly, AMP will perform the necessary procedures to ensure that the installation and activation of two SEL-41 1L line current differential relays at Jenney Substation, and the establishing of a fiber communication path between Jenny Substation and Oakland C Substation, are in compliance with PG&E's Interconnection Handbook. Procedures will include, but not be limited to, the following tasks: AMP's identification and assignment of a project team, project kick-off, schedule walk-down, preliminary engineering scoping, project walk-down, identification of clearance requirements, environmental review, permitting, and final development and approval of scope documentation.

## 2. Estimated Costs of 115 kV Relay Upgrade Project

Line Item	Unit Cost	Quantity	Total Cost
Labor	\$85.00	7,250	\$616,250.00
Materials	\$175,000.00	1	\$175,000.00
Overheads	\$1,701,188.00	1	\$1,701,188.00
Estimated Total Cost			= \$2,492,438.00
Contingency		30%	\$747,731.40
<b>Total w/Contingency, Before ITCC</b>			<b>= \$3,240,169.40</b>
ITCC (Applicable Federal Income Tax Rate)		24%	\$777,640.66
<b>TOTAL ESTIMATE</b>			<b>\$4,017,810.06</b>

**3. Cost Estimate and Payment Schedule**

	Net Cost of PG&E Facilities	\$3,240,169.40
A	ITCC (24%)	\$777,640.66
	Total Cost of PG&E Facilities (including ITCC, see Exhibit A-1)	= \$4,017,810.06
B	Less the cost of “removable and reusable” facilities which are provided, installed, financed, and furnished by PG&E	\$0.00
C	Less PG&E’s estimate of the total cost of facilities provided and installed by Customer (excluding costs of design and administration by PG&E)	\$0.00
	Payment at contract execution with FERC approval	\$4,017,810.06
D	<b>Total Payment</b>	<b>\$4,017,810.06</b>
E	<b>Total Cost</b>	<b>\$4,017,810.06</b>

**4. Estimated Monthly Cost-of-Ownership Charge**

Special Facilities Financed By	Application Base	Current Percentage Rate	Monthly Charge
AMP	Net Cost of Special Facilities (= A-1 Direct Assignment Facilities below)  1. Estimated cost of transmission facilities installed by PG&E: <u>\$3,240,169.40</u>  2. Estimated cost of transmission facilities installed by AMP and deeded to PG&E: <u>\$0</u>  Less allowance for existing facilities: --  Estimated net amount: <u>\$3,240,169.40</u>	0.61%	\$19,765.03/month
PG&E	Existing facilities allocated as Special Facilities	-	-
<b>Total Estimated Monthly Cost-of-Ownership Charge</b>		<b>\$19,765.03/month</b>	

5. Estimated Equivalent of One Time Charge (in lieu of estimated monthly Cost-of-Ownership Charge)

Check here if applicable

\$19,765.03/mo. (IV.C above) x 12 months × 14.73 (present worth factor) =

**\$ 3,493,666.70**

**VI. Liability and Indemnity**

Section 25 of the NCPA IA, Indemnity, and Section 27 of the NCPA IA, Liability, shall apply to this TFA.

In no event shall either Party hereto or any subcontractor be liable for indirect, special, incidental, consequential or exemplary damages, including but not limited to, the loss of profits or revenue, loss of use of the equipment or any associated equipment, cost of capital, cost of substitute equipment, facilities or services, down time costs, casts in excess of estimates, loss of opportunity, loss of data, loss of goodwill or claims of customers of the other Party for such damages, and each Party hereby releases each other Party there from.

**Interconnection Agreement**

**Between**

**Pacific Gas and Electric Company**

**and**

**Northern California Power Agency**

**and**

**City of Alameda,**

**City of Biggs,**

**City of Gridley,**

**City of Healdsburg,**

**City of Lodi,**

**City of Lompoc,**

**City of Palo Alto,**

**City of Ukiah,**

**and**

**Plumas-Sierra Rural Electric Cooperative**

**Service Agreement No. 292 under**

**PG&E FERC Electric Tariff Volume No. 5**

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**INTERCONNECTION AGREEMENT  
BETWEEN  
PACIFIC GAS AND ELECTRIC COMPANY  
AND  
NORTHERN CALIFORNIA POWER AGENCY  
AND  
CITY OF ALAMEDA,  
CITY OF BIGGS,  
CITY OF GRIDLEY,  
CITY OF HEALDSBURG,  
CITY OF LODI,  
CITY OF LOMPOC,  
CITY OF PALO ALTO,  
CITY OF UKIAH,  
AND  
PLUMAS-SIERRA RURAL ELECTRIC COOPERATIVE**

**1 PREAMBLE**

This Interconnection Agreement (Agreement) is made this 28th day of September, 2015 by and between Pacific Gas and Electric Company (PG&E), a corporation organized and existing under the laws of the State of California, and the Northern California Power Agency (NCPA), a joint powers agency of the State of California, and the California Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Ukiah, and the Plumas-Sierra Rural Electric Cooperative, Inc., (hereinafter referred to collectively as “NCPA Member Customers”), any or all of which are hereinafter referred to individually as a “Party” and collectively as “the Parties.” NCPA and the NCPA Member Customers are hereinafter referred to collectively as “the NCPA Parties.”

**2 RECITALS**

**2.1** Whereas, it is the policy of the Federal Energy Regulatory Commission (FERC) that open and non-discriminatory access to transmission be provided through transmission systems comprising as large an area as possible under the supervision and direction of an independent system operator or a regional transmission organization; and

**2.2** Whereas, PG&E is registered with the North American Electric Reliability Corporation (NERC) as a Transmission Owner (TO), and as a Transmission Operator (TOP) in accordance with the NERC compliance registry process; and

**2.3** Whereas, PG&E is a public utility providing both wholesale and retail electric power and energy sales and transmission and distribution services in northern and central California and owns an extensive electric transmission system within that area; and

**2.4** Whereas, PG&E transferred operational control of its transmission system to the California Independent System Operator Corporation (CAISO), and is now a Participating Transmission Owner and a party to the CAISO's Transmission Control Agreement, under which PG&E is subject to the direction of the CAISO in the operation of its transmission system and under which the CAISO becomes the provider of transmission service over PG&E's transmission system, pursuant to the terms of the CAISO Tariff, the PG&E TO Tariff, Transmission Control Agreement, Scheduling Coordinator Agreement, and Utility Distribution Company Operating Agreement, all of which enable PG&E to satisfy the obligations of operating within the CAISO's Balancing Authority Area; and

**2.5** Whereas, NCPA is a public agency engaged in the generation and transmission of electric power and energy and was created by a joint powers agreement first dated July 19, 1968, and as amended and restated January 1, 2008, entered pursuant to Chapter 5, Division 7, Title 1 of the California Government Code commencing with Section 6500; and

**2.6** Whereas, the NCPA Member Customers are members of NCPA, and NCPA or other duly authorized entity acts as Scheduling Coordinator on their behalf; and

**2.7** Whereas, NCPA has entered into certain agreements with the CAISO including, but not limited to, the Third Amended and Restated NCPA MSS Aggregator Agreement, as amended (NCPA MSS Agreement), and Scheduling Coordinator Agreement, and will have electric power delivered to or from it at each Point of Interconnection using transmission service available to it; and

**2.8** Whereas, the NCPA Member Customers have individually or collectively entered into certain agreements with the CAISO including, but not limited to, the NCPA MSS Agreement and the Operating Agreement, and will have electric power delivered to or from each of their respective Points of Interconnection using transmission service available to it; and

**2.9** Whereas, the relationships and obligations among NCPA and the NCPA Member Customers are determined under existing contracts and agreements among them, which this Agreement is not intended to alter; and

**2.10** Whereas, this Agreement is intended to provide for the terms and conditions of interconnections between the Electric Systems of PG&E and the NCPA Parties and to replace the existing Interconnection Agreement made effective on July 12, 2002 (“Prior Agreement”), between them; and

**2.11** Whereas, the Parties intend to replace the Existing Special Facilities Agreements that have been part of the Prior Agreement, and that provide for the interconnection of the existing generator units of the NCPA Parties with Large Generator Interconnection Agreements and Small Generator Interconnection Agreements, as applicable, among NCPA, PG&E and the CAISO; and

**2.12** Whereas the Parties do not intend to change the underlying rights and responsibilities of the parties to the Special Facilities Agreements by transitioning to the new format of the Large Generator Interconnection Agreements and Small Generator Interconnection Agreements, or to impose additional requirements or obligations on existing NCPA generators; and

**2.13** Whereas, the Parties agree to operate their respective Electric Systems in accordance with Good Utility Practice consistent with the requirements of this Agreement; and

**2.14** Whereas, the Parties intend to cooperate in the operation of their respective Electric Systems to maximize their mutual benefits under this Agreement.

### **3 AGREEMENT**

NOW, therefore, in consideration of the mutual covenants herein set forth, the Parties agree as follows:

### **4 DEFINITIONS**

#### **4.1 Use of Terms**

As used in this Agreement (including the Recitals hereto), unless in any such case the context requires otherwise: The terms “herein,” “hereto,” “herewith” and “hereof” are references to this Agreement taken as a whole and not to any particular provision; the term “include,” “includes” or “including” shall mean “including, for example and without limitation;” and references to a “Section,” “subsection,” “clause,” “Appendix,” “Schedule,” or “Exhibit” shall mean a Section, subsection, clause, Appendix, Schedule or Exhibit of this Agreement, as the case may be. Unless otherwise specified in the Agreement, all references to a given agreement, instrument, tariff or other document, or law, regulation or ordinance shall be a reference to that agreement, instrument, tariff or other document, or law, regulation or ordinance as such now exists, including any amendment or modification made hereafter. A reference to a “person” includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having a separate legal personality and includes its successors and permitted assigns. A reference to a “day” shall mean a calendar day

The following terms, when used in this Agreement with the initial letters capitalized, other than proper names, whether in the singular, plural or possessive, shall have the meanings indicated below. Capitalized terms not defined below shall have the meaning indicated in the Master Definitions Supplement included as Appendix A to the CAISO Tariff, provided, however, if a term as defined in this Agreement conflicts with the CAISO Tariff, the definition in this Agreement shall prevail.

#### **4.1.1 Adverse Impact**

An effect on a Party’s Electric System resulting from a Modification, New Facility Addition, or Long-Term Change to Operations to another Party’s Electric System that (1)

materially degrades reliability of the affected Party's Electric System or (2) materially reduces the ability of the affected Party's Electric System to physically transfer power into, out of, or within said Electric System.

#### **4.1.2 Agreement**

This Interconnection Agreement among the Parties and its Appendices, as it may be amended.

#### **4.1.3 Applicable Requirements**

Any applicable law or regulation; and any standards, procedures or requirements of an entity with lawful authority to control or govern, including planning, the applicable transmission system (whether in full or in part) or the Balancing Authority Area in which a Party's Electric System is located, including but not limited to FERC, NERC, WECC, Peak Reliability, and a Balancing Authority.

#### **4.1.4 Balancing Authority Area Arrangements**

Arrangements, which may include, but is not limited to, an MSS or MSS Aggregator Agreement, between a Party and its Balancing Authority, or, if a Party is its own Balancing Authority, between a Party and WECC, in which the Party agrees to self-provide or procure the necessary resources and services and perform operations to meet Balancing Authority Area operating requirements and Applicable Requirements to maintain the operating reliability and integrity of the Balancing Authority Area's Electric System(s) in an economic manner consistent with Good Utility Practice.

#### **4.1.5 Control Center**

An Electric System's designated operations manager responsible for, among other things, its Electric System switching operations.

#### **4.1.6 Cost**

All just, reasonable, necessary and prudently incurred expenses or capital expenditures, including but not limited to those for operation, maintenance, engineering and facilities studies, Adverse Impact identification, Adverse Impact mitigation, contract modification, administrative and general expenses, taxes, depreciation, and fees for consultants, as determined in accordance with the FERC Uniform System of Accounts as such may be amended or superseded from time to time, and capital costs.

#### **4.1.7 CPUC**

The California Public Utilities Commission or its regulatory successor.

#### **4.1.8 Direct Assignment Facilities**

Facilities or portions of facilities that are owned by PG&E and which are necessary to physically and electrically interconnect the NCPA Parties to the CAISO Controlled Grid at the Points of Interconnection. All Direct Assignment Facilities that are contemplated by the Parties as of the Effective Date of this Interconnection Agreement are identified in the accompanying Transmission Facilities Agreements attached to and made part of this Agreement. Direct Assignment Facilities shall be subject to FERC approval.

#### **4.1.9 Effective Date**

The date specified as the Effective Date of this Agreement in Section 5.2 hereof.

#### **4.1.10 Electric System**

All properties and other assets, now or hereafter existing, which are leased to, licensed to, owned by, or controlled by a single person or entity, that are located within or interconnected to that person or entity's service area, and are used for or directly associated with the generation, transmission, transformation, distribution, purchase or sale of electric power, including all additions, extensions, expansions, and improvements thereto. To the extent a person or entity is not the sole owner of an asset or property, only that person's or that entity's ownership interest in such asset or property shall be considered to be part of its Electric System.

#### **4.1.11 Engineering and Operating (E & O) Committee**

A joint committee of the Parties established pursuant to Section 9.8.

#### **4.1.12 Existing Contracts**

The contracts between the Parties in existence on April 1, 1998 (including any contracts entered into pursuant to such contracts) as may be amended in accordance with their terms or by agreement between the parties thereto from time to time or by order or requirement of FERC or any court having jurisdiction, provided that any contract shall cease to be an Existing Contract when its initially specified term ends, unless extended by agreement of the parties thereto, or when it may be earlier terminated; and contracts between PG&E and the Western Area Power Administration, and contracts between or tariffs involving PG&E and the Transmission Agency of Northern California, in which NCPA has a beneficial interest.

#### **4.1.13 Facility Study**

An engineering study to determine required Electric System modifications to accommodate a new Point of Interconnection or a modification of an existing Point of Interconnection, including the Cost and scheduled completion date for such modifications that will be required to provide needed services.

#### **4.1.14 Interconnection Capacity**

The rated maximum capability of Interconnection Facilities for power transfers at Points of Interconnection.

#### **4.1.15 Interconnection Facilities**

Electric facilities that establish or modify Points of Interconnection where PG&E's Electric System is connected to the Electric System of the NCPA Parties, or a Third Party. Interconnection Facilities may include, but are not limited to, transmission lines, towers and supports, switching stations, buses, breakers, switches, relays, transducers, transformers, meters, protective equipment, communications and telemetry devices, and land and land rights associated with the Interconnection Facilities at each Point of Interconnection.

#### **4.1.16 Long-Term Change to Operations**

An action intentionally taken, or an event permitted by a Party, that materially alters or modifies, on a long-term or permanent basis, the configuration or other operational characteristics of its Electric System. An action or event shall be deemed to have been taken, or to have occurred on a long-term basis if the action or event remains in effect for a period of more than 30 consecutive days or occurred on more than 60 days within any period of twelve (12) consecutive months. The following are examples of actions and events that qualify as a Long-Term Change to Operations when taken or occurring on a long-term basis, though this list is not exclusive:

- (a) materially modifying a Remedial Action Scheme (RAS) or Special Protection Scheme (SPS), or disarming a RAS or SPS contrary to the manner and conditions for which it is designed to operate;
- (b) opening switches that are generally kept closed under normal operating conditions, except in those cases where a modified switching configuration has been studied and agreed to by the affected Parties in accordance with Applicable Requirements;
- (c) closing switches that are generally kept open under normal operating conditions, except in those cases where a modified switching configuration has been studied and agreed to by the affected Parties in accordance with Applicable Requirements;
- (d) material changes to ratings or operating limits of any element of a Party's Electric System;
- (e) disabling or materially changing the operation of a phase-shifting transformer;
- (f) an increase in a Party's peak electric load on a Party's Electric System within a rolling twelve (12) month period that constitutes a ten (10) percent or greater increase over the Party's peak electric load from the prior twelve (12) month period;

- (g) the planned shutdown of a generation facility with a generating capacity greater than 500 kW within any Party's Electric System, other than for routine maintenance; or
- (h) actions or events similar in nature and/or effect to the foregoing.

A Long-Term Change to Operations as defined does not include (i) outages taken for maintenance or System Emergencies in accordance with Good Utility Practice; or (ii) actions taken during maintenance or to perform maintenance or respond to System Emergencies or (iii) actions taken by a Third Party, including the CAISO, that are beyond the control of the Parties.

#### **4.1.17 Modification**

The removal of or alteration or physical change to any element of a Party's Electric System.

#### **4.1.18 New Facility Addition**

The addition of a new transmission facility or the addition of a new generation facility directly connected to a Party's Electric System, whether owned by that Party or not.

#### **4.1.19 PG&E Transmission Owner Tariff (PG&E TO Tariff)**

PG&E Transmission Owner Tariff on file with FERC as PG&E FERC Electric Tariff Volume 5, as it may be modified or superseded from time to time.

#### **4.1.20 PG&E Wholesale Distribution Tariff (PG&E WD Tariff)**

PG&E Wholesale Distribution Tariff on file with the FERC as original PG&E FERC Electric Tariff Volume No. 4, as it may be modified or superseded from time to time.

#### **4.1.21 Point(s) Of Interconnection**

The physical connections of PG&E's transmission or distribution lines with NCPA or an NCPA Member Customer's Electric System as specified in Appendix A hereto, as that Appendix may be modified from time to time.

#### **4.1.22 Operating Agreement**

The Operating Agreement between Pacific Gas and Electric Company, Plumas-Sierra Rural Electric Cooperative, Northern California Power Agency and Sierra Pacific Power Company dated as of December 14, 2006, which describes and establishes the mutual responsibilities for operation of the interconnection points between PG&E and Plumas-Sierra Rural Electric Cooperation and Sierra Pacific Power Company and Plumas-Sierra Rural Electric Cooperation.

#### **4.1.23 Remote Telemetry Unit (RTU)**

A device that relays real-time information, including but not limited to kW, kVar, voltage, and breaker status, to a Party's Control Center or other designated recipient, to be used for monitoring purposes.

#### **4.1.24 Responsible Meter Party**

A Party having the responsibility for providing, installing, owning, operating, testing, servicing and maintaining meters and associated recording or telemetering equipment at each Point of Interconnection. Unless otherwise specified herein, NCPA and/or the applicable NCPA Member Customer who owns the meter or equipment in question shall be the Responsible Meter Party under this Agreement.

#### **4.1.25 Service Area**

That area within the geographic boundaries of the areas electrically served at retail, now or in the future, by the Parties.

#### **4.1.26 System Impact Study**

An engineering study conducted by or in coordination with PG&E at a NCPA Party's request to determine System Reinforcements required on PG&E's Electric System necessary to establish or modify a Point of Interconnection or to address a Significant Operational Change pursuant to Section 10.

#### **4.1.27 System Reinforcements**

Reinforcements to PG&E's Electric System, including but not limited to those identified by a System Impact Study, necessary to establish or maintain the Transfer Capability to a Point of Interconnection. System Reinforcements may be required when a Point of Interconnection is added or modified, when a Significant Operational Change pursuant to Section 10 is proposed, or when necessary to serve electric load reliably, or required by Good Utility Practice. System Reinforcements are limited to facilities required on PG&E's Electric System and ordinarily would not include Interconnection Facilities required at the Point of Interconnection.

#### **4.1.28 Third Party**

A person or entity that is not a Party to this Agreement.

#### **4.1.29 Transfer Capability**

The measure of the capability of interconnected Electric Systems to move or transfer power in a reliable manner from one point to another over all transmission lines between those points under specified system conditions.

#### **4.1.30 Transmission Arrangement**

An agreement or tariff, either the CAISO Tariff or a separate contract or tariff which enables NCPA to deliver power and energy to meet its electric power requirements.

#### **4.1.31 Transmission Operations Center**

PG&E's Control Center from which it directs operations of its transmission system.

#### **4.1.32 Transmission Facilities Agreement**

An agreement made between one or more Parties for services, including, but not limited to, the design and installation of new facilities.

#### **4.1.33 Uncontrollable Force**

Any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities or any other cause beyond the reasonable control of PG&E or the NCPA Parties which could not be avoided through the exercise of Good Utility Practice.

#### **4.1.34 Upgrade Facility**

A new or upgraded Interconnection Facility and/or System Reinforcement constructed or installed pursuant to this Agreement.

## **5 SCOPE**

### **5.1 Interconnected Operations**

This Agreement governs the interconnected and coordinated operation of PG&E's Electric System, a portion of which has been turned over to the operational control of the CAISO, and the NCPA Parties' Electric Systems. As of the Effective Date of this Agreement, the CAISO operates the Balancing Authority Area in which the Parties operate their respective Electric Systems. The Parties agree that, during the term of this Agreement and unless otherwise provided for by amendment of this Agreement, that portion or those portions of the Parties' Electric Systems that are interconnected shall be operated in parallel pursuant to the terms and conditions of this Agreement and their respective Balancing Authority Area Arrangements. Each Party shall at all times to the maximum extent practicable avoid causing any Adverse Impact on another Party's Electric System.

### **5.2 Effective Date**

The term "Effective Date" as used in this Agreement shall mean 0000 hours of November 1, 2015, or the date on which FERC accepts this Agreement for filing and permits it to be placed into effect without material change or material new conditions unacceptable to any Party, whichever is later.

If FERC sets this Agreement for hearing to determine whether it is just and reasonable and otherwise lawful, then this Agreement shall become effective on the date it is permitted to be placed into effect and subject to any conditions imposed by FERC. The ordering of such a hearing in and of itself shall not be considered a material change. However, in the event FERC makes any material change or imposes a material new condition unacceptable to any Party, the Parties shall promptly enter into good faith negotiations in an attempt to achieve a mutually agreeable modification to this Agreement to address any such material change or material new condition. The Parties agree to work diligently to obtain timely acceptance of this Agreement and all of its provisions by FERC, and agree that the NCPA Parties shall be entitled to prior review of PG&E's initial filing with FERC seeking acceptance of this Agreement for filing.

### **5.3 Termination**

This Agreement shall terminate on the earliest of: (i) the occurrence of the fifth anniversary of the Effective Date or the tenth anniversary of the Effective Date if the Parties have agreed to such five-year extension by no later than the fourth anniversary of the Effective Date, where NCPA is authorized by the NCPA Member Customers to act on their behalf regarding such five-year extension; or (ii) the end of the 12th month following the date on which a Party gives the other Parties written notice that this Agreement shall be terminated, which notice shall not be given prior to the fourth anniversary of the Effective Date; or (iii) as provided in Section 10, 15, or 21. Notwithstanding the provisions of Section 5.3, if an NCPA Member Customer provides written notice to the other Parties to terminate the Agreement on the end of the 12th month following the date on which the NCPA Member Customer provides such written notice, the Agreement shall remain in full force and effect as to the remaining Parties. In addition, PG&E may give notice of termination to one NCPA Member Customer without terminating the agreement as to NCPA or any other NCPA Member Customers.

## **6 INTERCONNECTIONS**

Transfer of electric power between the Electric Systems of PG&E and the NCPA Parties shall occur at the Point(s) of Interconnection identified in Appendix A.

## **6.1 Interconnection Capacity**

Interconnection Capacity is determined by engineering studies that consider the physical rating of all equipment installed within the Interconnection Facilities at the Points of Interconnection. The E&O Committee shall periodically review the Interconnection Capacity to ensure that it is sufficiently maintained throughout the term of this Agreement. Unless otherwise agreed by the E&O Committee, any required engineering studies shall be performed by PG&E and the NCPA Parties or an engineering professional acting on behalf of the NCPA Parties, and reviewed with the E&O Committee. The Parties shall cooperate by providing any information necessary for such studies.

## **6.2 Establishing or Modifying Point(s) of Interconnection**

Whenever NCPA or an NCPA Member Customer decides to add or modify a Point of Interconnection at transmission voltage, 60 kV or more, it shall so notify the CAISO, in accordance with the CAISO Tariff, and PG&E, in accordance with the PG&E TO Tariff. Upon PG&E's receipt of such notice, the Parties shall follow the procedures described in Sections 8 through 10 of the PG&E TO Tariff. Regarding disputes that might arise under this Section 6, if the PG&E TO Tariff conflicts with Section 22 of this Agreement, the PG&E TO Tariff shall govern.

If NCPA or an NCPA Member Customer decides to either modify or add a Point of Interconnection at distribution voltage, less than 60 kV, it shall so notify PG&E in accordance with the requirements of the PG&E WD Tariff. Upon PG&E's receipt of such notification, PG&E shall follow the applicable procedures and requirements of the PG&E WD Tariff to determine what Upgrade Facilities, if any, shall be required. Upgrade Facilities required for the addition or modification of a Point of Interconnection at distribution voltage shall be accomplished pursuant to the requirements of the PG&E WD Tariff. Regarding disputes that might arise under this Section 6 as related to service under PG&E WD Tariff, if the PG&E WD Tariff conflicts with Section 22 of this Agreement, the PG&E WD Tariff shall govern.

### **6.3 New Interconnection Facilities and Upgrades**

If Upgrade Facilities are needed as a result of a NCPA or NCPA Member Customer notice to add or modify a Point of Interconnection pursuant to this Section 6, then PG&E, NCPA, and, if applicable the Member Customer issuing the notice shall meet and confer on a mutually acceptable plan to complete the Upgrade Facilities. The Cost responsibility for Upgrade Facilities required as a result of NCPA's or an NCPA Member Customer's notice to add or modify a Point of Interconnection shall be determined based on the provisions of Section 8.1.2 of the PG&E TO Tariff or Section 15 of the PG&E WD Tariff, as applicable, and Appendix C of this Agreement.

Any dispute regarding the actual capability of the existing transmission, distribution, or Interconnection Facilities, or the need for Upgrade Facilities, that will support the new or upgraded Point of Interconnection, or how the Cost responsibility for the necessary Upgrade Facilities should be allocated, shall be resolved through the dispute resolution procedures as set forth in Section 22.

### **6.4 Construction Plan and Agreement**

Unless otherwise provided under the PG&E TO or WD Tariffs, or otherwise agreed to by the Parties, within thirty (30) calendar days after completion of a Facility Study as provided in the PG&E TO Tariff, NCPA or an NCPA Member Customer shall notify PG&E if it intends to proceed with the Upgrade Facility. PG&E, NCPA, and, if applicable, the notifying NCPA Member Customer shall then meet and confer on a mutually acceptable plan to complete the Upgrade Facility. If the conferring Parties reach agreement on a plan for construction or installation of an Upgrade Facility, including responsibility for payment of the applicable Cost, those Parties shall enter into a separate agreement pursuant to Appendix C. If the conferring Parties fail to reach such agreement, the matter should be resolved through the dispute resolution provisions in Section 22.

### **6.5 Test Period for Interconnection**

The Parties shall cooperate in the testing of the Point(s) of Interconnection and of the Parties' Interconnection Facilities before they go into operation.

## 7 BALANCING AUTHORITY AREA ARRANGEMENTS

All transmission, distribution and generation facilities within a Party's Electric System shall at all times during the term of this Agreement be within a Balancing Authority Area and operated in accordance with Balancing Authority Area Arrangements. After a Party has had a reasonable opportunity to obtain or re-establish operation in a Balancing Authority Area or make the necessary Balancing Authority Area Arrangements, failure by a Party to operate in a Balancing Authority Area and to operate its Electric System in accordance with, and to maintain in effect, Balancing Authority Area Arrangements, shall be deemed a material breach of this Agreement and just cause for termination and disconnection of the Agreement as to such Party. If any Party operates without being located in an established Balancing Authority Area or without Balancing Authority Area Arrangements in effect, that Party shall fully indemnify and make whole the other Parties for any penalties, fees or costs imposed or other damages caused to those Parties.

Each Party shall act as its own Scheduling Coordinator or employ a Scheduling Coordinator to act for it. No Party shall have any obligation under this Agreement to serve as Scheduling Coordinator for another Party or take on any other role in which it acts on behalf of another Party as to its Party's transactions.

PG&E has and will have in effect various existing agreements with the Balancing Authority in which its Electric System is located. These agreements include, but are not limited to, the Transmission Control Agreement, the Transmission Owner Tariff, Scheduling Coordinator Agreements, Operating Agreement, and Utility Distribution Company Operating Agreement, all of which enable PG&E to satisfy the obligations of operating within the CAISO's Balancing Authority Area. This Agreement is subject to PG&E's obligations and responsibilities under those agreements, and in the event of any inconsistency between those agreements and this Agreement, the former shall control. NCPA and the NCPA Member Customers have and will have in effect various existing agreements with the Balancing Authority in which their Electric Systems are located. These agreements include, but are not limited to, the Scheduling Coordinator Agreement and NCPA MSS Agreement with the CAISO, the Operating Agreement, and such agreements qualified as Balancing Authority Area Arrangement that may be needed by

the CAISO for operation of the Balancing Authority Area. This Agreement is subject to the NCPA Party's obligations and responsibilities under those agreements, and in the event of any inconsistency between those agreements and this Agreement, the former shall control.

## **8 SYSTEM PLANNING COORDINATION**

Pursuant to the CAISO Tariff and Section 8 of this Agreement, PG&E conducts planning studies of its Electric System annually, including the reasonable use of information provided to PG&E pursuant to this Agreement, to identify System Reinforcements or other Modifications of its Electric System necessary to determine the Transfer Capability to reliably serve the expected loads connected to its Electric System, including expected NCPA and NCPA Member Customer loads at Point(s) of Interconnection.

### **8.1 Planning Process**

In order for PG&E to include the effects of growth of the NCPA Parties' Electric System loads in its planning studies, each NCPA Party shall provide PG&E with their respective electric load planning forecast by October 1 of each year. Each NCPA Party shall also provide PG&E with certain network modeling data as required pursuant to Applicable Requirements, including NERC Standards MOD-010 and MOD-12, as such may be revised from time to time. Such electric load planning forecast shall contain the best estimate of its gross Electric System load (actual MW and MWh as measured at the Point of Interconnection plus generation resources internal to the Electric System) and net Electric System load (actual MW and MWh as measured at the Point of Interconnection) for the next five-year period. The initial forecast shall be submitted to PG&E within 30 days of the Effective Date. Both PG&E and the applicable NCPA Party or Parties shall be responsible for participating in planning for the construction of any necessary System Reinforcements as provided in the PG&E TO Tariff Sections 8 through 10. If PG&E disagrees with the electric load planning forecast provided by a NCPA Party, PG&E shall coordinate with NCPA and the impacted NCPA Member Customer, and if necessary, either Party may request that an E&O Committee meeting be scheduled pursuant to Section 9.8.1 to review and discuss PG&E's disagreement with the electric load planning forecast. Nothing in

Section 8 prevents PG&E from using, relying on, or incorporating alternative forecasts in planning studies.

## **8.2 System Reinforcements**

If, as a result of its annual planning review process, PG&E determines, through studies conducted pursuant to the CAISO Tariff, including Section 4.8.1 thereof, and in accordance with PG&E TO Tariff Section 9, that a need exists to construct System Reinforcements that will have a direct effect on NCPA or an NCPA Member Customer, PG&E shall inform NCPA and, if applicable, the affected NCPA Member Customer through a notice pursuant to Section 31. Those Parties shall then follow the applicable procedures of the PG&E TO Tariff Sections 8 through 10.

## **9 OPERATING PROVISIONS**

### **9.1 Good Utility Practice and Applicable Requirements Obligation**

Each Party shall operate pursuant to this Agreement in accordance with Good Utility Practice and in compliance with Applicable Requirements of federal, state, and local laws, licenses, and permits. Each Party shall plan and operate its respective Electric System in accordance with Good Utility Practice and endeavor to minimize electrical disturbances on the Electric System of the other Party. No Party shall be obligated to operate in a manner contrary to Good Utility Practice. When satisfying its obligations pursuant to this Agreement, a Party shall in good faith, take all reasonable actions required to satisfy its obligations in accordance with Good Utility Practice and Applicable Requirements to timely avoid or mitigate Adverse Impacts to another Party's Electric System.

### **9.2 General**

The Parties agree to coordinate the operations of their respective Electric Systems so as to avoid or minimize any Adverse Impacts to another Party's Electric System in accordance with Balancing Authority Area Arrangements.

### **9.3 Power Delivery and Quality Standard**

Power delivered is commonly designated as three-phase alternating current, at nominal 60 Hertz, and at the nominal voltage described in Appendix A for each Point of Interconnection. Voltage and frequency fluctuations under system normal operation conditions shall be permitted consistent with Good Utility Practice.

Each Party shall plan, design, and operate its Electric System so as to minimize the interchange of reactive power at the Point(s) of Interconnections.

### **9.4 Coordination Of Operations**

The Parties shall at all times coordinate and communicate their planned and unplanned outages and other switching operations that may have an effect on the operations of another Party's Electric System and may reasonably be required to protect the integrity of the Balancing Authority Area during System Emergencies.

PG&E, NCPA, and the NCPA Member Customers are also responsible for maintenance and switching operations of their Electric Systems. All Parties may from time to time remove various elements of their Electric Systems from operation or initiate other actions that may affect operations or transfer of energy across Point(s) of Interconnection.

The Parties shall coordinate their activities in the operation and maintenance of their Electric Systems in order to avoid or minimize any adverse effects of those activities on each other.

### **9.5 Relationship To Balancing Authority Area Operations**

The Parties currently operate in the CAISO Balancing Authority Area. In the event that a Party makes any changes that significantly or materially affect its relationship with the CAISO, including, but not limited to, interconnecting its Electric System with a non-CAISO Balancing Authority Area, the Party making the change shall give a minimum of 30 days' notice to the other Parties.

## **9.6 Separate Balancing Authority Area**

Nothing in this Agreement shall prevent or limit any Party from interconnecting with, joining or forming a new Balancing Authority Area. In such event, this Agreement shall be revised as appropriate to reflect such change in Balancing Authority Area operations.

## **9.7 Reporting Significant Events**

Each Party shall promptly, after reporting to the Balancing Authority, report to the other Parties any System Emergency or other significant operating event reasonably likely to affect operation of the other Party's Electric System at each Point(s) of Interconnection. For notice to PG&E, such notice shall be by telephone to PG&E's Transmission Operations Center personnel or to a PG&E substation or switching center as may be designated by PG&E. For notice to NCPA or an NCPA Member Customer, such notice shall be by telephone to NCPA's Control Center, or as otherwise designated by NCPA or the NCPA Member Customer. Each Party, upon request and on a case-by-case basis for reasonable cause related to operating conditions, shall, in a timely manner, provide Electric System operating information, such as loading on lines and equipment and levels of operating voltages and electric power factors. In the event of an interruption(s), including but not limited to, power quality events, of electric service at any Point of Interconnection, the Party causing the interruption shall report, in a timely manner, to the affected Party or Parties the nature and suspected cause of the event, actions being taken to restore electric service, and the estimated time until restoration of electric service. Within 30 days following the restoration of electric service to the affected Parties, the Party causing the interruption shall provide a written report to the affected Parties identifying the cause of the interruption, and what preventive actions may be taken in the future to mitigate further interruptions in electric service to the affected Parties.

## **9.8 Engineering And Operating Committee**

The Parties shall establish an Engineering and Operating (E&O) Committee. This "E&O Committee" shall jointly develop and modify, as necessary, operating procedures and engineering planning matters required to implement this Agreement. The E&O Committee shall consist of one representative designated in writing by each Party. Each Party shall also designate

an alternate who may act instead of a representative at the option of that Party, and an NCPA Member Customer may designate NCPA to act as its alternate. Any Party may at any time change its representatives or alternate on the E&O Committee and shall promptly notify the other Parties of any change in designation. Any representative, by written notice to the other Parties, may authorize its alternate to act temporarily in its place. Each member of the E&O Committee may invite other members of its organization or others, as its advisors, to attend meetings of the E&O Committee.

The E&O Committee shall establish procedures for the coordination and operation of the Parties' Electric Systems, including, but not limited to, providing for the coordination of maintenance schedules and operation of the Parties' Electric Systems as may be required to maintain the reliability and power quality of the interconnected Electric Systems, minimize outages, reduce losses, maintain voltage levels, and minimize reactive interchanges. The E&O Committee shall also be responsible for examining and making recommendations to the Parties for Upgrade Facilities in order to:

- (i) ensure that the Point(s) of Interconnection are operated in accordance with Good Utility Practice;
- (ii) determine necessary additions or modifications to equipment or operating procedures to ensure that the Parties' Electric System reliability and service to its customers will not be adversely affected;
- (iii) determine the studies that need to be performed and the manner in which the Cost of such studies shall be allocated unless the CAISO Tariff, PG&E TO Tariff or PG&E WD Tariff provides otherwise; and
- (iv) make recommendations for the allocation of Costs associated with the Upgrade Facilities unless the CAISO Tariff, PG&E TO Tariff or PG&E WD Tariff provides otherwise.

### **9.8.1 E&O Committee Meetings**

Any Party may call for a meeting of the E&O Committee upon reasonable advance notice to the other Parties. A written agenda incorporating any items proposed by the requesting Party shall be exchanged in advance of such meetings to the affected Parties. The meeting shall be timely scheduled, and the affected Parties shall select a meeting date that is mutually acceptable to the Parties. Meetings may be conducted in person, by telephone or by any other agreed-upon method. Meeting minutes shall be kept to document the discussions and outcome of the meetings, and such meeting minutes are to be distributed to the Parties.

### **9.8.2 E&O Committee Expenses**

The expenses of the members of the E&O Committee, their alternates and advisors shall be borne by the Party they represent. Expenses incurred by the E&O Committee in addition to those herein above mentioned shall be shared in a just and reasonable manner agreed to by the Parties. The sharing of such expenses shall be agreed to prior to the time that such additional expenses are incurred.

### **9.8.3 E&O Committee Authority**

The E&O Committee shall have no authority to modify any of the provisions of this Agreement. All actions, recommendations and reports shall become effective when signed, or otherwise approved, by all members of the E&O Committee and if necessary, referred to the Parties' respective management. Each Party's representatives shall be afforded ample time to review relevant details prior to finalizing any action, recommendation or report and may request up to 30 days to review the material to be acted upon.

## **9.9 Settlement of Disputes and Arbitration**

The Parties agree to make best efforts to settle all disputes under this Agreement between the Parties as a matter of normal business practice under this Agreement. Any unresolved disputes shall be resolved through the dispute resolution procedure set forth in Section 22.

### **9.10 Protective Devices**

Each Party shall, consistent with CAISO requirements and Good Utility Practice, install, modify, set and adjust any required protective relaying equipment associated with facilities within its respective Electric System at their own expense. Such settings, adjustments or replacement shall be consistent with settings, adjustments or replacement made by PG&E to PG&E's protective relaying equipment. The NCPA Parties shall install, modify, set, adjust or replace protective relaying equipment located within their respective Electric Systems in the event that such is required by PG&E's Modification of PG&E's Electric System consistent with CAISO requirements. Such changes shall be reviewed by the E&O Committee, unless otherwise agreed to by the affected Parties. The Parties shall exchange relay settings and fault duty information on a routine basis as agreed upon by the Parties.

### **9.11 Requirements for NCPA or NCPA Member Customer Operated Generators Connected to PG&E**

NCPA or an NCPA Member Customer shall enter into a generator interconnection-type agreement with PG&E substantially consistent with CAISO's Generation Interconnection Agreement, consistent with NCPA's MSS Agreement, and consistent with Section 6 of this Agreement for each new generating facility operated by NCPA or an NCPA Member Customer, which is connected to PG&E's Electric System at voltages of 60 kV or greater. NCPA or an NCPA Member Customer shall enter into a generator interconnection-type agreement with PG&E substantially consistent with PG&E's Generator Interconnection Agreement under the PG&E WD Tariff, consistent with NCPA's MSS Agreement and consistent with Section 6 of this Agreement for each new generating facility operated by NCPA or an NCPA Member Customer, which is connected to PG&E's Electric System at voltages of less than 60 kV. This section 9.11 does not apply to NCPA or NCPA Member Customer generating facilities not connected to PG&E's Electric System. The Parties will transition existing Special Facilities Agreements with PG&E to the appropriate Generator Interconnection Agreement, but this change is not intended to alter the rights or obligations of the Parties under the existing agreements.

## **9.12 Continuity Of Service**

### **9.12.1 Operation Actions To Maintain Continuity**

Each Party shall take actions that are reasonable and consistent with Balancing Authority Area Arrangements as necessary to maintain continuity of service between the Parties. Such actions may include, but are not limited to, opening or closing circuit breakers or other components of the interconnections.

### **9.12.2 Unscheduled Interruptions**

A Party may temporarily interrupt or reduce any service, or temporarily separate all or any part of the facilities of its Electric System from another Party's Electric System to implement CAISO operating orders and their respective Balancing Authority Area Arrangements or Good Utility Practice at any time that: (i) a System Emergency exists, provided that if the unscheduled interruption is not undertaken pursuant to a CAISO operating order (a) such interruption, reduction of service or separation is necessary to remedy the System Emergency, and (b) the duration of such interruption, reduction of service or separation will be limited to as short a time period as reasonable under the circumstances; (ii) the action is necessary to prevent a hazard to life or property; or (iii) the operation of the Party's Electric System is suspended, interrupted or interfered with as a result of an Uncontrollable Force. Reasonable effort shall be made to coordinate any such interruption and such interruption will be immediately communicated to the affected Party. In the event of such interruption or reduction in service, the Parties shall restore full service on a basis comparable to the restoration of other public service and safety facilities and consistent with their respective Balancing Authority Area Arrangements.

### **9.12.3 Scheduled Interruptions**

All scheduled interruptions of service shall be made as mutually agreed to by the Parties and in accordance with Balancing Authority Area Arrangements and Good Utility Practice. The Parties shall provide a minimum of 72 hours advance notice of any such interruption, reduction or separation, and its estimated duration.

#### **9.12.4 Interruption By Protective Devices**

The Parties utilize automatic protective devices in order to assist in maintaining the integrity and reliability of their respective Electric Systems and to protect their customers from damage, injury or prolonged outages. Service on the Parties' Electric Systems is subject to interruption in the event of operation of such devices. In the event of such interruption, service will be restored consistent with Good Utility Practice and Balancing Authority Area Arrangements. In addition, the Parties shall coordinate such restoration and all installations, upgrades, and replacements of protective devices at Point(s) of Interconnection.

#### **9.12.5 Jeopardy**

If at any time continuity of service within the CAISO Balancing Authority Area is being jeopardized due to failure of facilities, the Parties shall coordinate their responses to the situation in order to implement CAISO operating orders in accordance with their respective Balancing Authority Area Arrangements, Good Utility Practice, and any relevant standard promulgated by NERC or another body authorized to promulgate such standards. Such coordination may include the reduction of load; provided, except as otherwise set forth in the Parties' Balancing Authority Area Arrangements, such reduction shall maintain, as far as may be practicable, the relative sizes of load served by each Party in the same proportion as existed before such reduction so that no one Party is required to reduce its load disproportionately.

Any Party may also temporarily interrupt or reduce deliveries to Points of Interconnection or separate all or a part of the facilities of its Electric System from all or a part of the Electric System of another Party, or the Electric System that directly or indirectly serves another Party, if the first Party determines that the following conditions exist or that the described action is necessary: (i) a System Emergency; (ii) in order to install equipment on, make repairs or replacements to, make investigations and inspections of, or perform maintenance or other work on a Party's Electric System; (iii) to prevent a hazard to life or property; (iv) as necessitated by Good Utility Practice; or (v) where the operation of a Party's Electric System is suspended, interrupted or interfered with as a result of Uncontrollable Force. The Parties understand and agree that load curtailment under such circumstances should be coordinated among PG&E, NCPA, the relevant NCPA Member Customer(s) and the CAISO based upon the

CAISO Tariff and any Balancing Authority Area Arrangements entered into between the Parties and the CAISO. The Parties shall endeavor to provide notice to the affected Party prior to such interruptions or reductions of deliveries, and such interruptions or reductions of deliveries shall be minimized and implemented after all other practical remedies have been exhausted.

### **9.13 Operating Records**

Each Party shall maintain operating records in accordance with Good Utility Practice. Each Party shall have reasonable access to such operating records kept by another Party which reasonably relate to interconnected operation of the Parties' Electric Systems; provided, that if requested to do so by the other Party, a Party requesting such records shall be required to keep such records confidential pursuant to Section 9.14. Such records shall include, but not be limited to, operating logs, scheduled transfers through each Point of Interconnection, line loadings, outage and power quality reports, voltages and reactive power.

### **9.14 Confidentiality**

The Parties anticipate that during the course of the Parties' relationship under this Agreement, they will at times supply copies of confidential or proprietary information to each other, including information that should be kept confidential from and not disclosed to certain departments within a Party (e.g., transmission planning information that cannot be disclosed to marketing personnel) or to Third Parties, including the public. If PG&E supplies confidential information to NCPA and/or one or more NCPA Member Customers, or NCPA or one or more NCPA Member Customer supplies confidential information to PG&E, it is the responsibility of the supplying Party to inform the receiving Party that such information is confidential and to label or otherwise mark each confidential document or electronic file "CONFIDENTIAL". It shall be the responsibility and obligation of the receiving Party to maintain the confidentiality of such information in accordance with the supplying Party's reasonable instructions, and to not disclose information designated confidential to any Third Party or entity to whom disclosure is prohibited under applicable regulations (e.g., the FERC Standards of Conduct), unless required to do so by law.

If a Party (“Receiving Party”) receives a request from a Third Party, whether under the California Public Records Act, California Government Code Sections 6250-6270, as amended, or otherwise, for access to, or inspection, disclosure or copying of, any of the other Party’s (the “Supplying Party”) confidential data or information (“Disclosure Request”), then the Receiving Party shall provide notice to and a copy of the Disclosure Request to the Supplying Party within three (3) business days of receipt of the Disclosure Request. Within three (3) business days of receipt of such notice, the Supplying Party shall provide notice to the Receiving Party either:

- (a) that the Supplying Party believes there are reasonable legal grounds for denying or objecting to the Disclosure Request, and the Supplying Party requests the Receiving Party to deny or object to the Disclosure Request with respect to identified confidential information. In such case, the Supplying Party will either defend the denial of the Disclosure Request at its sole Cost (with reasonable assistance by the Receiving Party), or it shall indemnify the Receiving Party for all Costs associated with denying or objecting to the Disclosure Request. Such indemnification by the Supplying Party of the Receiving Party shall include all of the Receiving Party’s Costs reasonably incurred with respect to denial of or objection to the Disclosure Request, including but not limited to Costs, penalties, and the Receiving Party’s attorneys’ fees; or
- (b) that the Supplying Party shall agree that the Receiving Party may grant the Disclosure Request without any liability by the Receiving Party to the Supplying Party.

## **10 SIGNIFICANT REGULATORY OR OPERATIONAL CHANGE**

The procedures set forth in this Section 10 shall apply in the event of a Significant Regulatory Change or a Significant Operational Change as described below.

### **10.1 Significant Regulatory Change**

A “Significant Regulatory Change,” as this term is used in this Section 10, shall be deemed to occur if FERC, the CPUC, the CAISO or any other court, public authority,

governmental, or other lawfully established civilian authorities having jurisdiction, issues an order or decision or adopts or modifies a tariff or filed contract, or enacts a law that materially interferes with the ability of any Party to perform any of its obligations under this Agreement.

## **10.2 Significant Operational Change**

A “Significant Operational Change,” as this term is used in this Section 10, shall consist of any of the following: (i) a Party making a new interconnection of its Electric System with the Electric System of a Third Party, including any generation, that would have an Adverse Impact on the operation of another Party’s Electric System; (ii) installation, operation, termination, or expansion by a Party or a Third Party of a generation facility within any Party’s Electric System where power or energy from such generation is intended to or may possibly flow through a Point of Interconnection and create an Adverse Impact on another Party’s Electric System; (iii) a Long-Term Change to Operations; (iv) any other operational change proposed by a Party that could reasonably be expected to create an Adverse Impact on another Party’s Electric System; (v) material amendments and/or revisions to any tariffs, contracts or other applicable documents referenced in this Agreement that directly affect a Party’s obligations under this Agreement, including, but not limited to, the CAISO Tariff, PG&E’s TO Tariff or PG&E’s WD Tariff; or (vi) an action taken by the Balancing Authority that may have a material detrimental impact on the way a Party operates or must operate its Electric System or the Points of Interconnection between the Parties.

## **10.3 Change in Functions or Scope**

The Parties recognize that there may be a change in the functions performed by the CAISO or in the scope of the facilities under the operational control of the CAISO, or the replacement of the CAISO with a Regional Transmission Organization that may perform different functions or have a different scope than the CAISO as of the Effective Date. Such a change shall not be deemed to be a Significant Regulatory Change unless the conditions described in Section 10.1 and 10.2 of this Agreement are satisfied. Any transfer from PG&E to the CAISO of any functions contemplated in this Agreement can be a Significant Regulatory Change if the conditions described in Section 10.1 and 10.2 of this Agreement are satisfied.

#### **10.4 Notification of Significant Regulatory or Operational Change**

At any time during the term of this Agreement, if any Party anticipates the occurrence of a Significant Regulatory Change that may reasonably be expected to create an Adverse Impact on any Parties' obligations or operations under this Agreement or Significant Operational Change, such Party shall provide written notice to the affected Parties as soon as practicable. The notice shall contain a description of the change, including expected time schedules, and of the effect of the significant change to the affected Party's Electric System. If the Party giving notice believes that it will be necessary to amend this Agreement to address the anticipated change, then the notice to the other Party may include a proposal that the Parties meet to negotiate an appropriate amendment to this Agreement. The Parties shall promptly enter into good faith negotiations and attempt to achieve a mutually agreeable modification to this Agreement to address any such significant change. If a Party is uncertain as to whether a proposed change might be Significant or might create an Adverse Impact, or if it wishes to have certainty under Section 10.8 before proceeding, the Party should also give notice to the potentially Affected Party as soon as practicable. Notwithstanding the foregoing, where the potential Significant Operational Change is studied in or is the result of the CAISO generator interconnection process ("CAISO Generator Change"), a Party is not obligated to give notice under this Section 10.4, provided that the Parties are notified in writing of the CAISO Generator Change in accordance with the CAISO Tariff in reasonable time to allow the other Parties the opportunity to express concerns and to provide information to the study conducted in accordance with the CAISO generator interconnection planning process.

#### **10.5 Amendment of Agreement**

If the Parties agree that an amendment to this Agreement is necessary to address a Significant Regulatory Change or a Significant Operational Change, the Parties will proceed to negotiate such amendment. If the Parties have not reached agreement within 60 calendar days of the date of the first meeting, any unresolved issues may be submitted for resolution through the dispute resolution procedures set forth in Section 22; provided that all Parties agree to such procedures. After the 60-day period stated above, any Party may, but is not required to, unilaterally initiate an appropriate proceeding respecting this Agreement with FERC pursuant to

Sections 205 or 206 of the FPA, which proceeding could include a request for termination of this Agreement, and another Party may exercise its rights under the FPA to protest or oppose such filing. In the event of filing for termination, PG&E shall make an appropriate regulatory filing of a replacement agreement such that the replacement agreement is effective contemporaneously with the termination date of this Agreement.

### **10.6 Studies of Significant Operational Change**

The Party receiving notice of a Significant Operational Change will respond to the Party submitting such notice within 30 days. If the Party receiving such notice believes that there will be no Adverse Impact resulting from the Significant Operational Change, it shall so state. If the Party receiving notice of a Significant Operational Change believes that the proposed change may reasonably be expected to have an Adverse Impact on the operation of its Electric System, it may request a study of any such Significant Operational Change to determine the potential for any Adverse Impacts and any potential avoidance or mitigation measures thereto. The affected Parties shall cooperate in determining the scope of the study and how the study should be conducted, and shall cooperate to provide information necessary to conduct such a study in a timely manner. NCPA may, at its sole discretion, act on behalf of a NCPA Member Customer and participate in determining the scope of the study and how the study should be conducted if NCPA is not an affected Party. To the extent studies are required, those studies will be performed in a reasonable period of time.

If it is determined, based on the results of the study, that, in addition, a Facility Study or System Impact Study is required, such study shall be performed within the time and in the manner specified in Section 10 of the PG&E TO Tariff and as agreed by the Parties. All study Costs associated with a proposal shall be the responsibility of the Party whose proposal or actions will cause the Significant Operational Change, or will be split into two equal shares by (1) PG&E and (2) the NCPA Parties if the CAISO is the entity that causes or will cause the change; provided, that such Costs may be paid by a responsible Third Party and that NCPA Parties shall be responsible for dividing their share of such Costs among themselves. Any disputes over the necessity of particular studies or the Cost of such studies shall be resolved through the dispute resolution procedures set forth in Section 22 unless the dispute resolution

procedures of the PG&E TO Tariff or the PG&E WD Tariff apply. Upon completion of necessary studies, the Parties will each review the study results and discuss any recommendations for avoidance and/or mitigation of Adverse Impacts.

### **10.7 Mitigation And Costs**

Unless otherwise agreed by the Parties, the Party whose proposal or action causes the Significant Operational Change (“Modifying Party”) shall be responsible for avoiding or fully mitigating an Adverse Impact to the Electric System of an affected Party (“Affected Party”), and to the extent Adverse Impacts cannot be avoided or fully mitigated, fully compensating the Affected Party for all Costs incurred pursuant to the Adverse Impact; provided, that such Costs may be paid by a responsible Third Party. Any reasonable Cost incurred by the Affected Party in its cooperation with the Modifying Party shall be reimbursed by the Modifying Party. All avoidance or mitigation measures shall be completed before the Significant Operational Change is made. Any dispute regarding the need for, the nature of, or the Cost of mitigating Adverse Impacts or compensating the Affected Party for those Adverse Impacts that cannot be mitigated shall be resolved through the dispute resolution procedures set forth in Section 22.

In the event changes in transmission delivery voltages, relocation of facilities serving Points of Interconnections or other changes in transmission facilities are necessary on PG&E’s side of any Point of Interconnection with NCPA or an NCPA Member Customer because of changes to PG&E’s transmission as a result of Good Utility Practice or CAISO planning requirements, these changes shall be made by PG&E at its expense. For similar changes made to NCPA’s or an NCPA Member Customer’s side of Point(s) of Interconnection, such changes shall be at NCPA’s or the NCPA Member Customer’s expense unless the change is made for PG&E’s benefit and at PG&E’s sole discretion or as otherwise agreed. Such change made at PG&E’s sole discretion shall be submitted to the E&O Committee for its determination of respective long term benefits of such changes, if any. The E&O Committee shall recommend a methodology for allocating the Cost of such changes based on the projected net long-term benefits to each Party. Changes required on PG&E’s side due to any changes made for NCPA’s or an NCPA Member Customer’s benefit and at NCPA’s or an NCPA Member Customer’s sole discretion shall be made at NCPA’s or the NCPA Member Customer’s expense, unless submitted to the E&O

Committee for its determination of an appropriate allocation between the Parties based on projected net long term benefits to each Party.

Notwithstanding the provisions of this Section 10.7, the Modifying Party will not be responsible for their share of any Costs associated with the changes made under this Section that are approved by FERC, or other jurisdictional authority, for inclusion in the Affected Party's Transmission Revenue Requirement for recovery through Access Charges, as provided in Section 26 of the CAISO Tariff. Nothing in the foregoing sentence obligates or requires the Affected Party to seek recovery for any specific Costs in their Transmission Revenue Requirement.

### **10.8 Failure To Notify Of Significant Operational Changes**

Each Party has a duty to provide notice to any Affected Parties of Significant Operational Changes planned for its Electric System that could reasonably be expected to have an Adverse Impact on the Electric System of those Parties. If a Party implements a Significant Operational Change without providing such notice, the Affected Party shall have the right to open any affected Point(s) of Interconnection if, in its judgment, it is necessary to protect the integrity of its Electric System, and the right to file with FERC under Sections 205 or 206 of the FPA seeking appropriate relief, including, but not limited to, amendment or termination of this Agreement, except that the termination of this Agreement by an NCPA Member Customer will not be deemed to terminate this Agreement as to NCPA or any other NCPA Member Customer.

## **11 INSTALLATION AND ACCESS**

Where it is necessary for any Party to install any of its facilities on another Party's premises in order to accomplish the Interconnection or otherwise to perform the duties contemplated by this Agreement, the Parties hereby grant to each other, subject to any legal and regulatory requirements for any specific installation, for the term of this Agreement: i) the right to make such installation along the mutually agreed route (subject to each Party's right to protect its operations or that of its customers in its Service Area) of sufficient width to provide full legal clearance from all structures on such property; and ii) access to each Party's premises upon

reasonable notice and at reasonable hours for any purposes reasonably connected with this Agreement.

No Party shall be allowed or obligated to install such facilities unless and until all necessary licenses, permits, certificates, or other governmental authorizations or approvals that may be necessary are obtained and any necessary easements for the installation of facilities are granted. Electric facilities belonging to one Party that are installed on another Party's premises will be relocated only with the agreement of the owner of such facilities, which shall not be unreasonably withheld. The requesting Party shall pay the Cost, if any, of any such facility relocation. If such Costs are FERC jurisdictional, PG&E shall request and obtain FERC acceptance to assess such Costs prior to collection.

## **12 METERING**

### **12.1 Delivery Meters**

All real and reactive power deliveries shall be metered at each Point of Interconnection with meters meeting the requirements of: (i) the CAISO Tariff for interconnections at 60 kV and above; and (ii) the PG&E WD Tariff for interconnections below 60 kV. Any conflicts with regard to metering standards that may arise between this Agreement, the PG&E WD Tariff, or the CAISO Tariff shall be resolved consistent with the applicable tariff. Power deliveries shall be metered at delivery voltages described in Appendix A. At a minimum, the Responsible Meter Party shall meter all power flowing across each Point of Interconnection in either direction. The Parties shall cooperate in the installation and provision of access to the meters, as necessary for each Party to obtain the information needed to perform as contemplated under this Agreement.

### **12.2 Requirements For Meters And Meter Maintenance**

The Responsible Meter Party is obligated to install and maintain metering equipment, including where necessary RTUs, in accordance with CAISO standards, at each Point of Interconnection that shall measure and record real and reactive power flows and shall be capable of recording flows in both directions. Such "in" and "out" meters shall be designed to prevent reverse registration and measure and continuously record such deliveries.

### **12.3 The NCPA Parties' Obligation To Provide Meter Data To PG&E**

NCPA and the NCPA Member Customers, pursuant to the NCPA MSS Agreement, subject to any exemptions granted by the CAISO, supplies the CAISO with both telemetry and settlement quality meter data for each Point of Interconnection. The telemetry data includes generator status, voltage and energy output. NCPA or an NCPA Member Customer will be the Responsible Meter Party for each meter and will grant PG&E access to the same metering data in accordance with the NCPA MSS Agreement. NCPA or an NCPA Member Customers shall also grant PG&E access to metering data that is supplied to the CAISO in accordance with the NCPA MSS Agreement that is associated with generating units interconnected to the Electric System of NCPA or an NCPA Member Customers. NCPA or an NCPA Member Customer will reasonably cooperate with PG&E to ensure that PG&E can successfully access metering data under this Section 12.3. Should the NCPA MSS Agreement terminate for any reason, the Parties shall cooperate in determining an alternative method for supplying PG&E the same level of access to data as it had under the NCPA MSS Agreement and this Agreement.

In addition, where there is real-time telemetry of NCPA or NCPA Member Customer generation facilities and transmission interconnections of one (1) MW or larger, NCPA and/or NCPA Member Customers shall provide PG&E with the available real-time telemetry via the existing PG&E to NCPA Inter-Control Center Protocol ("ICCP") data link.

### **12.4 Consequences of Failing to Provide Meter Data**

In the event that the Responsible Meter Party fails to provide to PG&E access to available meter data in accordance with Section 12.3, PG&E shall be entitled to make reasonable assumptions necessary for the operation of its transmission system. The assumptions shall be based on reasonably available information including, but not limited to, records of historical usage, available data and meter readings and general characteristics of NCPA or the NCPA Member Customers' operation and facilities.

### **12.5 Periodic Meter Testing**

All meters necessary to operate each Point of Interconnection shall be installed, tested, and maintained in accordance with the CAISO Tariff and Good Utility Practice, and shall be

tested periodically by the Party owning the meter, at intervals consistent with the CAISO Tariff, and at any other reasonable time upon request by PG&E (if an NCPA Party) or NCPA or an NCPA Member Customer (if PG&E). Meters shall be sealed and the seals shall be broken only upon occasions when the meters are to be inspected, tested, or adjusted, and representatives of PG&E (if an NCPA Party) or the NCPA Parties (if PG&E) shall be afforded reasonable opportunity to be present upon such occasions. Notwithstanding a Party's obligation to afford reasonable opportunity for other Parties to be present for meter inspections, testing or adjustments, if metering equipment that is used to collect settlement qualify data requires immediate maintenance or repair, such maintenance or repair may be completed by the owning Party at its sole discretion.

### **13 BILLING AND PAYMENT**

PG&E shall bill NCPA and/or an NCPA Member Customer, and NCPA and/or an NCPA Member Customer shall pay any amounts owed to PG&E pursuant to this Agreement in accordance with Appendix D. NCPA and/or an NCPA Member Customer shall bill PG&E, and PG&E shall pay any amounts owed to NCPA and/or an NCPA Member Customer pursuant to this Agreement, where Sections D.1 through D.9 of Appendix D shall hereto apply to PG&E's payment obligations to NCPA and/or an NCPA Member Customer, substituting "NCPA" and/or "NCPA Member Customer" for "PG&E", respectively, in accordance with Appendix D.

### **14 ACCOUNTING**

#### **14.1 Accounting Procedures**

The Parties shall record relevant Cost(s) and maintain accounting records in accordance with generally accepted accounting practices and as to PG&E the FERC Uniform System of Accounts.

#### **14.2 Audit Rights**

For good cause and upon reasonable notice, each Party shall have the right to audit, at its own expense, the relevant records of PG&E (if an NCPA Party) or NCPA or an NCPA Member Customer (if PG&E) for the limited purpose of determining whether the other Party is meeting

its obligations under this Agreement. Such audits shall be limited to only those records reasonably required to determine compliance with this Agreement, and each Party agrees to disclose the information obtained in such audit only to those persons, whether employed by such Party or otherwise, that are directly involved in the administration of this Agreement and that are permitted to have access to such information under applicable regulations, including the FERC Standards of Conduct. Each Party agrees that under no circumstances will it use any information obtained in such an audit for any commercial purpose or for any purpose other than assuring enforcement of this Agreement. The right to audit shall be limited to data for two prior years from the date of the final billing for a matter or from the date of the questioned event, as applicable.

## **15 ADVERSE DETERMINATION OR EXPANSION OF OBLIGATIONS**

### **15.1 Adverse Determination**

If, after the Effective Date of this Agreement, FERC or any other regulatory body, agency or court of competent jurisdiction determines that all or any part of this Agreement, its operation or effect is unjust, unreasonable, unlawful, imprudent or otherwise not in the public interest, each Party shall be relieved of any obligations hereunder to the extent necessary to comply with or eliminate such adverse determination. The Parties shall promptly enter into good faith negotiations in an attempt to achieve a mutually agreeable modification to this Agreement to address any such adverse determination.

### **15.2 Expansion Of Obligations**

If, after the Effective Date of this Agreement, FERC or any other regulatory body, agency or court of competent jurisdiction orders or determines that this Agreement should be interpreted, modified, or significantly extended in such a manner that a Party may be required to extend its obligations under this Agreement to a Third Party, or to incur under this Agreement significant new or different obligations to another Party or to Third Parties not contemplated by this Agreement, then the Parties shall be relieved of their obligations to the extent lawful and necessary to eliminate the effect of that order or determination, and the Parties shall attempt to renegotiate in good faith the terms and conditions of the Agreement to restore the original

balance of benefits and burdens contemplated by the Parties at the time this Agreement was made.

### **15.3 Renegotiation**

If, within three months after an order or decision as described in Sections 15.1 and 15.2, the Parties either: (i) do not agree that a renegotiation is feasible or necessary; or (ii) the Parties cannot agree to amend or supersede this Agreement, then: (a) any Party may initiate dispute resolution in accordance with Section 22; (b) PG&E may unilaterally file an amendment to this Agreement or a replacement agreement; or (c) the NCPA Parties may take any action before the FERC or elsewhere which it deems appropriate. The effect of any termination under this Section 15.3, and the rights of the Parties thereunder, shall be as provided in Sections 36 and 37. As used in this Section 15.3, the term "Agreement" includes both this Agreement and any tariff, rate or rate schedule that in whole or in part results from this Agreement.

## **16 ASSIGNMENT**

### **16.1 Consent Required**

No transfer or assignment of the rights, benefits or duties of any Party under this Agreement shall be effective without the prior written consent of the other Parties except as provided herein, which consent shall not be withheld unreasonably; provided, that this Section 16 shall not apply to interests that arise by reason of any deed of trust, mortgage, indenture or security agreement heretofore granted or executed by any Party. No partial assignment of the rights, benefits or duties of any Party shall be permitted under this Agreement unless otherwise agreed to by PG&E (if an NCPA Party) or NCPA and the NCPA Member Customers (if PG&E), except that the NCPA Parties may assign the rights, benefits and duties under this Agreement among themselves at their discretion.

### **16.2 Assignee's Continuing Obligation**

Any successor to or transferee or assignee of the rights or obligations of a Party, whether by voluntary transfer, judicial sale, foreclosure sale or otherwise, shall be subject to all terms and

conditions of this Agreement to the same extent as though such successor, transferee, or assignee were an original Party.

## **17 CAPTIONS**

All indices, titles, subject headings, section titles and similar items are provided for the purpose of reference and convenience and are not intended to affect the meaning of the contents or scope of the Agreement.

## **18 CONSTRUCTION OF THE AGREEMENT**

Ambiguities or uncertainties in the wording of the Agreement shall not be construed for or against any Party.

## **19 CONTROL AND OWNERSHIP OF FACILITIES**

The Electric System of a Party shall at all times be and remain in the exclusive ownership, possession and control of the Party, or licensed or leased to that Party as provided in the applicable arrangement, and nothing in this Agreement shall be construed to give another Party any right of ownership, possession or control of all or any portion of that Electric System. All facilities owned and installed by one Party hereunder shall, unless otherwise agreed by the Parties, at all times be and remain the property of that Party, except that the NCPA Parties may transfer ownership of property among themselves at their discretion.

## **20 COOPERATION AND RIGHT OF ACCESS AND INSPECTION**

Each Party shall give to the others all necessary permission to enable it to perform its obligations under the Agreement. PG&E shall give to the NCPA Parties, and the NCPA Parties to PG&E, the right to have their agents, employees and representatives, on reasonable notice and accompanied by the agents, employees and representatives of the other Party, enter its premises at reasonable times and in accordance with reasonable rules and regulations for the purpose of inspecting the property and equipment of the other Party to the extent necessary and in a manner that is reasonable for assuring the performance of the Parties under the Agreement.

## **21 DEFAULT**

### **21.1 Termination For Default**

If any Party breaches its material obligations under this Agreement, such breach shall constitute an event of default. If any Party defaults under this Agreement, another Party may terminate this Agreement as to the defaulting Party; provided that prior to such termination the non-defaulting Party must provide the defaulting Party with written notice stating: 1) the non-defaulting Party's intent to terminate; 2) the date of such intended termination; 3) the specific grounds for termination; 4) specific actions that the defaulting Party must take to cure the default, if any; and 5) a reasonable period of time, which shall not be less than 60 calendar days, within which the defaulting Party may take action to cure the default and avoid termination, provided there is any action which can be taken to cure the default. Termination shall not become effective without approval by FERC. Application of dispute resolution pursuant to Section 22 with regard to separate disputes shall not be deemed to limit the right to terminate this Agreement under this Section 21.1. Notwithstanding the right of a non-defaulting Party to terminate this Agreement pursuant to Section 21.1, if less than all of the NCPA Member Customers exercise such right, the Agreement shall remain in full force and effect as to the remaining Parties. Nor will the default of one or more NCPA Member Customers allow termination of the Agreement with respect to NCPA itself or the other NCPA Member Customers.

### **21.2 Other Remedies For Default**

The remedy under Section 21.1 is not exclusive and, subject to Section 22, any Party shall be entitled to pursue any other legal, equitable or regulatory rights and remedies it may have in response to a default by another Party.

## **22 DISPUTE RESOLUTION**

The Parties shall make best efforts to resolve all disputes arising under this Agreement expeditiously and by good faith negotiation. Where this Agreement specifically calls for resolution of disputes pursuant to this Section 22, the Parties shall pursue dispute resolution according to the provisions of Appendix B.

## 23 GOVERNING LAW

This Agreement shall be interpreted, governed by and construed under the laws of the State of California, as if executed and to be performed within the State of California.

## 24 INDEMNITY

### 24.1 Definitions

As used in this Section 24, with initial letters capitalized, whether in the singular or the plural, the following terms shall have the following meanings:

#### 24.1.1 Accidents

- (a) Accidents sustained by a Third Party (“Claimant”), which is an ultimate use customer of a Party;
- (b) arises out of delivery of, or curtailment of, or interruption to electric service, including but not limited to abnormalities in frequency or voltage; and
- (c) results from either or both of the following:
  - (i) engineering, design, construction, repair, supervision, inspection, testing, protection, operation, maintenance, replacement, reconstruction, use, or ownership of any Party's Electric System; or
  - (ii) the performance or non-performance of any Party's obligations under the Agreement.

### 24.2 Indemnity Duty

If a Claimant makes a claim or brings an action against a Party seeking recovery for loss, damage, Costs or expenses resulting from or arising out of an Accident the following shall apply:

**24.2.1** That Party shall defend any such claim or action brought against it, except as otherwise provided in this Section 24.2.

**24.2.2** A Party ("Indemnitor") shall hold harmless, defend and indemnify, to the fullest extent permitted by law, PG&E (if such claim or action is brought against an NCPA Party) or NCPA or an NCPA Member Customer (if such claim or action is brought against PG&E), its directors or members of its governing board, officers and employees ("Indemnitees"), upon request by the Indemnitee, for claims or actions brought against the Indemnitee allegedly resulting from Accidents caused by acts, errors or omissions of the Indemnitor.

**24.2.3** No Party shall under this Agreement be obligated to defend, hold harmless or indemnify another Party, its directors or members of its governing board, officers and employees for Accidents resulting from the latter's gross negligence or willful misconduct.

**24.2.4** In the event a dispute under this Section 24 is litigated, each Party specifically agrees to pay its own incurred Costs including attorney's fees, expert and consultant fees, and other Costs of litigation.

## **25 JUDGMENTS AND DETERMINATIONS**

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

## **26 LIABILITY**

### **26.1 To Third Parties**

Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to, any Third Party.

### **26.2 No Consequential, Special or Indirect Damages from Breach**

Except for its willful action, gross negligence, or with respect to breach of this Agreement or the indemnity duty under Section 24.2, no Party, nor its directors or members of its governing board, officers, employees or agents shall be liable under this Agreement to another

Party for any loss, damage, claim, Cost, charge or expense arising from or related to this Agreement. In the event of breach of this Agreement, no Party, nor its directors or members of its governing board, officers, employees or agents shall be liable under this Agreement to another Party for any consequential, special or indirect damages.

### **26.3 Protection Of A Party's Own Facilities**

Each Party shall be responsible for protecting its facilities from possible damage by reason of electrical disturbances or faults caused by the operation, faulty operation, or non-operation of PG&E's (if an NCPA Party) or NCPA's or an NCPA Member Customers' (if PG&E) facilities, and such other Party shall not be liable for any such damage so caused; provided, this limitation on liability shall not extend to failure to observe the requirements of Section 10.

### **26.4 Liability For Interruptions**

PG&E shall not be liable to the NCPA Parties, and the NCPA Parties shall not be liable to PG&E, and each hereby releases the others and their directors, members of their governing board, officers, employees and agents from and indemnifies them, to the fullest extent permitted by law, for any claim, demand, liability, loss or damage, whether direct, indirect or consequential, incurred by either, that results from the interruption or curtailment in accordance with i) this Agreement, ii) Good Utility Practice, or (iii) as directed by the CAISO, of power flows through a Point of Interconnection under this Agreement.

## **27 NO DEDICATION OF FACILITIES**

Any undertaking by any Party under any provision of this Agreement is rendered strictly as an accommodation and shall not constitute the dedication by the first Party of any part or all of its Electric System to the other, the public, or any Third Party. Any such undertaking by any Party under a provision of, or resulting from, this Agreement shall cease upon the termination of that Party's obligations under this Agreement.

**28 NO OBLIGATION TO OFFER SAME SERVICE TO OTHERS**

By entering into this Agreement to interconnect with the NCPA Parties or any Third Party at NCPA's or an NCPA Member Customer's request, and filing it with FERC, PG&E does not commit itself to furnish any like or similar undertaking to any other person or entity.

**29 NO PRECEDENT**

This Agreement establishes no precedent with regard to any other entity or agreement. Nothing contained in this Agreement shall establish any rights to or precedent for other arrangements as may exist, now or in the future, between the Parties for the provision of any interconnection arrangements, interconnection service, or any form of electric service.

**30 NO OTHER SERVICES PROVIDED**

No Party undertakes under this Agreement the obligation to provide or make available any transmission service, distribution service, power or energy sales or services or Ancillary Services for any other Party or any Third Party, unless otherwise agreed to by a Party, and where such provision or receipt of services will be made pursuant to a separate agreement. Provided, however, this Agreement does not supersede rights or obligations as provided in Existing Contracts.

**30.1 Limitation on Parties Obligation**

The Parties specifically intend that this Agreement shall relate only to their rights and obligations pertaining to the interconnection of their Electric Systems. Under this Agreement, no Party undertakes to provide or make available any Balancing Authority Area services, transmission service, distribution service, power or energy sales or services or Ancillary Services for any other Party or any Third Party, and in no circumstance shall any Party be responsible under this Agreement for providing any such services.

This Agreement does not supersede rights or obligations as provided in any other agreement between any or all of the Parties. Nothing in this Agreement shall prevent any Party from seeking an order under Section 211 or 212 of the FPA.

### 30.2 Transmission Arrangements

The NCPA Parties are currently party to several contracts that, among other things, provide Transmission Arrangements for the delivery of power to NCPA Parties' Electric Systems. Nothing in this Agreement shall interfere with the NCPA Parties' rights, including those for transmission services, provided under such contracts. All Parties may make Transmission Arrangements, other than or in addition to such service provided from the CAISO.

## 31 NOTICES

### 31.1 Written Notices

Any notice, request, declaration, demand, information, report, or item otherwise required, authorized or provided for in this Agreement shall be given in writing, except as otherwise provided in this Agreement, and shall be deemed properly given if delivered personally or by facsimile transmission (fax), sent by first class United States Mail or overnight or express mail service, postage or fees prepaid, or through electronic communication where such electronic communication shall be deemed delivered on the first business day following delivery, to each of the persons specified below:

(1) To NCPA:

Randy Howard  
General Manager  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

and

Tony Zimmer  
Supervisor, Industry Restructuring & Interconnection Affairs  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

(2) To PG&E:

Mr. David Rubin  
Director, Service Analysis  
Pacific Gas and Electric Company  
Mail Code N9P  
P.O. Box 770000  
San Francisco, CA 94177

With a copy to:

Mr. Yilma Hailemichael  
Manager, Transmission Contract Management  
Pacific Gas and Electric Company  
Mail Code B13L  
P.O. Box 770000  
San Francisco, CA 94177

and

Mr. Bruce Henry  
Director, Transmission System Operations  
Pacific Gas and Electric Company  
Mail Code B15A  
P.O. Box 770000  
San Francisco, CA 94177

(3) To City of Alameda:

Glenn Steiger  
General Manager  
Alameda Municipal Power  
2000 Grand Street  
Alameda, CA 94501

- (4) To City of Biggs:  
Mark Sorensen  
City Administrator  
City of Biggs  
P.O. Box 307  
465 "C" Street  
Biggs, CA 95917
  
- (5) To City of Gridley:  
City Administrator  
City of Gridley  
685 Kentucky Street  
Gridley, CA 95948
  
- (6) To City of Healdsburg:  
Terry Crowley  
Electric Utility Director  
City of Healdsburg  
401 Grove Street  
Healdsburg, CA 95448
  
- (7) To City of Lodi:  
Elizabeth Kirkley  
Utility Director  
City of Lodi  
1331 South Ham Lane  
Lodi, CA 95242

- (8) To City of Lompoc:  
Larry Bean  
Utility Department Director  
City of Lompoc  
P.O. Box 8001  
100 Civic Center Plaza  
Lompoc, CA 93438
- (9) To City of Palo Alto:  
Valerie Fong  
Utilities Director  
City of Palo Alto  
250 Hamilton Avenue  
Palo Alto, CA 94301
- (10) To Plumas-Sierra Rural Electric Cooperative:  
Bob Marshall  
General Manager  
Plumas-Sierra Rural Electric Cooperative  
73233 Highway 70  
Portola, CA 96122
- (11) To City of Ukiah:  
Mel Grandi  
Utility Director  
City of Ukiah  
300 Seminary Avenue  
Ukiah, CA 95482

### **31.2 Changes Of Notice Recipient**

Any Party may change its designation of the person who is to receive notices on its behalf by giving the other Parties notice thereof in the manner provided in this Section 31. No more than three persons shall be designated by a Party to receive notices.

### **31.3 Routine Notices**

Any notice of a routine character in connection with service under this Agreement or in connection with the operation of facilities shall be given in such a manner as the Parties may determine is appropriate from time to time, unless otherwise provided in this Agreement.

### **31.4 Reliance On Notice**

Every Party shall be entitled under this Agreement to rely on another Party's notice when given (or not given, when a Party fails to provide notice within the time prescribed) as having all necessary approvals of that other Party's management, Board of Directors or other governing body, and any notice (or failure to provide timely notice) hereunder shall be binding on the noticing Party and shall obligate that Party to make such payments or to perform such duties as are necessarily associated with the notice or, if a Party fails to provide timely notice, that failure to give notice.

## **32 RESERVATION OF RIGHTS**

Nothing contained herein shall be construed as affecting in any way the Parties' rights under Sections 205 and 206 of the FPA or the regulations promulgated thereunder. The term "rates" as used herein shall mean a statement of rates and charges for or in connection with the services provided for in this Agreement, and all classifications, practices, rules or regulations that in any manner affect or relate to such rates and charges. PG&E may unilaterally make application to FERC for a change in rates, including rate methodology and the terms and conditions of service, under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder. Any party may seek changes to the terms of this Agreement pursuant to Section 206 of the FPA. Nothing contained herein shall be construed as affecting in any way the right of the NCPA Parties to oppose such a change under Section 205 or FERC's

rules and regulations or to exercise its rights under Section 206 of the FPA or FERC's rules and regulations.

### **33 RESPONSIBILITY FOR PAYMENTS AND SECURITY**

All Parties shall be fully responsible and liable to each other for payments to be made under this Agreement. The Parties shall perform unconditionally and fully each and every obligation that each has under this Agreement; provided, that this Agreement shall not restrict any right any Party may otherwise have to pledge any of its revenues, funds, assets, rights, property or interests therein. A Party's status as a creditor shall not be subordinate to the interest of any creditor, subject to any pledge or debt obligation, provision of law or existing obligations of a Party.

### **34 RULES AND REGULATIONS**

The Parties may propose, from time to time, changes to such procedures, rules, or regulations as they shall determine are necessary in order to establish the methods of operation to be followed in the performance of this Agreement or requirements of the Balancing Authority; provided, that any such procedure, rule, or regulation shall not be inconsistent with the provisions of this Agreement. If a Party objects to a procedure, rule, or regulation proposed by another Party, it will notify the other Parties and the Parties will endeavor to modify the procedure, rule, or regulation in order to resolve the objection. No such procedure, rule or regulation shall be adopted absent the mutual written consent of the Parties.

### **35 SEVERABILITY**

If any term, covenant or condition of this Agreement or its application is held to be invalid as to any person, entity or circumstance, by FERC or any other regulatory body, or agency or court of competent jurisdiction, then such term, covenant or condition shall cease to have force and effect to the extent of that holding. In that event, however, all other terms, covenants and conditions of this Agreement and their application shall not be affected thereby, but shall remain in full force and effect unless and to the extent that a regulatory agency or court

of competent jurisdiction finds that a provision is not separable from the invalid provision(s) of this Agreement.

### **36 CONTINUING RIGHTS OF THE NCPA PARTIES UPON TERMINATION**

Upon termination of the Agreement, the NCPA Parties shall continue to have such rights, if any, to be connected to PG&E's Electric System that are provided by law, regulation or other contract or agreement; provided, that the existence of this Agreement, after its termination, shall not be used by any Party to establish or defeat the existence of any rights provided by law, regulation or other contract or agreement. Termination of this Agreement, if accepted or approved by FERC, also shall terminate any other tariff or rate schedule that in whole or in part results from this Agreement, to the extent not inconsistent with a Party's aforementioned rights at law. After termination of this Agreement and any required FERC acceptance or approval of such termination, all obligations and rights provided under this Agreement or such tariff or rate schedule shall cease, and no Party shall claim or assert any continuing right other than as may be provided by law, regulation or other contract or agreement. Such termination shall not affect rights and obligations of a continuing nature or for payment of money for goods or services provided prior to termination. This Section shall not be construed as a bar to the assertion by the NCPA Parties of any rights it may have to service following termination of this Agreement, independent and exclusive of the Agreement.

### **37 RIGHTS OF PG&E UPON TERMINATION**

Should FERC deny, condition, suspend or defer PG&E's notice of termination, PG&E shall under no circumstances be required to maintain any interconnections or to provide any services, based in whole or in part on the existence of this Agreement, beyond the minimum time necessary for compliance with FERC's denial, condition, suspension or deferral.

### **38 WAIVER OF RIGHTS**

Any waiver at any time by any Party of its rights with respect to a default under the Agreement, or with respect to any other matter arising in connection with the Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter

arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right shall not constitute or be deemed a waiver.

### **39 UNCONTROLLABLE FORCES**

A Party shall not be considered to be in default in the performance of any obligation under the Agreement (other than an obligation to make payments for bills previously rendered pursuant to the Agreement) when a failure of performance is the result of Uncontrollable Forces.

### **40 ENTIRE AGREEMENT AND AMENDMENTS**

PG&E and the NCPA Parties agree that the provisions of this Agreement constitute the entire agreement between them regarding the subject matter of the Agreement and the Parties' rights and obligations with respect thereto. This Agreement is intended to be the complete and exclusive statement of the terms of the Parties' agreement that supersedes all prior and contemporaneous offers, promises, representations, negotiations, discussions or communications between PG&E and the NCPA Parties that may have been made in connection with the subject matter of this Agreement. No representation, covenant, or other matter, oral or written, that is not expressly set forth, incorporated, or referenced in this Agreement (except for applicable laws and regulations) shall be a part of, modify, or affect this Agreement.

This Agreement may be modified by written agreement of the Parties. Each subpart of Appendix A of this Agreement may be modified by the written agreement of PG&E and the NCPA Member Customer to whose Point(s) of Interconnection that subsection applies, without the agreement of any other Party.

### **41 NO THIRD PARTY RIGHTS OR OBLIGATION**

No right or obligation contained in this Agreement shall be applied or used for the benefit of any person or entity that is not a Party.

### **42 WARRANTY OF AUTHORITY**

Each Party warrants and represents that this Agreement has been duly authorized, executed and delivered by such Party and constitutes the legal, valid and binding obligation of

such Party, enforceable against such Party in accordance with its terms, except as enforcement may be limited by bankruptcy, insolvency, reorganization, or similar laws effecting the enforcement of creditor's rights.

#### **43 COUNTERPARTS**

This Agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument and as if all the signatories to all of the counterparts had signed the same instrument. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any signatures thereon, and may be attached to another counterpart of this Agreement identical in form hereto but having attached to it one or more signature pages.

#### **44 APPENDICES INCLUDED**

The following Appendices to this Agreement, as they may be revised from time to time by written agreement of the Parties or by order of FERC, are attached hereto and are incorporated by reference as if fully set forth herein:

Appendix A — Points of Interconnection

Appendix B — Dispute Resolution and Arbitration

Appendix C — Upgrade Facilities

Appendix D — Billing and Payments

Appendix E — Operational Coordination

#### **45 EXECUTION**

IN WITNESS THEREOF, the Parties have, by signature of its duly authorized representative shown below, executed and delivered a counterpart of this Agreement.

PACIFIC GAS AND ELECTRIC COMPANY  
FERC Electric Tariff Volume No. 5

Service Agreement No. 292

**NORTHERN CALIFORNIA POWER AGENCY**

By: 

Name: Randy Howard

Title: General Manager

Date: 9/11/15

**PACIFIC GAS AND ELECTRIC COMPANY**

By: \_\_\_\_\_

Name: David Rubin

Title: Director, Service Analysis

Date: \_\_\_\_\_

**CITY OF ALAMEDA**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

PACIFIC GAS AND ELECTRIC COMPANY  
FERC Electric Tariff Volume No. 5

Service Agreement No. 292

**NORTHERN CALIFORNIA POWER AGENCY**

By: \_\_\_\_\_

Name: Randy Howard

Title: General Manager

Date: \_\_\_\_\_

**PACIFIC GAS AND ELECTRIC COMPANY**

By: David Rubin

Name: David Rubin

Title: Director, Service Analysis

Date: August 5, 2015

**CITY OF ALAMEDA**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

PACIFIC GAS AND ELECTRIC COMPANY  
FERC Electric Tariff Volume No. 5

Service Agreement No. 292

**NORTHERN CALIFORNIA POWER AGENCY**

By: \_\_\_\_\_

Name: Randy Howard

Title: General Manager

Date: \_\_\_\_\_

**PACIFIC GAS AND ELECTRIC COMPANY**

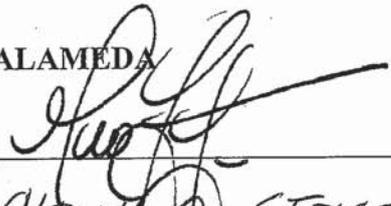
By: \_\_\_\_\_

Name: David Rubin

Title: Director, Service Analysis

Date: \_\_\_\_\_

**CITY OF ALAMEDA**

By:  \_\_\_\_\_

Name: GLENN STEIGER

Title: GENERAL MANAGER

Date: SEPT. 17, 2015

PACIFIC GAS AND ELECTRIC COMPANY  
FERC Electric Tariff Volume No. 5

Service Agreement No. 292

**CITY OF BIGGS**

By: Roger L. Frith

Name: Roger L. Frith

Title: MAYOR

Date: 9/18/15

**CITY OF GRIDLEY**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF HEALDSBURG**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF BIGGS**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF GRIDLEY**

By:  \_\_\_\_\_

Name: Daryl Dye

Title: Gridley Electrical Superintendent

Date: 9/17 2015

**CITY OF HEALDSBURG**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF BIGGS**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF GRIDLEY**

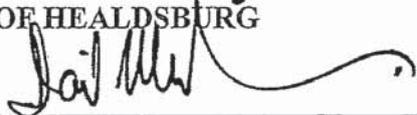
By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF HEALDSBURG**

By:  \_\_\_\_\_

Name: David Mickaelian

Title: City Manager

Date: 9/25/15

PACIFIC GAS AND ELECTRIC COMPANY  
FERC Electric Tariff Volume No. 5

Service Agreement No. 292

**CITY OF LODI**

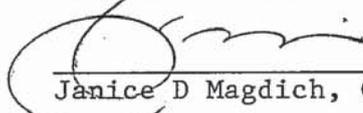
By: 

Name: Stephen Schwabauer

Title: City Manager

Date: 9/24/15

APPROVED AS TO FORM:

  
Janice D Magdich, City Attorney

ATTEST:

  
Jennifer Ferraiolo, City Clerk

**CITY OF LOMPOC**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF PALO ALTO**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF LODI**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF LOMPOC**

By: Bob Long

Name: Bob Long

Title: Mayor City of Lompoc

Date: 9/28/2015

**CITY OF PALO ALTO**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF LODI**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF LOMPOC**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF PALO ALTO**

By:  \_\_\_\_\_

Name: <sup>for</sup> James Keene

Title: CITY MANAGER

Date: 9-18-15

**PLUMAS SIERRA RURAL ELECTRIC COOPERATIVE**

By: 

Name: Robert W. Marshall

Title: General Manager/CEO

Date: 9/21/15

**CITY OF UKIAH**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

PACIFIC GAS AND ELECTRIC COMPANY  
FERC Electric Tariff Volume No. 5

Service Agreement No. 292

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**PLUMAS SIERRA RURAL ELECTRIC COOPERATIVE**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**CITY OF UKIAH**

By: Sgt. Sangiacome

Name: Sgt. Sangiacome

Title: City Manager

Date: 9-18-15

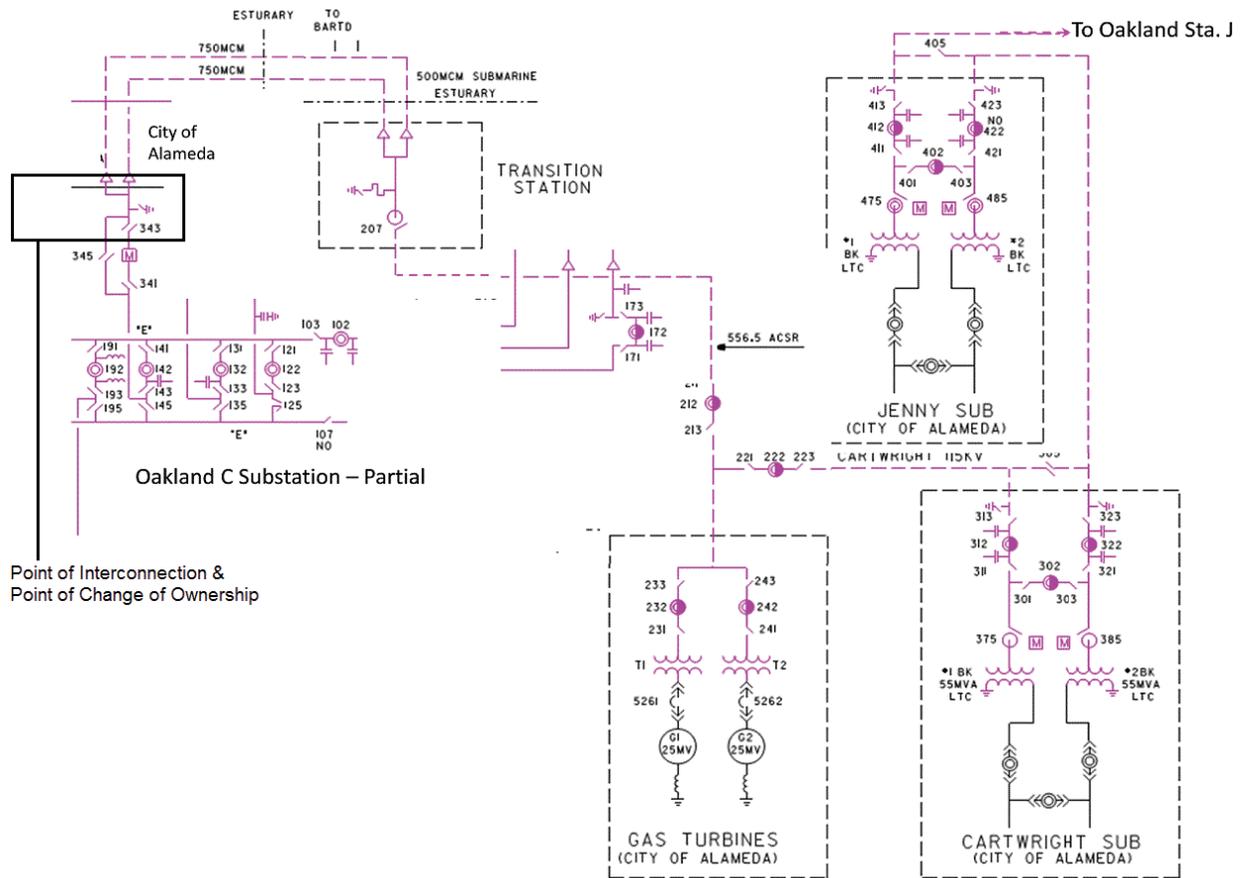
**APPENDIX A  
 POINTS OF INTERCONNECTION**

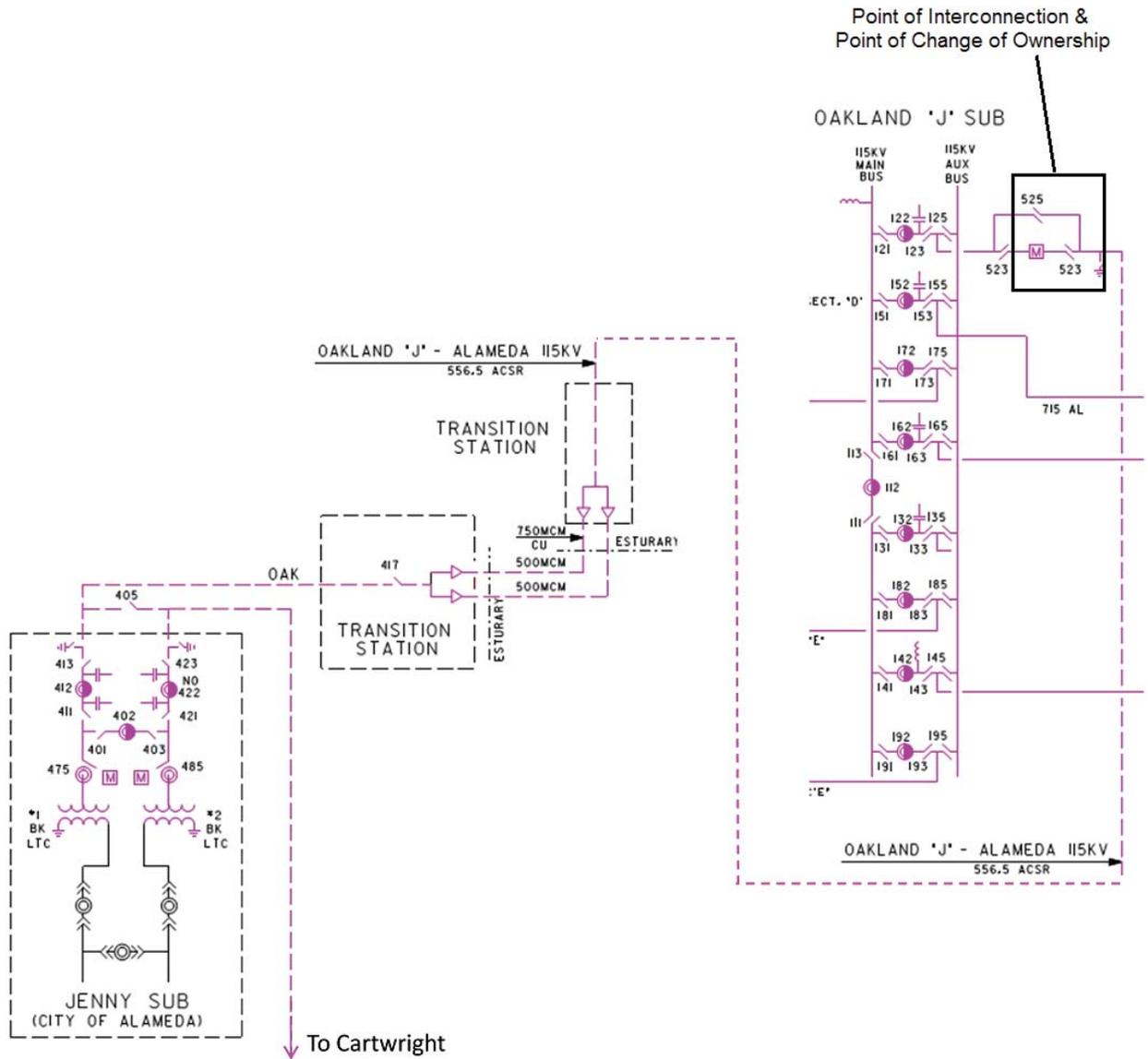
<b>NCPA Member Customer</b>	<b>Point(s) of Interconnection</b>	<b>Voltage (kV)</b>
Alameda	Oakland Substation C and Oakland Substation J	115 (Both Points)
Biggs	Biggs Sub (60 kV and 12 kV)	60 and 12 <sup>1</sup>
Gridley	Gridley Sub	60
Healdsburg	Healdsburg Sub	60
Lodi	Industrial Sub (Lodi Line 1 and Lodi Line 2); and  White Slough STIG <sup>2</sup>	60 (Both Industrial Points)  230 (White Slough STIG)
Lompoc	Lompoc Sub (Lompoc Line 1 and Lompoc Line 2)	115 (Both Points)
Palo Alto	Colorado Sub (Palo Alto Line 1, Palo Alto Line 2, and Palo Alto Line 3)	115 (All 3 Points)
Plumas Sierra	Quincy Sub	60
Ukiah	Babcock Sub	115

- 1 As set forth in the Interruptible Wholesale Distribution Service and Interconnection Agreement between PG&E and the City of Biggs (“12 kV Agreement”), PG&E Rate Schedule FERC No. 246, PG&E’s 12 kV system and the facilities needed to retain the connection with the City of Biggs shall only be used for delivery in emergency conditions or during scheduled maintenance of the 60 kV system and only on an as available and interruptible basis, after notification by the party requesting such use. Notwithstanding anything in this Agreement or the 12 kV Agreement, PG&E may take the 60 kV system out of operation or schedule maintenance on the 60 kV system regardless of available capacity on the 12 kV system; provided, however, that PG&E otherwise communicates and coordinates planned outages with NCPA and the City of Biggs in accordance with Section 9.4 of this Agreement.
  
- 2 Lodi Wastewater treatment plant Load will be served via the Lodi White Slough STIG Interconnection with PG&E, be separately metered, and be included in the normal, coincident and non-coincident Load information for Lodi.

### CITY OF ALAMEDA SCHEMATICS FACILITIES AT POINT OF INTERCONNECTION AND OWNERSHIP

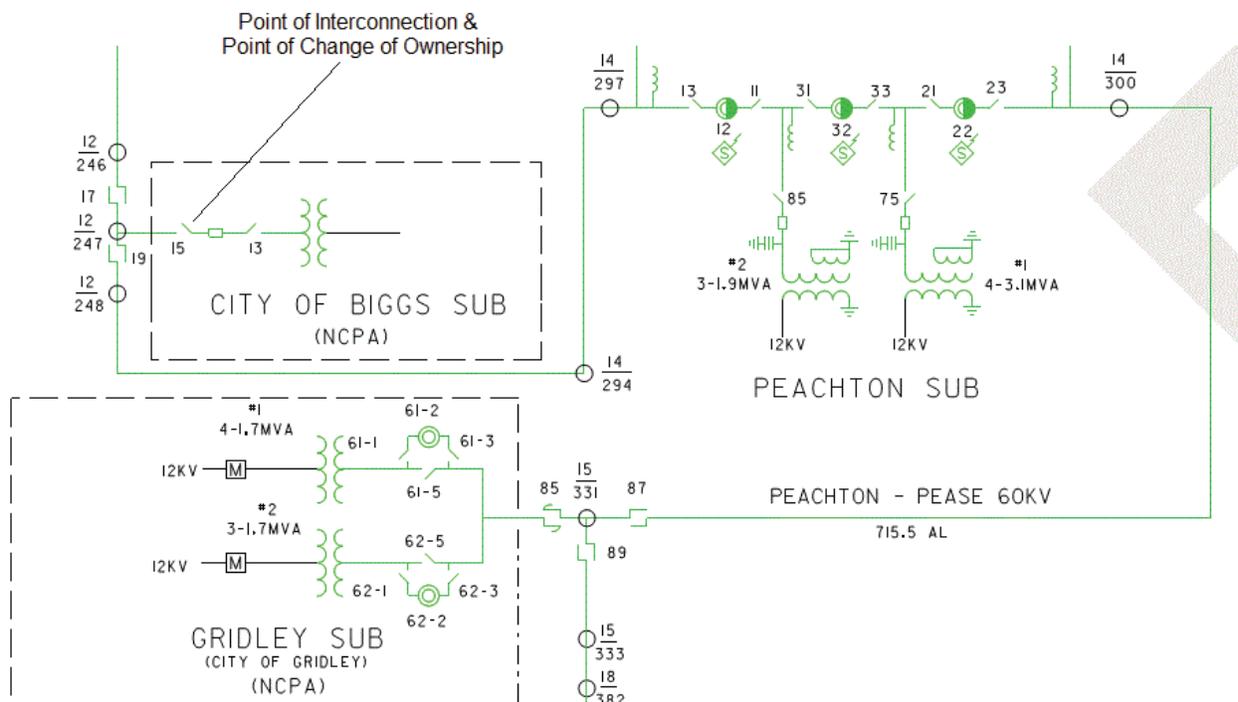
The following are single-line diagrams of the City of Alameda's ("Alameda") Interconnection Facilities at the Points of Interconnection that identifies the owner of such Interconnection Facilities.





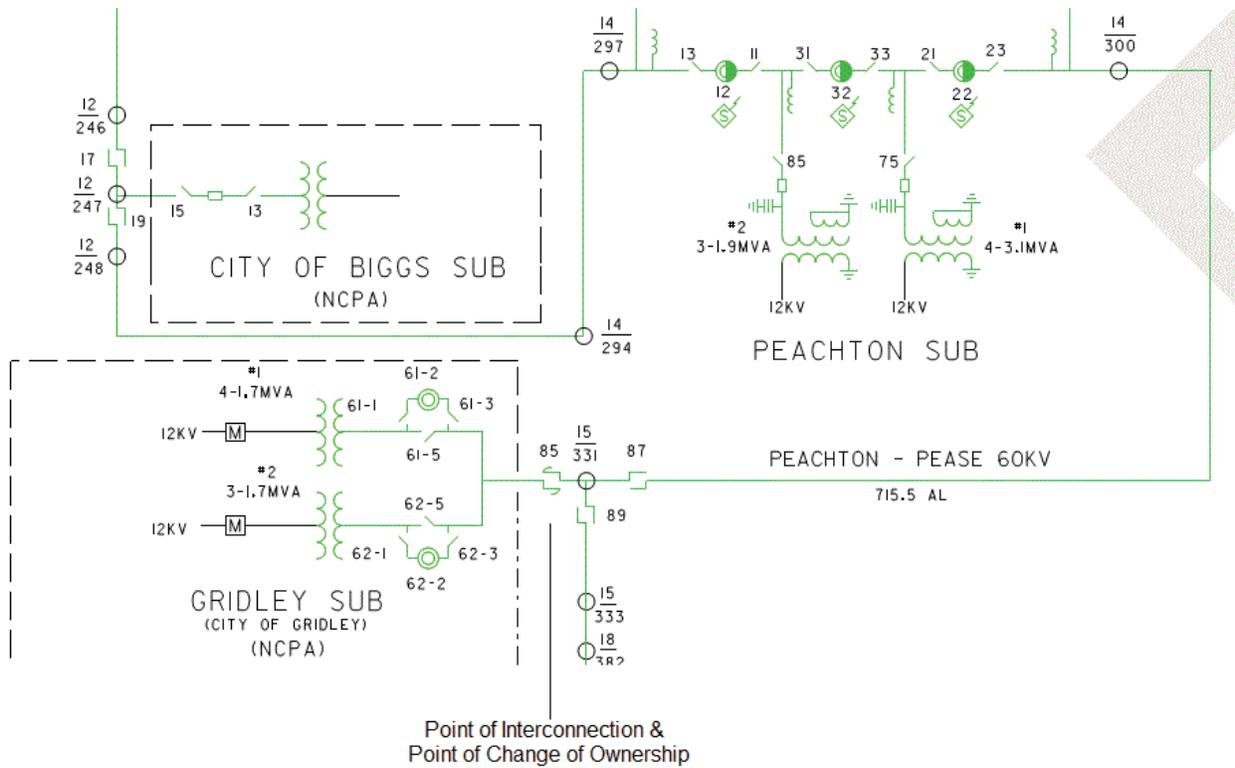
### CITY OF BIGGS SCHEMATIC FACILITIES AT POINT OF INTERCONNECTION AND OWNERSHIP

The following is a single-line diagram of the City of Biggs' ("Biggs") Interconnection Facilities at the Point of Interconnection that identifies the owner of such Interconnection Facilities.



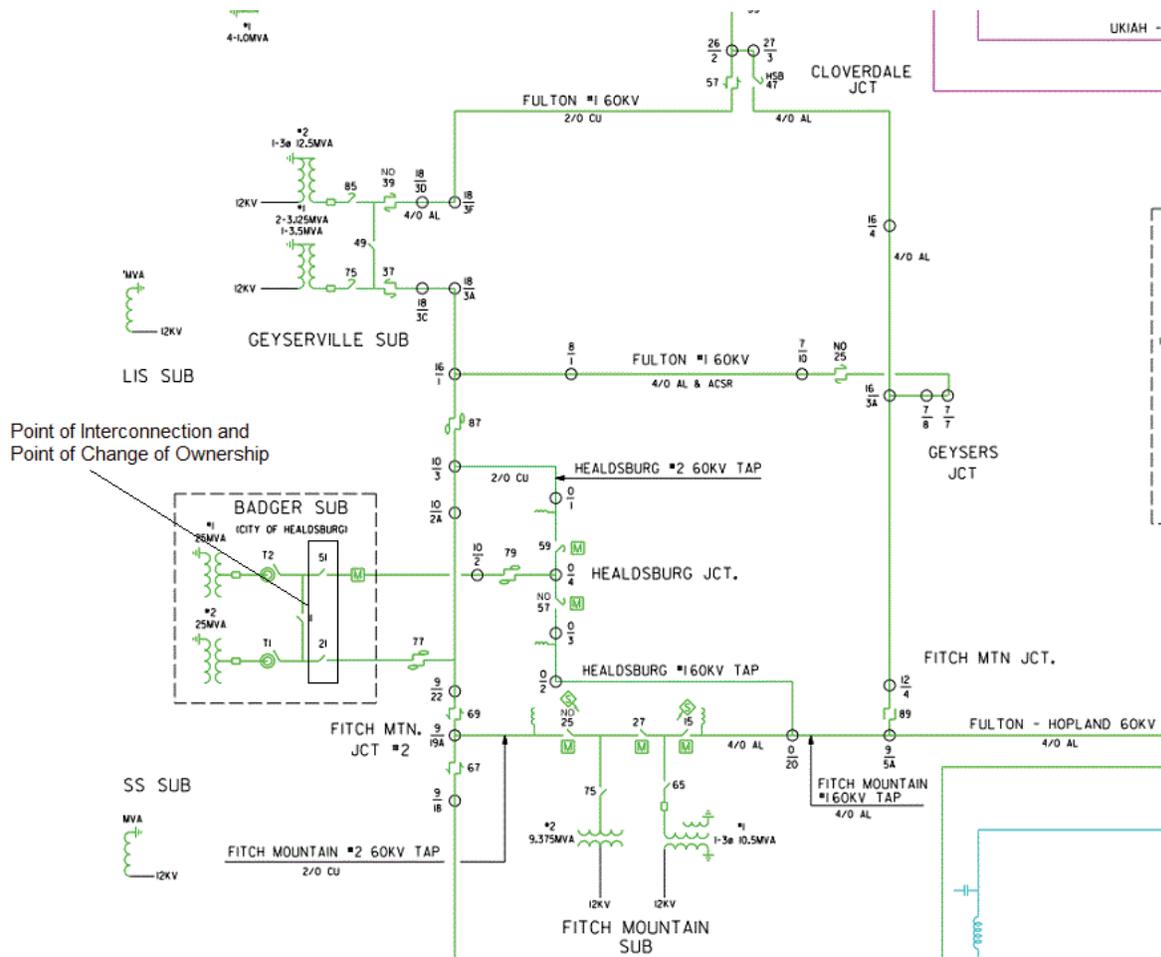
### CITY OF GRIDLEY SCHEMATIC FACILITIES AT POINT OF INTERCONNECTION AND OWNERSHIP

The following is a single-line diagram of the City of Gridley's ("Gridley") Interconnection Facilities at the Point of Interconnection that identifies the owner of such Interconnection Facilities.



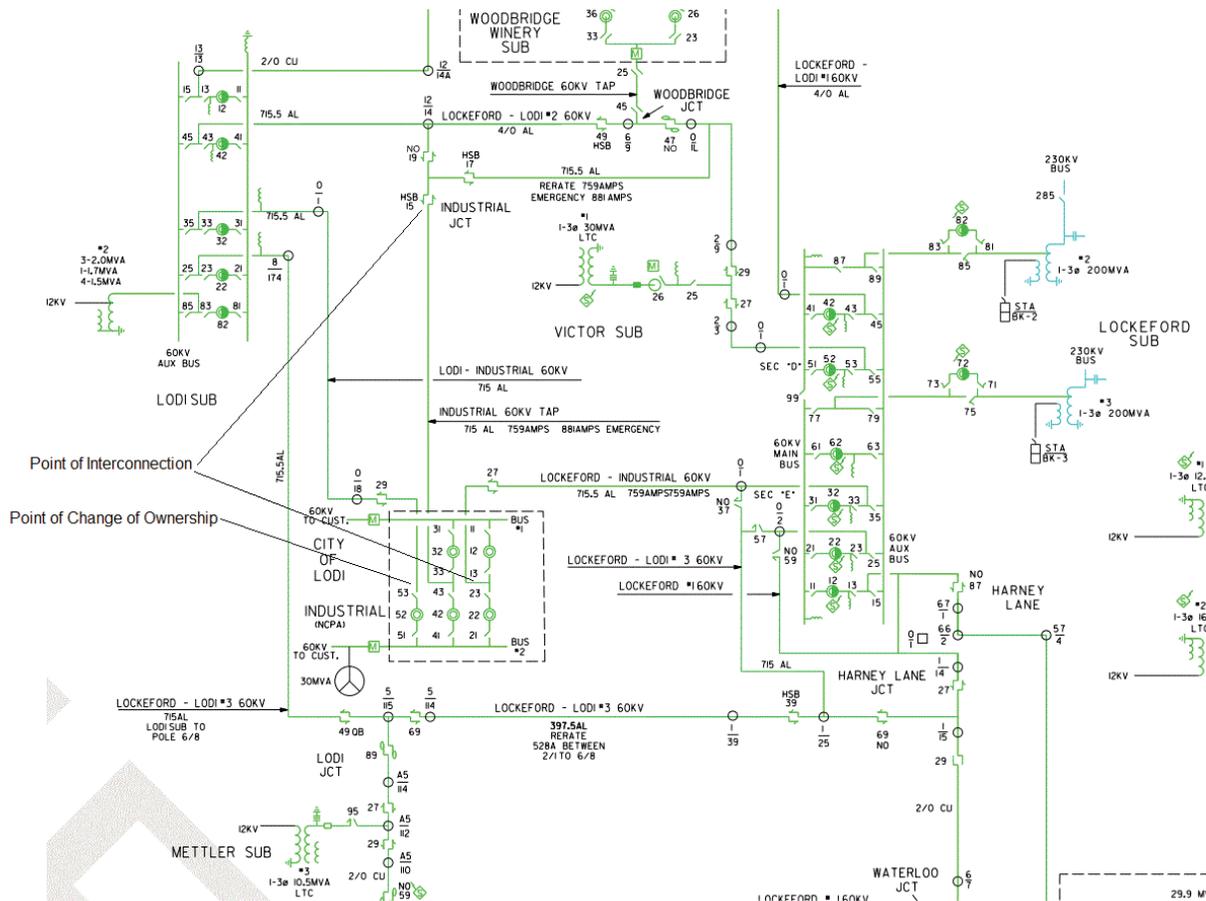
### CITY OF HEALDSBURG SCHEMATIC FACILITIES AT POINT OF INTERCONNECTION AND OWNERSHIP

The following is a single-line diagram of the City of Healdsburg's ("Healdsburg") Interconnection Facilities at the Points of Interconnection that identifies the owner of such Interconnection Facilities.



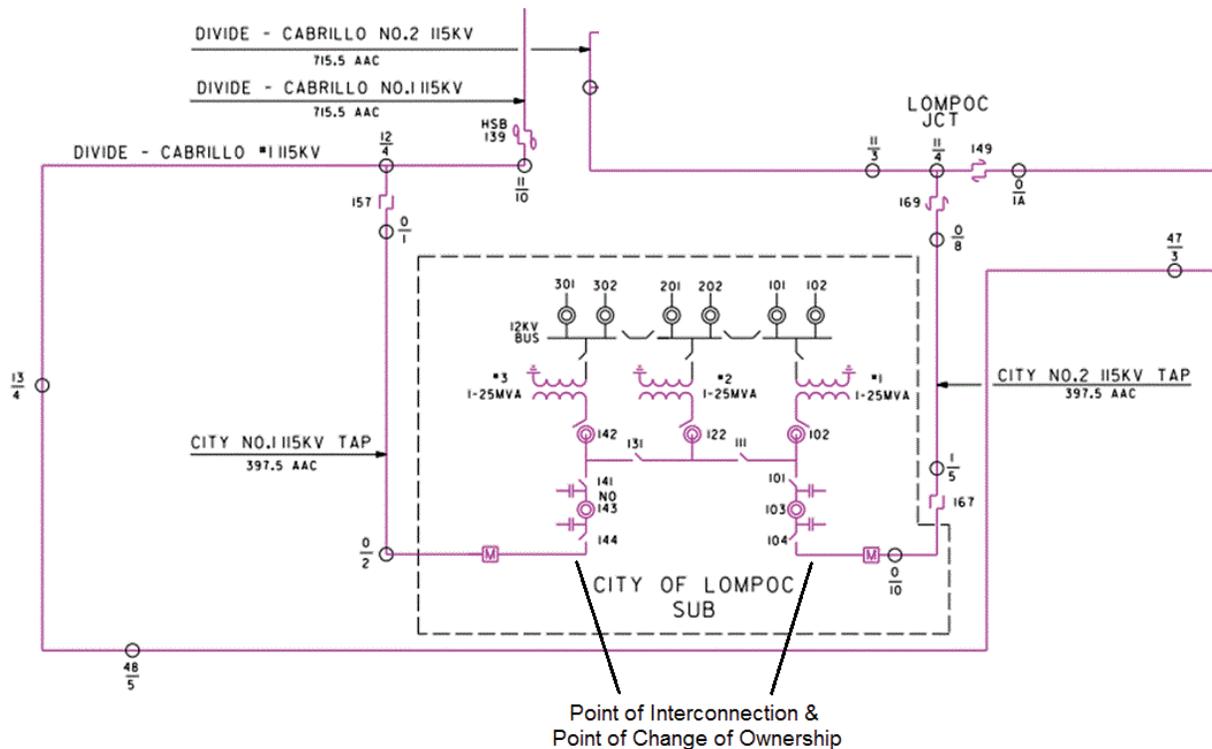
## CITY OF LODI SCHEMATIC FACILITIES AT POINT OF INTERCONNECTION AND OWNERSHIP

The following is a single-line diagram of the City of Lodi's ("Lodi") Interconnection Facilities at the Points of Interconnection that identifies the owner of such Interconnection Facilities.



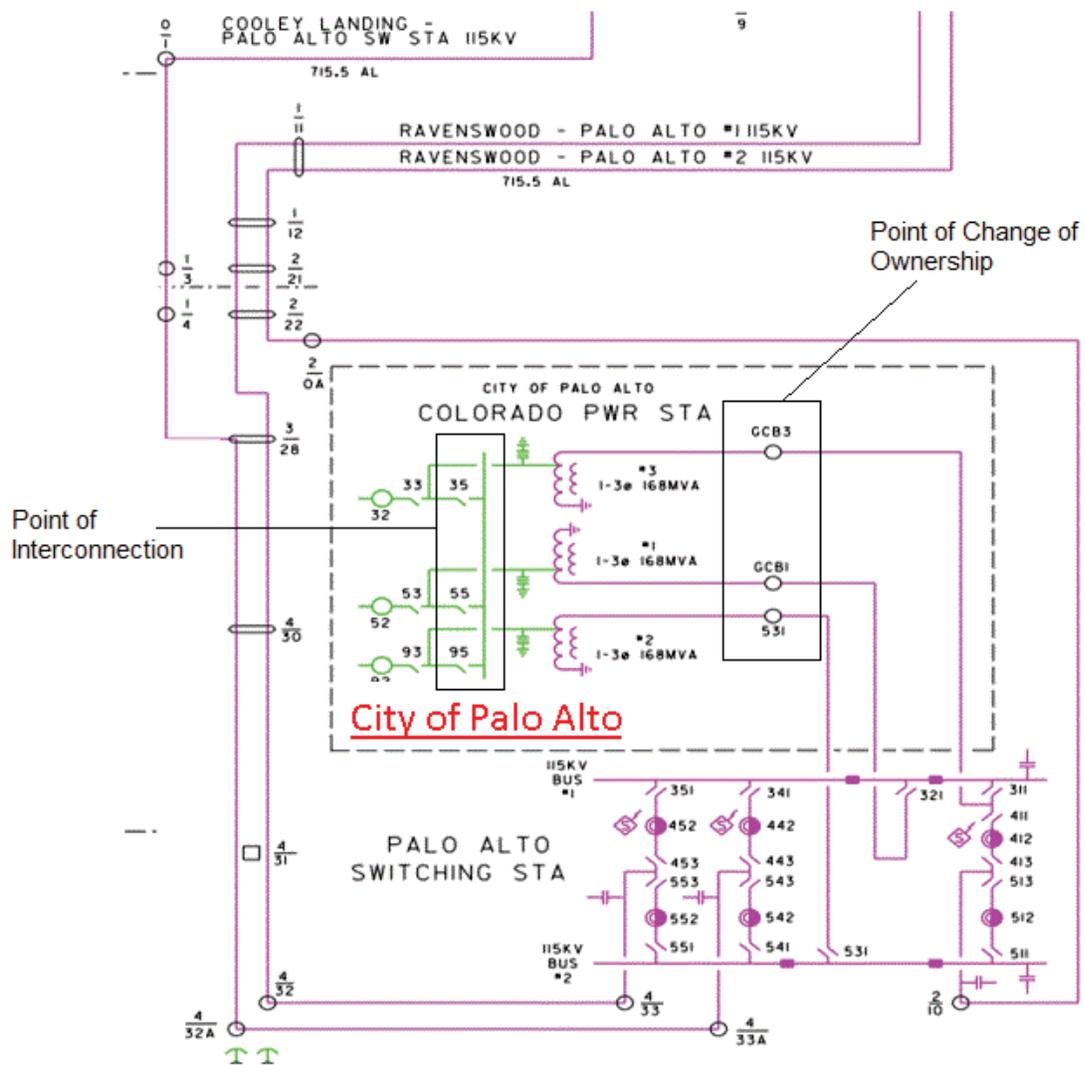
### CITY OF LOMPOC SCHEMATIC FACILITIES AT POINT OF INTERCONNECTION AND OWNERSHIP

The following is a single-line diagram of the City of Lompoc's ("Lompoc") Interconnection Facilities at the Points of Interconnection that identifies the owner of such Interconnection Facilities.



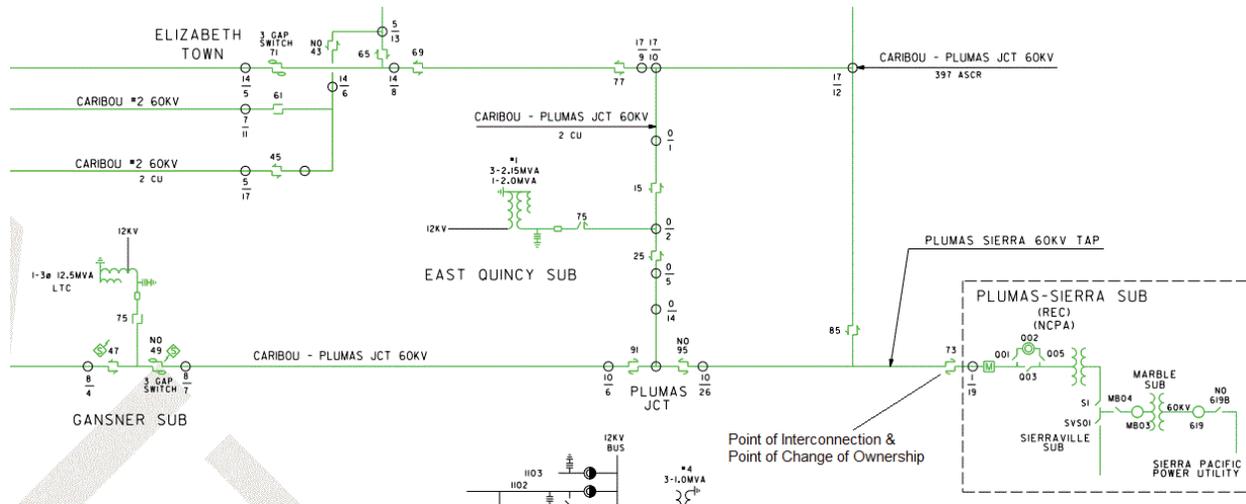
### CITY OF PALO ALTO SCHEMATIC FACILITIES AT POINT OF INTERCONNECTION AND OWNERSHIP

The following is a single-line diagram of the City of Palo Alto's ("Palo Alto") Interconnection Facilities at the Points of Interconnection that identifies the owner of such Interconnection Facilities.



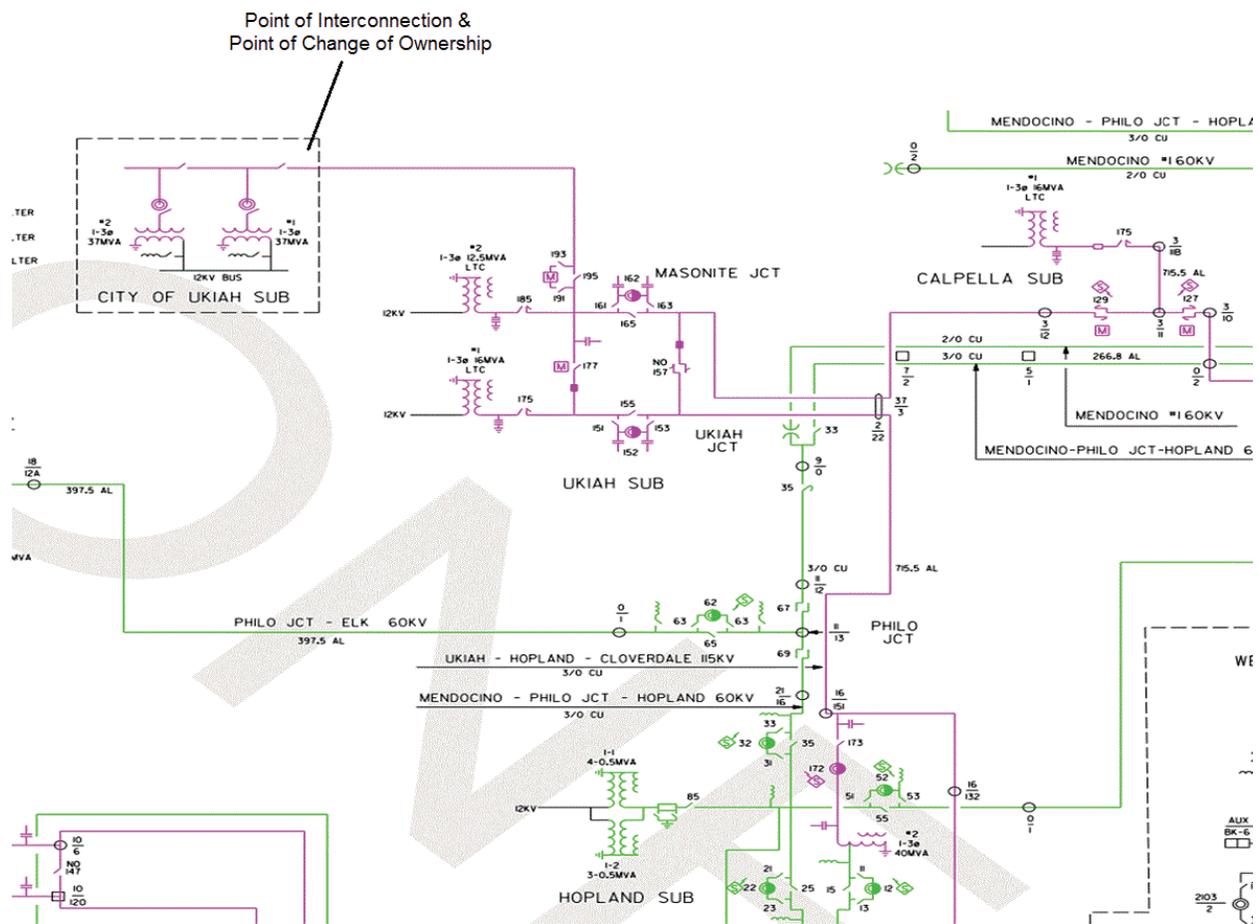
**PLUMAS SIERRA RURAL ELECTRIC COOPERATIVE SCHEMATIC  
 FACILITIES AT POINT OF INTERCONNECTION AND OWNERSHIP**

The following is a single-line diagram of the Plumas Sierra Rural Electric Cooperative's ("Plumas") Interconnection Facilities at the Point of Interconnection that identifies the owner of such Interconnection Facilities.



### CITY OF UKIAH SCHEMATIC FACILITIES AT POINT OF INTERCONNECTION AND OWNERSHIP

The following is a single-line diagram of the City of Ukiah's ("Ukiah") Interconnection Facilities at the Point of Interconnection that identifies the owner of such Interconnection Facilities.



## **APPENDIX B DISPUTE RESOLUTION AND ARBITRATION**

### **B.1 NEGOTIATION AND MEDIATION**

As provided in Section 22, the Parties agree to seek settlement of all disputes arising under this Agreement by good faith negotiation before resorting to other methods of dispute resolution. In the event that negotiations have failed, but before initiating arbitration proceedings under this Appendix B, the Parties may by mutual assent decide to seek resolution of a dispute through mediation. If this occurs, the Parties shall meet and confer to establish an appropriate timetable for mediation, to pick a mediator, and to decide on any other terms and conditions that will govern the mediation.

### **B.2 TECHNICAL ARBITRATION**

The Parties agree to seek expedited resolution of arbitrable disputes arising under this Agreement that are technical in nature. Technical disputes may include, without limitation, disputes centered on engineering issues involving technical planning studies, the need for and Cost of Upgrade Facilities, and the Interconnection Capacity of a Point of Interconnection. Such technical issues may be resolved through expert application of established technical knowledge and by reference to Good Utility Practice and industry standards.

The Party initiating arbitration pursuant to Section B.3 below shall indicate in its notice to the other Party whether it regards the dispute to be technical in nature. If the Parties agree that a dispute is technical in nature, then the Parties shall meet and confer to develop an appropriate timetable and process for expedited resolution of the dispute by a neutral expert, or “technical arbitrator”. If the Parties cannot agree that a dispute is technical in nature, or if they cannot agree on a neutral arbitrator, then the Parties may submit the dispute to arbitration under the procedures set forth in Appendix B, Section 3 below.

## **B.3 ARBITRATION**

### **B.3.1 Notices And Selection Of Arbitrators**

In the event that a dispute is subject to arbitration under Section 22, the aggrieved Party or Parties shall initiate arbitration by sending written notice to the other Party or Parties. Such notice shall identify the name and address of an impartial person to act as an arbitrator. If any Party takes the position that the dispute is not arbitrable, any Party may take the dispute to FERC for resolution. Within ten (10) business days after receipt of such notice, the other Party or Parties shall, if they agree that the decision is properly arbitrable, give a similar written notice stating the name and address of the second impartial person to act as an arbitrator. Each Party (or aligned group of Parties) shall then submit to the two named arbitrators a list of the names and addresses of at least three persons for use by the two named arbitrators in the selection of the third arbitrator. If the same name or names appear on both lists, the two named arbitrators shall appoint one of the persons named on both lists as the third arbitrator. If no name appears on both lists, the two named arbitrators shall select a third arbitrator from either list or independently of either list. Each arbitrator selected under these procedures shall be a person experienced in the construction, design, operation or regulation of electric power transmission facilities, as applicable to the issue(s) in dispute. If NCPA and any one or more of the NCPA Members Customers are acting jointly or have aligned positions regarding the subject under arbitration, NCPA and the NCPA Member Customers who are acting jointly/have aligned positions will be treated as a single Party for the purposes of selection of an arbitrator.

## **B.4 PROCEDURES**

Within fifteen (15) business days after the appointment of the third arbitrator, or on such other date to which the parties may agree, the arbitrators shall meet to determine the procedures that are to be followed in conducting the arbitration, including, without limitation, such procedures as may be necessary for the taking of discovery, giving testimony and submission of written arguments and briefs to the arbitrators. Unless otherwise mutually agreed by the parties, the arbitrators shall determine such procedures based upon the purpose of the Parties in conducting an arbitration under Section 22 of the Agreement, specifically, the purpose of utilizing the least burdensome, least expensive and most expeditious dispute resolution

procedures consistent with providing each Party with a fair and reasonable opportunity to be heard. If the arbitrators are unable unanimously to agree to the procedures to be used in the arbitration, the arbitration shall be governed by the Commercial Arbitration Rules of the American Arbitration Association.

#### **B.5 HEARING AND DECISION**

After giving the Parties due notice of hearing and a reasonable opportunity to be heard, the arbitrators shall hear the dispute(s) submitted for arbitration and shall render their decision within ninety (90) calendar days after appointment of the third arbitrator or such other date selected upon the mutual agreement of the Parties. The arbitrators' decision shall be made in writing and signed by any two of the three arbitrators. The decision shall be final and binding upon the parties subject to rights to appeal the decision to FERC. Judgment may be entered on the decision in any court of competent jurisdiction upon the application of any Party.

#### **B.6 EXPENSES**

Each Party shall bear its own Costs and the Costs and expenses of the arbitrators shall be borne equally by the Parties. If the NCPA Parties are acting jointly regarding the subject under arbitration, the NCPA Parties will be treated as a single Party for the purpose of allocating Costs and expenses of the arbitrators.

## **APPENDIX C UPGRADE FACILITIES**

### **C.1 UPGRADE FACILITIES**

At least 60 calendar days prior to the date on which NCPA or an NCPA Member Customer is to commence payment of any Cost as a result of construction of an Upgrade Facility, PG&E shall determine and provide to NCPA and the NCPA Member Customer, if applicable: (i) an estimate of all Cost, broken down by major activities, which PG&E expects to incur; and (ii) a schedule indicating the approximate dates when PG&E expects to pay such Cost for each major activity included in the estimate. PG&E may revise the payment schedule from time to time as appropriate.

**C.1.1** If needed, the Affected Parties will enter into a Transmission Facilities Agreement that shall include an estimate and schedule of Cost and payments , and the applicable NCPA Party shall advance such Cost to PG&E pursuant to such schedule or any revisions to it.

**C.1.2** The applicable NCPA Party's total payments to PG&E for work performed under this Appendix C, Section 1 shall be for the actual Cost incurred by PG&E. PG&E shall document to the NCPA Party the actual Cost incurred upon completion, and shall refund any amount overpaid by, or request any additional payment from, the NCPA Party, with interest computed as provided in Appendix D, Section D.6 of this Agreement.

**C.1.3** Should an NCPA Party seek a ruling from the Internal Revenue Service that its payments under this subsection should be treated as non-taxable contributions-in-aid-of-construction, PG&E shall cooperate reasonably with the NCPA Party in supporting its filing with the Internal Revenue Service.

**C.1.4** The NCPA Party shall have the right pursuant to Section 14 of this Agreement to audit the supporting documents upon which PG&E bases its estimate of the Cost of work and actual work performed to be advanced by the NCPA Party pursuant to the Transmission Facilities Agreement, as well as documents that show the actual Cost incurred by PG&E.

## **C.2 ASSOCIATED FERC FILINGS**

If required by FERC or requested by an NCPA Party, PG&E shall file, or at its election may file, with FERC a Transmission Facilities Agreement to document and seek approval of any Cost charged by PG&E to an NCPA Party associated with any facility Modifications, changes, reinforcements or advances contemplated by this Agreement. A NCPA Party shall support this filing by an appropriate submittal to FERC stating its agreement with the charges; provided, that if the Parties are unable to agree on the need or design for an Upgrade Facility or the Cost of an Upgrade Facility or the amount thereof an NCPA Party shall be responsible for, the NCPA Parties may oppose such PG&E filing.

## **C.3 LIMITATIONS ON RESPONSIBILITY FOR UPGRADE COSTS**

### **C.3.1 No Double Collection**

PG&E may not charge an NCPA Party for any Costs associated with Upgrade Facilities that have already been or will be collected through rates paid by PG&E retail or wholesale customers or from a Third Party; provided, that this Section shall not preclude PG&E charging an NCPA Party where refunds are made to those who originally paid for such Costs.

## APPENDIX D BILLING AND PAYMENT

The NCPA Parties shall pay PG&E Costs owed pursuant to this Agreement at:

Pacific Gas and Electric Company  
Payment Processing Center  
Research Unit / B5A  
P.O. Box 770000  
San Francisco, CA 94177

PG&E may change the place where payment is made by giving the NCPA Parties notice thereof as provided in Section 31.

PG&E shall pay NCPA or an NCPA Member Customer Costs owed pursuant to this Agreement at a place to be named by NCPA or an NCPA Member Customer.

**D.1** PG&E shall prepare and submit bills to an NCPA Party on or after the first business day of each calendar month. The payment of any bill shall be due and must be received by PG&E not later than the 30th calendar day following the day on which NCPA receives the bill. Such date shall be referred to as the "Payment Due Date". If the Payment Due Date falls on a Saturday, Sunday or legal holiday, then payment shall be due the next business day. Such date shall be referred to as the Payment Due Date. A bill shall be deemed delivered on the third business day after the postmarked date unless a copy of the bill is sent by electronic facsimile, in which case it shall be deemed delivered on the same day.

**D.2** If charges under this Agreement cannot be determined accurately for preparing a bill, PG&E may use its best estimates in preparing the bill and such estimated bill shall be paid by the NCPA Parties. Any estimated charges shall be labeled as such and PG&E shall, upon request, document the basis for the estimate used. Estimated bills shall be prepared and paid in the same manner as other bills under this Agreement.

**D.3** If an NCPA Party disputes all or any portion of a bill submitted to it by PG&E, it nevertheless shall, not later than the Payment Due Date of that bill, pay the bill in full. A dispute between a Party and any Third Party shall not be a proper basis for withholding payment. Payments to PG&E of the NCPA Party's obligations arising under this Agreement are not subject to any reduction, whether by offset, payments into escrow, or otherwise, except for routine adjustments or corrections as may be agreed to by the Parties or as expressly provided in this Agreement.

**D.4** When final and complete billing information becomes available and a charge is determined accurately or billing errors are identified and corrected, PG&E shall promptly prepare and submit an adjusted bill to an NCPA Party, and any additional payments by an NCPA Party shall be made in accordance with the provisions of this Appendix D. Refunds by PG&E shall be paid to the affected NCPA Party not later than thirty (30) calendar days after the date of the adjusted bill. All adjustments or corrections of bills under this Agreement shall be subject to the interest provisions of Appendix D, Sections 5 and 6.

**D.5** Interest on an additional payment shall accrue from the Payment Due Date of the applicable bill and interest on a refund shall accrue from the date payment of the applicable bill was received by PG&E.

**D.6** Any amount due under this Agreement which is not timely paid shall accrue interest from the date prescribed in Appendix D, Section 5 until the date payment is made. The interest amount shall be determined using the interest rate applicable to any amount due during a given month and shall be calculated using the methodology for refunds pursuant to Section 35.19(a) of FERC's Regulations, 18 C.F.R § 35.19(a). This interest rate shall not exceed the maximum interest rate permitted under California law. Interest shall be calculated for the period that the payment is overdue or the period during which the refund is accruing interest.

**D.7** As provided in Appendix D, Section 3, if any portion of a bill is disputed, the disputing Party shall pay the full amount, without offset or reduction, by the Payment Due Date, however, a Party can challenge the accuracy of a bill even if no dispute was identified prior to the Party's payment of the bill and such right to dispute a bill shall extend to the end of the

statutory period of limitations. In addition, the disputing Party shall, on or before the Payment Due Date, notify PG&E, in writing, of the amount in dispute and the specific basis for the dispute. The Parties shall endeavor to resolve any billing dispute within thirty (30) calendar days of PG&E's receipt of the disputing Party's notice of a dispute (or such extended period as the Parties may establish). If the Parties cannot agree, any Party may initiate dispute resolution pursuant to Section 22.

**D.8** If, after a disputing Party has paid the full amount of a disputed bill directly to PG&E, the results of dispute resolution pursuant to Section 22 include a determination that the amount due was different than the amount paid by the disputing Party, a refund by PG&E to the disputing Party shall include interest for the period from the date the disputing Party's overpayment was received by PG&E to the date the refund is paid to the disputing Party. Likewise, an additional payment by the disputing Party to PG&E shall include interest for the period from the original Payment Due Date to the date the disputing Party's additional payment is received by PG&E. Interest paid pursuant to this Appendix D, Section 8 shall be at the rate determined pursuant to Appendix D, Section 6.

**D.9** A Party's failure to make any payment on or before the applicable Payment Due Date shall constitute a material breach of this Agreement if that failure is not corrected within seven (7) business days after the other Party delivers written notice to non-paying Party. In such event, the Party not receiving payment shall be entitled to pursue any legal, equitable and regulatory rights and remedies it may have under this Agreement or otherwise.

## **APPENDIX E OPERATIONAL COORDINATION**

The Parties will perform operational coordination obligations and responsibilities, which consist of but are not limited to the following:

### **E.1 Maintenance Coordination**

The Parties shall coordinate, in conformance with their obligations to the Balancing Authority on an annual basis, any planned maintenance outages of transmission facilities of their respective Electric Systems that may reasonably be expected to have a material impact on another Party's Electric System.

### **E.2 Underfrequency Load Shedding (UFLS)**

Each year after the Planning Coordinator allocates automatic underfrequency load shedding ("UFLS") obligations pursuant to Applicable Requirements, PG&E and each NCPA Member Customer shall coordinate UFLS participation for the twelve (12) month period beginning the following July 1 of that year.

PG&E and each NCPA Member Customer with NCPA's assistance shall coordinate to determine each NCPA Member Customers' total amount of UFLS responsibility, if any, for that twelve month period ("NCPA Member Customer UFLS Share"). Each NCPA Member Customer's NCPA Member Customer UFLS Share shall be calculated by multiplying the NCPA Member Customer's proportionate share (represented as a percentage) of the total historical coincident peak electric load in the PG&E service area, for the prior twelve (12) month period as of the date and time specified by the Planning Coordinator, by the total amount of UFLS requirement allocated by the Planning Coordinator to PG&E, acting as the Transmission Operator. Within thirty days after the Planning Coordinator allocates UFLS obligations, PG&E and each NCPA Member Customer shall coordinate to determine how each NCPA Member Customer shall provide UFLS to meet its NCPA Member Customer UFLS Share requirement. Each NCPA Member Customer shall be responsible for ensuring that it has implemented any necessary changes to its underfrequency relay or other relay equipment as necessary to ensure

that it is enabled to provide its NCPA Member Customer UFLS Share by July 1 of each calendar year, pursuant to Applicable Requirements. Each NCPA Member Customer shall be responsible for ensuring that it maintains equipment necessary for the purpose of UFLS, in conformance with Applicable Requirements.

If a NCPA Member Customer fails to meet any requirement of this Section E.2, PG&E reserves the right to take any measure necessary to satisfy the NCPA Member Customer's NCPA Member Customer UFLS Share, including but not limited to, implementing automatic load shedding to shed or interrupt some or all load of the NCPA Member Customer.

If at any time PG&E does not require any (one or more) NCPA Member Customer to meet its NCPA Member Customer UFLS Share requirement, this shall not waive or excuse any NCPA Member Customer's obligation to satisfy its NCPA Member Customer UFLS Share requirement in that year or at any future date. And any action PG&E takes to satisfy any NCPA Member Customer's NCPA Member Customer UFLS Share at any time shall not create a precedent or obligation that PG&E must take the same or a similar measure in the future.

Notwithstanding any provision of this Interconnection Agreement, including Section 26, if a NCPA Member Customer fails to meet any requirements of this Section E.2, and if PG&E is assessed any financial penalties by the CAISO, WECC, NERC, FERC, or any other applicable authority as a result of such failure to meet Applicable Requirements, the applicable NCPA Member Customer shall be responsible for compensating PG&E for the share of the financial penalties directly attributable to the NCPA Member Customer's failure under this Section E.2.

### **E.3 Manual Load Shedding**

The Parties shall maintain equipment for the purpose of manual load shedding programs in coordination with Applicable Requirements and the Balancing Authority as system conditions warrant.

**E.4 Load Restoration**

The Parties shall, in conformance with Applicable Requirements and their obligations to the Balancing Authority, coordinate the restoration of load following a system disturbance, and agree to do so in coordination with the Balancing Authority when required.

**E.5 Reactive Power**

As between PG&E and each NCPA Member Customer, both Parties shall maintain reactive power flow on each of their Electric Systems so that the sum of the reactive flows at the transmission Point(s) of Interconnection between PG&E and that NCPA Member Customer is within the power factor band of 0.97 lag and 0.99 lead. Both Parties will normally operate their respective systems to minimize kVar exchange between them. Operating conditions may require larger than normal kVar exchange between both Parties, and any such exchange will be done in accordance with Good Utility Practice and Applicable Requirements.

# PG&E Fiber and Relay Upgrade Project

January 12, 2026

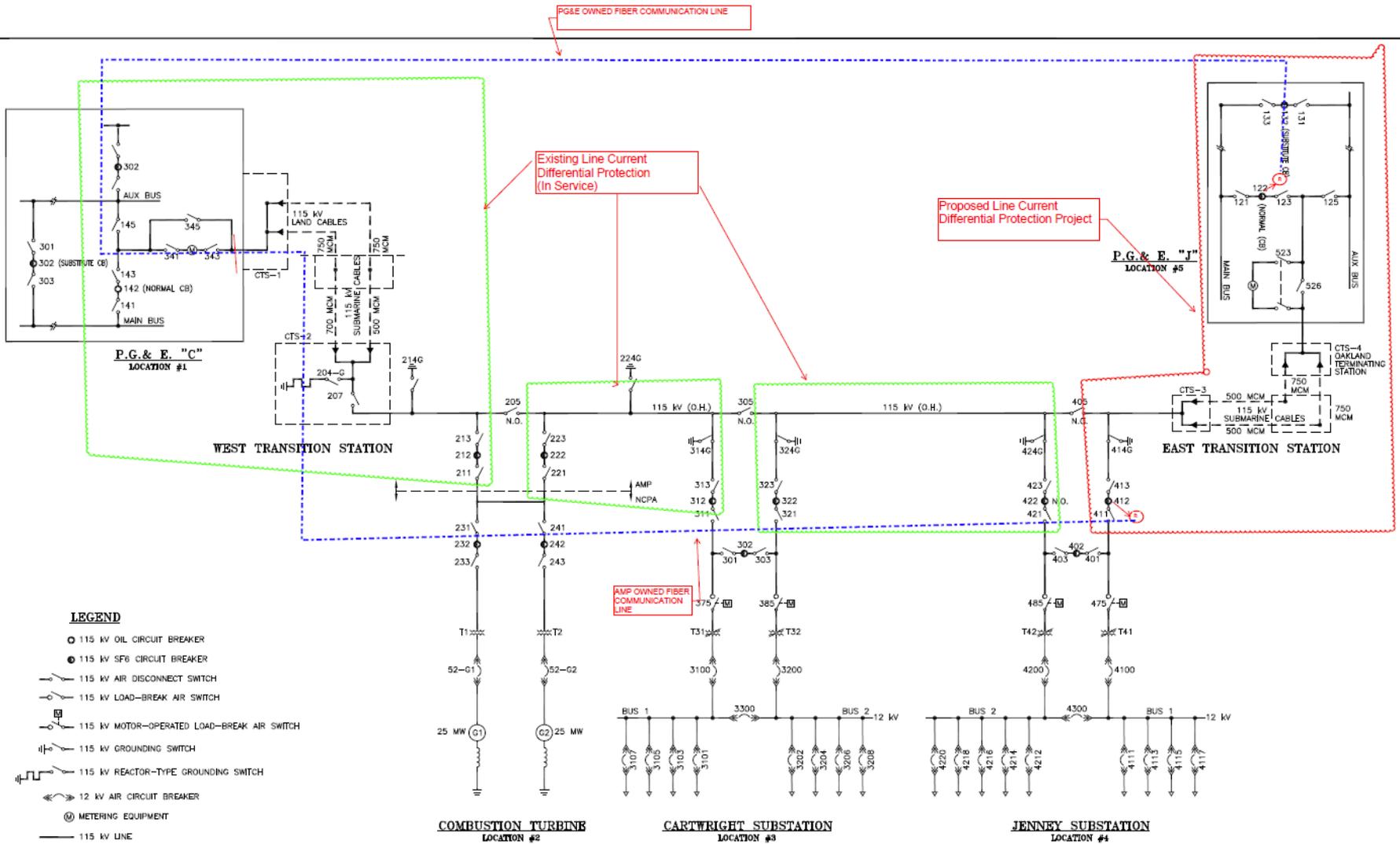
# Background

- Line current differential protection is the standard for protecting critical, hard-to-replace infrastructure and reliable service standards.
- AMP lost its AT&T leased copper wire connection and line current differential protection scheme between Station J and Jenney 15 years ago.
- June 2025 – Board approved \$7 million towards PG&E fiber and relay upgrade project within the FY26 Capital Budget

# Project Justification

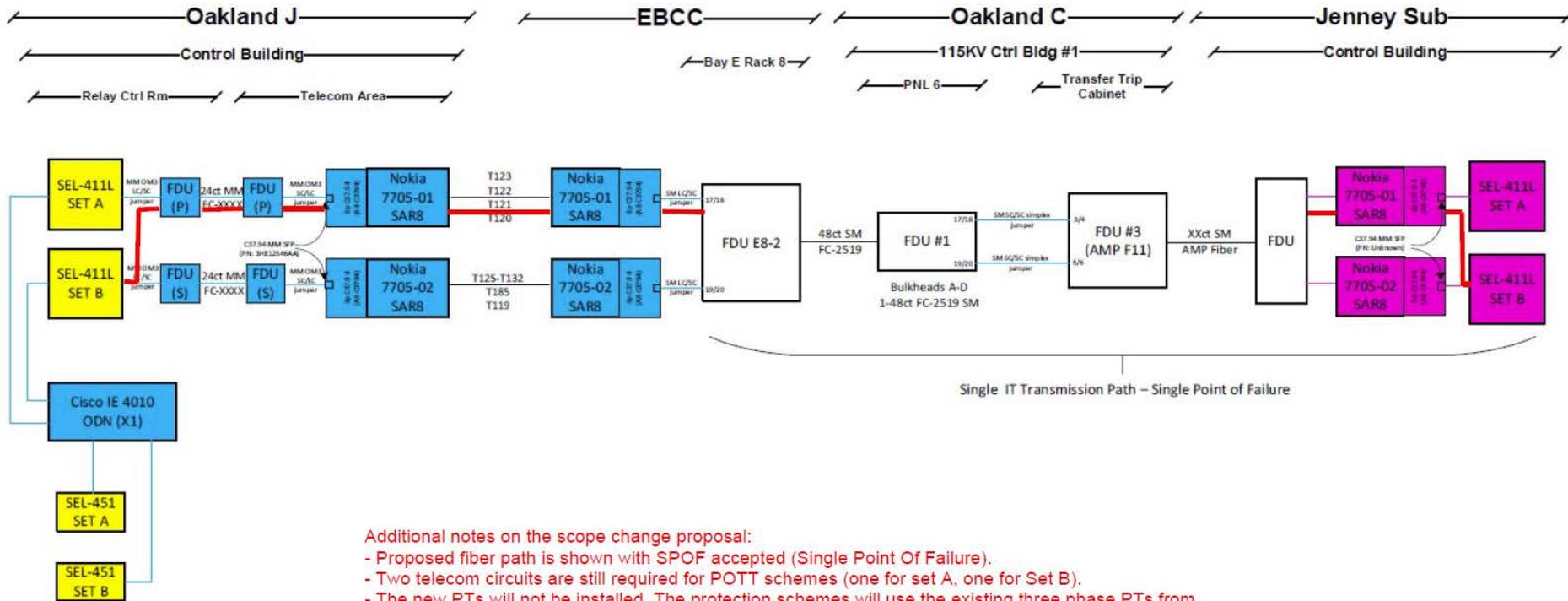
1. Project provides a higher level of system reliability, protection, and control of the 115 kV transmission lines between Jenney and Station J.
  - Protects \$10 – 20 million submarine 115kV cable
    - Damage to cable would expose AMP to single transmission source for 3 months +.
  - Current distance relays at Station J can overreach and trip Jenney based on a high 12kV fault on AMP's system.
2. Using the PG&E fiber optic communication channel is more economical than installing new direct fiber infrastructures crossing the Oakland-Alameda estuary and Interstate-880.

# Single-Line



# Scope of Work - Diagram

## Proposed



### Additional notes on the scope change proposal:

- Proposed fiber path is shown with SPOF accepted (Single Point Of Failure).
- Two telecom circuits are still required for POTT schemes (one for set A, one for Set B).
- The new PTs will not be installed. The protection schemes will use the existing three phase PTs from bus side and the existing single A-phase PT on the line side instead.

# Scope of Work

- PG&E
  - Four relays
  - Five network switches
  - 4 Fiber distribution units
  - Less than 2,000ft of fiber installation
- AMP
  - Two relays
  - Two network switches
  - Relay Consultant



# PG&E Cost Breakdown

Line Item	Unit Cost	Quantity	Total Cost
Labor	\$85.00	7,250	\$616,250.00
Materials	\$175,000.00	1	\$175,000.00
Overheads	\$1,701,188.00	1	\$1,701,188.00
Estimated Total Cost			= \$2,492,438.00
Contingency		30%	\$747,731.40
<b>Total w/Contingency, Before ITCC</b>			<b>= \$3,240,169.40</b>
ITCC (Applicable Federal Income Tax Rate)		24%	\$777,640.66
<b>TOTAL ESTIMATE</b>			<b>\$4,017,810.06</b>

## Estimated Equivalent of One Time Charge

\$19,765.03/mo. (IV.C above) x 12 months x 14.73 (present worth factor) =

**\$ 3,493,666.70**

Special Facilities Financed By	Application Base	Current Percentage Rate	Monthly Charge
AMP	Net Cost of Special Facilities (= A-1 Direct Assignment Facilities below)  1. Estimated cost of transmission facilities installed by PG&E: <u>\$3,240,169.40</u>  2. Estimated cost of transmission facilities installed by AMP and deeded to PG&E: <u>\$0</u>  Less allowance for existing facilities: --  Estimated net amount: <u>\$3,240,169.40</u>	0.61%	\$19,765.03/month
PG&E	Existing facilities allocated as Special Facilities	-	-
<b>Total Estimated Monthly Cost-of-Ownership Charge</b>			<b>\$19,765.03/month</b>

# Contingency

- If no contingency is used, final PG&E payments could be as low as \$5,778,059.
- Similar to AMP's process for customer connections, PG&E will provide a true-up of actual costs after project completion.

# Questions?

