



**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

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Application of PACIFIC GAS AND  
ELECTRIC COMPANY (U 39 E) for a  
Certificate of Public Convenience and  
Necessity Authorizing the Construction of the  
Northern San Joaquin 230 kV Transmission  
Project.

Application No. 23-09-\_\_\_\_

**APPLICATION OF PACIFIC GAS AND ELECTRIC  
COMPANY (U 39 E) FOR A CERTIFICATE OF PUBLIC  
CONVENIENCE AND NECESSITY AUTHORIZING THE  
CONSTRUCTION OF THE NORTHERN SAN JOAQUIN  
230 KV TRANSMISSION PROJECT**

**PUBLIC VERSION**

**EXHIBIT B  
CONTAINS CONFIDENTIAL INFORMATION  
FILED VIA ARCHIVAL GRADE DVD AND EXCLUDED  
DUE TO FILE SIZE AND FORMAT**

**EXHIBIT K  
FILED VIA ARCHIVAL GRADE DVD AND EXCLUDED  
DUE TO FILE SIZE AND FORMAT**

DAVID T. KRASKA  
Pacific Gas and Electric Company  
Law Department, 19<sup>th</sup> Floor  
300 Lakeside Drive, Suite 210  
Oakland, CA 94612  
Telephone: (415) 314-0840  
E-Mail: david.kraska@pge.com

MATHEW J. SWAIN  
Senior Counsel  
Paragon Legal  
601 Montgomery Street, Suite 2030  
San Francisco, CA 94111  
Telephone: (415) 407-6066  
E-Mail: mathew.swain@pge.com

Dated: September 1, 2023

Attorneys for Applicant  
PACIFIC GAS AND ELECTRIC COMPANY

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## LIST OF EXHIBITS

- Exhibit A: Project Overview Map
- Exhibit B: Proponent's Environmental Assessment (Filed Via Archival Grade DVD and Excluded Due to File Size and Format)
- Exhibit C: Preliminary Project Schedule
- Exhibit D: Map Showing the Location of Existing Electrical Transmission Lines Within One Mile of the Project
- Exhibit E: Minutes of the March 22, 2018 California Independent System Operator Board of Governors Meeting
- Exhibit F: Detailed Cost Estimate for Project
- Exhibit G: Preliminary Transmission EMF Management Plan and Substation Checklist
- Exhibit H: Letter from PG&E to the City of Lodi Seeking Position Statement, dated May 17, 2023
- Exhibit I: Letter from the City of Lodi to PG&E Providing a Position Statement, dated June 13, 2023.
- Exhibit J: Letter from PG&E to San Joaquin County Seeking Position Statement, dated July 13, 2023.
- Exhibit K: California Independent System Operator (CAISO). 2018a. 2017-2018 Final ISO Transmission Plan. March 22, 2018. Board Approved. (Filed Via Archival Grade DVD and Excluded Due to File Size)
- Exhibit L: California Independent System Operator (CAISO). 2018b. 2017-2018 Final ISO Transmission Plan. Appendix B: Reliability Assessment. Confidential – Subject to Transmission Planning NDA. Document Available on ISO Market Participant Portal. March 22, 2018.

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**

Application of PACIFIC GAS AND ELECTRIC COMPANY (U 39 E) for a Certificate of Public Convenience and Necessity Authorizing the Construction of the Northern San Joaquin 230 kV Transmission Project.

Application No. 23-09-\_\_\_\_

**APPLICATION OF PACIFIC GAS AND ELECTRIC  
COMPANY (U 39 E) FOR A CERTIFICATE OF PUBLIC  
CONVENIENCE AND NECESSITY AUTHORIZING THE  
CONSTRUCTION OF THE NORTHERN SAN JOAQUIN  
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Pursuant to the California Public Utilities Code, the California Public Utilities Commission's ("Commission" or "CPUC") General Order 131-D ("GO 131-D"), and the Commission's Rules of Practice and Procedure ("Rules"), Pacific Gas and Electric Company ("PG&E") respectfully requests that the Commission issue a Certificate of Public Convenience and Necessity ("CPCN") authorizing the construction of the Northern San Joaquin 230 kV Transmission Project (the "Project").

**I. INTRODUCTION**

**A. Contents of Application**

PG&E's Application for the Project consists of this cover pleading, the Proponent's Environmental Assessment ("PEA") submitted herewith, and the other specific materials required by GO 131-D and the CPUC Rules of Practice and Procedure, which are attached as Exhibits A-I, and incorporated herein by reference.

The PEA complies with and provides the information required by CPUC Rule 2.4, GO 131-D, and the Commission's Guidelines for Energy Project Applications Requiring CEQA Compliance: Pre-

filing and Proponent's Environmental Assessments. The PEA includes all information necessary for the Commission to evaluate the environmental consequences of the Project in accordance with the California Environmental Quality Act ("CEQA").

## **B. Project Overview**

The Project will provide a new 230 kilovolt ("kV") transmission system in northern San Joaquin County, in central California. The project will loop PG&E's existing overhead Brighton-Bellota 230 kV transmission line through PG&E's Lockeford Substation and install a new overhead double-circuit 230 kV transmission line between Lockeford Substation and a new PG&E switching station ("Thurman Switching Station") at the City of Lodi's Lodi Electric Utility's ("LEU") existing Fred M. Reid Industrial Substation ("Industrial Substation") in Lodi, California. In a related action, but which is not subject to CPUC jurisdiction, LEU will construct a new 230/60 kV substation, referred to as Guild Substation, in the City of Lodi that will receive power from PG&E's new switching station. There are three existing PG&E 60 kV lines currently connected to LEU Industrial Substation which PG&E would disconnect from LEU Industrial Substation as part of the Project.

The purpose of the Project is to address reliability and capacity issues identified by the California Independent System Operator ("CAISO") on the existing PG&E 230 kV and 60 kV systems serving the area between PG&E Lockeford and PG&E Lodi substations in northern San Joaquin County (Northern San Joaquin area). PG&E currently implements operational procedures to temporarily address the potential for 60 kV system-wide outages during peak loading conditions over approximately 165 megawatts (MW) of load. This temporary operational procedure draws from a single strong PG&E 230 kV source and can serve up to approximately 180 MW of load. However, if 60 kV system load exceeds 180 MW, or if the single PG&E 230 kV line has an issue and cannot transmit power, then the area's power load needs aren't met.

CAISO conducted a reliability assessment on the 230/60 kV system in the Northern San Joaquin area, studying normal system and various outage conditions for peak loading over a 10-year planning horizon. The CAISO reliability assessment identified thermal overload and voltage issues resulting

from National Electric Reliability Council (“NERC”) Category P1<sup>1</sup> contingencies on the PG&E 230/60 kV systems between PG&E Lockeford and Lodi Electric Utility (LEU) Industrial substations.<sup>2</sup> Additional CAISO assessment identified several NERC Category P6<sup>3</sup> outage scenarios that could result in thermal overloads on the 60 kV power lines in the Northern San Joaquin area.<sup>4</sup> CAISO identified Category P6 outages causing thermal overloads involving an outage of two of the five PG&E 60 kV power lines in its reliability assessment. While P6 is not required to be addressed by CAISO at this time, the project will address the thermal overloads identified by the P6 outage scenarios. CAISO’s 2017-2018 TPP assessment showed that if the recorded 2017 peak load for LEU was modeled in its study, overloads for P1 outages would have been identified on the PG&E 60 kV lines between PG&E Lockeford Substation and LEU Industrial Substation.<sup>5</sup> After 2018, CAISO identified Category P1 outages on the PG&E 60 kV lines in the Northern San Joaquin area as peak loads has increased annually.

The Project was recommended by the CAISO in its 2017-2018 Transmission Plan and approved by the CAISO Board of Governors at their March 22, 2018 meeting. If PG&E’s proposed schedule, set forth at Exhibit C, is achieved, the Project would be operational by March 2029 and construction would be completed by December 2029.

## **II. PROJECT DESCRIPTION**

The Project includes construction of a new double-circuit 230 kV transmission line and new 230 kV switching station in the City of Lodi that will be connected to the local 230 kV system by looping into an existing double-circuit 230 kV line located in San Joaquin County. The Project would be located primarily in the City of Lodi and San Joaquin County. The Project will increase the

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<sup>1</sup> A single outage, or a NERC Category P1 contingency, is defined as the loss of a generator, the loss of one transmission circuit, the loss of one transformer, the loss of one shunt device, or the loss of a single pole of direct current lines (NERC TPL-001-5.1 - Transmission System Planning Performance Requirements (2023)).

<sup>2</sup> CAISO 2017-2018 Transmission Plan at 118 (attached as Exhibit L).

<sup>3</sup> NERC Category P6 contingency, or outage, is defined as two overlapping single outages (transmission circuit, transformer, shunt device, or single pole of a direct current line) (NERC TPL-001-5.1 - Transmission System Planning Performance Requirements (2023)).

<sup>4</sup> CAISO 2017-2018 Transmission Plan, Appendix B at B76 to B80 (attached as Exhibit M).

<sup>5</sup> Id.

reliability of the existing system by providing a strong source of power for the City of Lodi to draw from. This Project will provide a capacity increase to the City of Lodi.

The Project involves both transmission and substation/switchyard construction activities consisting of five major elements:

1. Loop the Brighton-Bellota double circuit 230 kV transmission line into the existing Lockeford Substation
2. Upgrade the existing Lockeford Substation to accommodate the looped in Brighton-Bellota double-circuit 230-kV transmission line, including:
  - Reconfiguring the 230 kV ring bus to a four bay breaker-and-a-half (BAAH) configuration
  - Modifying existing and installing new electric equipment, including 230 kV disconnect switches, instrument transformers, protective relaying, metering and control equipment, remote SCADA equipment and telecommunication fiber extension, among others. Telemetry equipment, an auxiliary alternating current and direct current (AC/DC) power system, an electric grounding system, and underground conduits or trench systems
3. Construction of a new double-circuit 230 kV line from Lockeford Substation to the new Thurman 230 kV Switching Station
4. Construction of the new Thurman Switching Station that will receive the new double-circuit 230 kV transmission line from Lockeford Substation and serve the City of Lodi's new Guild Substation, including the following components:
  - A new 230 kV BAAH bay, with three 230 kV circuit breakers
  - A new 230 kV circuit breaker and disconnect switches.
5. Disconnect PG&E's three existing 60 kV transmission system from the City of Lodi's electrical grid, and reconfigure the lines to operate as Lockeford-Lodi 60 kV #1 (preliminary name).

In addition, construction will require equipment staging sites, laydown yards, equipment and material storage areas, and areas to temporarily store excavated materials.



Project construction will take place over an approximately 42-month period with initiation of service targeted for March 2029, and will involve a workforce of 2 to 66 people at any one time. As more fully detailed in Exhibit F, PG&E estimates that the total construction cost for the Project will be approximately \$137.1 million before contingencies. PG&E has budgeted \$15.8 million in contingencies. Thus, the total estimated construction cost of the Project with contingencies is approximately \$152.9 million.

### **III. CPCN REQUIREMENTS UNDER GO 131-D, SECTION IX.A**

#### **A. A Detailed Description Of The Proposed Transmission Facilities, Including The Proposed Transmission Line Route And Alternative Routes, If Any; Proposed Transmission Equipment, Such As Tower Design And Appearance, Heights, Conductor Sizes, Voltages, Capacities, Substations, Switchyards, Etc.; And A Proposed Schedule For Certification, Construction, And Commencement Of Operation Of The Facilities.**

Pursuant to GO 131-D, Section IX(A)(1)(a) and CPUC Rule 3.1(a) (as incorporated by GO 131-D), PG&E has provided in Section 2 of the PEA (Exhibit B), a detailed description of the proposed transmission facilities and equipment, as well as a schedule for certification, construction and commencement of operations of the facilities included in the Project. In Chapter 5 of the PEA (Exhibit B), PG&E provides a discussion of alternatives considered. A preliminary schedule, including proposed dates for certification, right-of-way acquisition, construction, and commencement of operation, is attached as Exhibit C.

#### **B. A Map Of Suitable Scale Of The Proposed Routing Location Showing Details Of The Right-Of-Way In The Vicinity Of Settled Areas, Parks, Recreational Areas, Scenic Areas, And Existing Electrical Transmission Lines Within One Mile Of The Proposed Route.**

Pursuant to GO 131-D, Section IX(A)(1)(b), and CPUC Rule 3.1(c) (as incorporated by GO 131-D), PG&E provides a map of the Project at Exhibit A. Maps showing route showing parks, recreation areas, and scenic areas may be found at Figure 5.16-1 of the PEA (Exhibit B). A map showing the location of existing electrical transmission lines within one mile of the Project is included as Exhibit D. Maps showing settled areas, including residential development, in the Project vicinity may be found at Figures 5.11-3 and 5.11-4 of the PEA (Exhibit B). A map showing the Project location in relation to the broader region may be found at Figure 3.1-1 of the PEA (Exhibit B).

**C. A Statement Of Facts And Reasons Why The Public Convenience And Necessity Require The Construction And Operation Of The Proposed Transmission Facilities.**

Pursuant to GO 131-D, Section IX(A)(1)(c) and CPUC Rule 3.1(e) (as incorporated by GO 131-D), PG&E provides the following statement of why the public convenience and necessity require construction and operation of the Project.

The project's service area is within northern San Joaquin County and includes approximately 37,750 PG&E and LEU electrical customers in the communities of Stockton, Lodi, Lockeford, Victor, Acampo, and Thornton. PG&E has approximately 10,000 customers in the service area, one of which is the City of Lodi. LEU serves approximately 27,750 electrical customers within the City of Lodi.

PG&E customers in the Northern San Joaquin area are served by PG&E's Lockeford Substation, which receives its power for its Lockeford-Lodi 60 kV line system from two PG&E 230 kV transmission lines. One 230 kV transmission line, Rio Oso-Lockeford, comes from Rio Oso Substation, which is 60 miles away from PG&E Lockeford Substation, and the other 230 kV transmission line, Lockeford-Bellota, comes from Bellota Substation, which is 11 miles away. The voltage is stepped down from 230 kV to 60 kV through two 230/60 kV transformers at Lockeford Substation. PG&E's 60 kV system is capable of delivering up to approximately 194 MW of power to the Northern San Joaquin area under normal conditions.

Energy demand in the Northern San Joaquin area is increasing steadily with residential development as well as agricultural and industrial growth. The current PG&E Lockeford-Lodi system has a load serving capability of approximately 194 MW under normal operating condition, and an emergency load serving capability of approximately 152 MW under a modeled NERC Category P1 contingency. Under peak loading conditions (more than approximately 165 MW of load), an outage of the Lockeford-Bellota 230 kV line would result in significant voltage deviation and low voltages on the Lockeford Substation 230 kV and 60 kV systems, which could lead to a system-wide outage in the Northern San Joaquin area affecting approximately 37,750 PG&E and LEU electrical customers. PG&E currently implements a temporary operational procedure to operate only the stronger transmission source – the shorter 11-mile Lockeford-Bellota 230 kV line – serving Lockeford Substation. Currently, during peak loading conditions, PG&E open-ends the longer 60-mile Rio Oso-Lockeford 230 kV line, effectively taking the line temporarily out of service to Lockeford Substation. This temporary

operational procedure addresses voltage issues, allowing the existing PG&E 230/60 kV system in the Northern San Joaquin area to serve up to approximately 180 MW of load from the strong transmission source. However, this temporary operational procedure means only one 230 kV source is serving Lockeford Substation and the Northern San Joaquin area 60 kV system. Under these conditions, the reliability of the power supply for the Northern San Joaquin area is significantly reduced as it only has a single 230 kV source. If the 60 kV system load exceeds 180 MW, or if the shorter Lockeford-Bellota 230 kV line has an issue and cannot provide transmission, then service through the PG&E 60 kV system would be lost without the longer 230 kV line in operation.

The peak amount of electrical service, or load served, in the area has exceeded the capacity of the existing system during normal operation and under various outage conditions. When the system load exceeds capacity, voltage and thermal issues may arise that can impair the reliability of the system. CAISO identified thermal overload and voltage issues resulting from NERC Category P1 contingencies on the PG&E 230/60 kV systems between PG&E Lockeford and LEU Industrial substations.<sup>6</sup> CAISO also identified several NERC Category P6 outage scenarios that could result in thermal overloads on the 60 kV power lines in the Northern San Joaquin area. In addition, CAISO identified in its reliability assessment Category P6 outages causing thermal overloads involving an outage of two of the five PG&E 60 kV power lines in the Lodi area. CAISO also determined that if the recorded 2017 peak load for LEU was modeled in its study, overloads causing P1 outages would have occurred on the PG&E 60 kV lines between Lockeford Substation and LEU's Industrial Substation.<sup>7</sup> CAISO determined that the potential for P1 outages on the PG&E 60 kV lines would continue to exist after 2018 in the Northern San Joaquin area because peak loads have increased annually. In other words, PG&E's current temporary operational procedure to address voltage issues will not be an effective solution with forecasted peak load regularly being greater than 180 MW.

CAISO concluded that to improve system reliability and accommodate existing and forecasted growth in electrical needs beyond the existing capacity, the system needs to shift load from the 60 kV system to a new 230 kV source. CAISO identified this project in its 2017-2018 Transmission Plan to

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<sup>6</sup> CAISO 2017-2018 Transmission Plan at 118 (attached as [Exhibit L](#)).

<sup>7</sup> CAISO 2017-2018 Transmission Plan, Appendix B at B76 to B80 (attached as [Exhibit M](#)).

address the reliability, thermal overload, and voltage issues on the 60 kV network between PG&E Lockeford and PG&E Lodi substations and the 230 kV system serving the area.<sup>8</sup>

Consistent with the CAISO scope, PG&E's proposed project scope would loop Brighton-Bellota 230 kV line through PG&E Lockeford Substation and construct a new double-circuit 230 kV line through the new PG&E Thurman Switching Station at LEU Industrial Substation. The PG&E 230 kV scope includes the expansion of Lockeford Substation to accommodate the new 230 kV lines. As a related effort, LEU will construct a new 230/60 kV substation, referred to as Guild Substation, to receive the new 230 kV source from PG&E's new Thurman Switching Station. LEU's Guild Substation will step down the new 230 kV source to 60 kV and connect to LEU's Industrial Substation following certain modifications by LEU to that substation. PG&E would disconnect the three existing 60 kV lines currently connected to LEU Industrial Substation, Lodi-Industrial, Industrial Tap and Lockeford-Industrial, and reconfigure them outside of LEU Industrial Substation when the new 230 kV source is in service.

After completing the Project, the PG&E Lockeford-Lodi system will increase from its current normal load serving capability of 194 MW to approximately 404 MW under normal operating condition, and from its emergency load serving capability of 152 MW to approximately 456 MW under a P1 contingency. By connecting a new 230 kV source to LEU and removing LEU from its current PG&E 60 kV sources, low voltage and thermal overload issues on the PG&E 230/60 kV system would be resolved with less overall power demand on the PG&E 60 kV system. The need for the current operational procedure to address voltage issues (open-ending PG&E Rio Oso-Lockeford) would be eliminated and capacity for peak loading would be increased, creating improved service reliability for the PG&E customers in the Northern San Joaquin area during current and forecasted peak loading conditions.

PG&E's objectives for the Project, which reflect its purpose and need, are to:

- Meet PG&E's legal obligation to implement the CAISO-approved project.
- Improve system reliability for PG&E's approximately 10,000 electrical customers, one of which is Lodi Electric Utility, which itself serves approximately 27,750 customers.

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<sup>8</sup> CAISO 2017-2018 Transmission Plan at 118 (attached as Exhibit L).

- Increase capacity to accommodate projected growth in demand and minimize future reliability issues.
- Address thermal overloads and voltage concerns on PG&E's 60 kV transmission system identified during P1 contingencies and maintain compliance with NERC reliability standards.
- Address thermal overloads on PG&E's 60 kV transmission system identified during P6 contingencies and maintain compliance with NERC reliability standards.
- Reinforce the PG&E 60 kV system in the Lodi area by constructing a new 230 kV double-circuit line to provide an additional source of power.
- Construct a new 230 kV switching station to receive the new 230 kV double-circuit line and provide power to a new 230/60 kV substation to be constructed by LEU.
- Separate PG&E's 60 kV system at the LEU Industrial Substation from LEU's 60 kV system.
- Construct a safe, economical, and technically feasible project that minimizes environmental and community impacts.

PG&E shares CAISO's conclusion that the value of making the reliability investment reflected in the Project is warranted.

The minutes from CAISO's March 22, 2018 Board of Governors meeting adopting the 2017-2018 Transmission Plan, including CAISO's determination that the Project is needed and should be constructed, are included at Exhibit E.

**D. A Detailed Statement Of The Estimated Cost Of The Proposed Facilities.**

Pursuant to GO 131-D, Section IX(A)(1)(d) and CPUC Rule 3.1(f) (as incorporated by GO 131-D), PG&E estimates that the total construction cost for the Project will be approximately \$ 137.1 million before contingencies. PG&E has budgeted \$ 15.8 million in contingencies. Thus, the total estimated construction cost of the Project with contingencies is approximately \$ 152.9 million. A summary and detailed decision-level cost estimate is provided in Exhibit F. Project construction costs are broken down in the following preliminary estimates:

<b>Construction Costs</b>	<b>Cost (\$2023)</b>
New double-circuit 230 kV Line: Lockeford to Thurman Switching Station	41,714,782
Loop Brighton-Bellota 230 kV Transmission Line into Lockeford Substation	23,528,128
Thurman 230 kV Switching Station	29,707,757
Upgrade Lockeford 230kV Substation	36,120,193
Remote-end substation upgrades: Brighton, Bellota, Lodi and Rio Oso substation	3,327,002
Disconnect 60 kV system from City of Lodi and Reconfigure Existing 60 kV Lines	2,222,979
Low-Cost and No-Cost Measures to Reduce Electromagnetic Field Exposure	450,000
<b>TOTAL CONSTRUCTION COSTS WITHOUT CONTINGENCIES</b>	<b>137,070,841</b>
Contingencies	15,820,000
<b>TOTAL CONSTRUCTION COSTS WITH CONTINGENCIES</b>	<b>152,890,841</b>

PG&E estimates that average annual operation and maintenance costs for the Project over a 75-year project life will be as follows:

<b>Operation and Maintenance Costs</b>	<b>Average Annual Cost (\$2023)</b>
Upgrades to Lockeford Substation and New Thurman 230 kV Switching Station	72,000
230 kV Transmission Lines	115,000
<b>TOTAL ANNUAL OPERATION AND MAINTENANCE COSTS</b>	<b>187,000</b>

PG&E notes that the last cost estimate it submitted in 2017 to the CAISO as part of the Transmission Planning Process was developed prior to the completion of the engineering cost and feasibility studies that resulted in the current, more refined decision-quality cost estimates reflected above and in Exhibit F.

**E. Reasons For Adoption Of The Route Selected, Including Comparison With Alternative Routes, Including The Advantages And Disadvantages Of Each.**

Pursuant to GO 131-D, Section IX(A)(1)(e), PG&E has included a discussion of the alternatives it considered in Chapter 5 of the PEA (Exhibit B). That discussion evaluates the advantages and disadvantages of the considered alternatives and provides the reasons for adoption of the route selected.

**F. A Schedule Showing The Program Of Right-Of-Way Acquisition And Construction.**

Pursuant to GO 131-D, Section IX(A)(1)(f), PG&E provides a preliminary, illustrative schedule for construction and right-of-way acquisition activities in Exhibit C. The final Project construction schedule can only be determined once the Commission's staff issue a full Notice to Proceed, all applicant-proposed environmental protection measures and any other environmental mitigation

measures have been taken into account, materials needed for construction have been delivered and are ready for installation, and PG&E's contractors have mobilized and are ready to initiate construction.

The estimated construction duration for the Project is approximately 42 months, and PG&E's intent is to place the new switching station and lines in service by March 2029 and complete construction by December 2029. The construction activities included in the attached preliminary schedule include the construction of the Thurman Switching Station and the new double-circuit 230 kV transmission line.

Construction will typically occur between 7 a.m. and 5:30 p.m., or during times that will be set through coordination with the City of Lodi. All applicable regulations, ordinances, and restrictions will be identified and complied with prior to and during construction. #

**G. A Listing Of The Governmental Agencies With Which Proposed Route Reviews Have Been Undertaken, Including A Written Agency Response To The Applicant's Written Request For A Brief Position Statement By That Agency. (Such Listing Shall Include The Native American Heritage Commission, Which Shall Constitute Notice On California Indian Reservation Tribal Governments.) In The Absence Of A Written Agency Position Statement, The Utility May Submit A Statement Of Its Understanding Of The Position Of Such Agencies.**

Pursuant to GO 131-D, Section IX(A)(1)(g), PG&E provides the following information regarding the government agencies with which PG&E has reviewed the proposed Project. While PG&E has provided summaries of its meetings with both local governments and resource agencies, it has appended to this Application written correspondence with the City of Lodi and San Joaquin County, as these are the local governments in the Project area, and are consequently the only agencies from which PG&E specifically sought input regarding siting and routing alternatives.

**City of Lodi, California**

PG&E met regularly with LEU, a department of the City of Lodi, throughout the development of the project regarding technical review of the scope, and because LEU plans to rely on the CPUC's CEQA document for CEQA compliance. Additionally, PG&E has met with City of Lodi planning and public works officials and other key staff on multiple occasions in 2015, 2016, 2017, 2018 and 2022 to provide an overview of the Project and subsequent updates.



The Lodi City Council passed a unanimous resolution in favor of the Northern San Joaquin Power Connect Project on April 7, 2016. On May 17, 2023, PG&E sent the email attached as Exhibit H to the City of Lodi requesting a written position statement. The City of Lodi expressed its support for the Project in a letter dated June 13, 2023, which is attached as Exhibit I.

### **San Joaquin County, California**

PG&E met with County planning and public works officials on multiple occasions in 2015 and 2016 to provide an overview of the Project and subsequent updates. On July 13, 2023, PG&E sent the email attached as Exhibit J to San Joaquin County requesting a written position statement.

### **The Native American Heritage Commission (“NAHC”)**

PG&E requested a search of the Sacred Lands Files from the Native American Heritage Commission (“NAHC”) on November 4, 2015. “PG&E requested a search of the Sacred Lands Files from the Native American Heritage Commission (“NAHC”) on November 4, 2015. The NAHC responded on November 25, 2015, indicating that the file search was negative but providing a list of Native American groups and individuals with ancestral ties to the area. The NAHC provided a list of seven Native American tribes (Randy Yonemura, Buena Vista Rancheria of Me-Wuk Indians, California Valley Miwok Tribe, Ione Band of Miwok Indians, Ione Band of Miwok Indians Cultural Committee, Ione Band of Miwok Indians, and Wilton Rancheria) who may have an interest in the proposed Project. PG&E sent initial outreach letters to the contacts in May and November of 2016. In response to communication on December 6, 2016 from Wilton Rancheria, PG&E met with Wilton Rancheria representatives on January 12, 2017 to discuss the project.

After the project scope was revised by CAISO, PG&E requested a new search of the Sacred Lands Files from the NAHC on April 13, 2021. The NAHC responded on May 10, 2021, indicating that the file search was negative but providing a list of Native American groups and individuals with ancestral ties to the area. The NAHC provided a list of 18 Native American tribes (Buena Vista Rancheria of Me-Wuk Indians, California Valley Miwok Tribe, California Valley Miwok Tribe AKA Sheep Rancheria of Me-Wuk Indians of CA, Chicken Ranch Rancheria of Me-Wuk Indians, Guidiville Indian Rancheria, Ione Band of Miwok Indians, Muwekma Ohlone Indian Tribe of the SF Bay Area, Nashville Enterprise Miwok-Maidu-Nishinam Tribe, North Valley Yokuts Tribe, North Valley Yokuts



Tribe, Tule River Indian Tribe, Tule River Indian Tribe, Tule River Indian Tribe, United Auburn Indian Community of the Auburn Rancheria, Wilton Rancheria, Wilton Rancheria, Wilton Rancheria, Wilton Rancheria, and The Confederated Villages of Lisjan) who may have an interest in the proposed Project. PG&E sent initial outreach letters to the contacts on June 17, 2021. PG&E sent additional outreach letters to the 18 contacts on February 8, 2023.

At the time of this report, four responses have been received from the Buena Vista Rancheria of Me-Wuk Indians, the United Auburn Indian Community of the Auburn Rancheria, Wilton Rancheria, and the Confederated Villages of Lisjan requesting additional information. Additionally, Buena Vista Rancheria of Me-Wuk Indians requested formal government-to-government consultation under CEQA to discuss a site visit and other potential measures to protect the cultural resources. PG&E responded to the four tribes on July 27, 2023 with access to the cultural resources reports and the NAHC results. The Confederated Villages of Lisjan responded on August 2, 2023 with no further project information. All NAHC correspondence is included in the PEA (Exhibit B) as Appendix D4.

#### **IV. CPCN REQUIREMENTS UNDER GO 131-D, SECTION X**

GO 131-D, Section X(A) requires PG&E to provide information regarding the measures taken or proposed by PG&E to reduce the potential for exposure to electromagnetic fields (“EMF”) generated by the Project. PG&E will employ “no cost” and specified “low cost” measures to reduce public exposure to EMF in accordance with Commission Decision (“D.”) 06-01-042 and PG&E’s “EMF Design Guidelines for Electrical Facilities.” Although the precise measures that will be employed will not be determined until final engineering is completed, the following are examples of measures that may be adopted as required by D. 06-01-042 and the Design Guidelines:

- Optimal Conductor Phasing. The new 230 kV loop and new 230 kV line are configured with optimal phasing to minimize EMF at the right of way boundary.
- Raising Tower Height. PG&E will raise the height of 15 towers for the new 230 kV lines by 10 feet to reduce EMF near residences along the proposed route.
- Substation Design Considerations. PG&E will keep high current devices, transformers, and capacitors, reactors away from the substation and switching station property lines.

Once the Project is approved by the Commission, a Final EMF Management Plan containing the precise EMF measures to be employed will be prepared for the Project and submitted to the CPUC. Interested parties may contact PG&E's Project Information Line at 415-973-5530 to receive a copy of the Final EMF Management Plan once it has been prepared. PG&E's Preliminary EMF Management Plan and Checklist for the proposed Project are attached as Exhibit I.

#### **V. CEQA COMPLIANCE AND MINOR MODIFICATIONS IN FINAL PROJECT DESIGN**

GO 131-D, Section XVI, and CPUC Rule 2.4 require that the Project comply with CEQA. PG&E submits herewith as Exhibit B its PEA for the Project. The Commission's Energy Division will review the Project in accordance with CEQA and prepare the appropriate CEQA document (a Negative Declaration ("ND"), Mitigated Negative Declaration ("MND"), or Environmental Impact Report ("EIR")). The Commission will determine whether the CEQA document was completed in compliance with CEQA and, if so, certify it for the Project.

To avoid incurring significant costs before the Commission approves the Project, PG&E will perform final engineering after the Commission has completed its CEQA review and approved the Project or an alternative thereto. Final engineering sometimes results in minor modifications to the Project design. Under Section 15162(a)(1) of the CEQA Guidelines, which commence at Section 15000 of Title 14 of the California Code of Regulations, a subsequent ND, MND or EIR is required if the lead agency determines that "[s]ubstantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects."

PG&E requests that in issuing any CPCN approving the Project, the Commission explicitly order that the Energy Division shall be authorized to determine whether a minor Project modification would trigger any of the criteria that require preparation of a subsequent ND, MND or EIR under CEQA Guideline § 15162(a), including the standard set forth above. If a proposed change to the approved Project requires a subsequent ND, MND or EIR under this standard, then Energy Division would determine that a Petition for Modification of the Commission Decision granting the CPCN must be filed and a subsequent ND, MND or EIR must be prepared if the proposed change is pursued. If a proposed

change to the approved Project does not trigger the subsequent ND, MND or EIR standard under CEQA, then the Energy Division should be authorized by the Commission's CPCN Decision to grant any requested minor Project modification required during final engineering and construction.

## **VI. STATUTORY AND PROCEDURAL REQUIREMENTS**

### **A. The Applicant**

PG&E is, and since October 10, 1905, has been, an operating public utility corporation organized under California law. It is engaged principally in the business of furnishing electric and gas services in California. PG&E's principal place of business is 300 Lakeside Drive, Oakland, CA 94612.

A certified copy of PG&E's Amended and Restated Articles of Incorporation, effective as of June 22, 2020, is on record before the Commission in connection with PG&E's A.20-07-002, filed with the Commission on July 1, 2020. These articles are incorporated herein by reference pursuant to Rule 2.2 of the Commission's Rules.

PG&E's most recent Proxy Statement dated April 6, 2023 was filed with the Commission on May 2, 2023 in A.23-05-005, and is incorporated herein by reference. PG&E's balance sheet and an income statement for the three months ended March 31, 2023 was filed with the Commission on May 15, 2023 in A.23-05-012, and is incorporated herein by reference.

Communications with regard to this Application should be addressed to:

DAVID T. KRASKA  
MATHEW J. SWAIN  
Pacific Gas and Electric Company  
Law Department, 19<sup>th</sup> Floor  
300 Lakeside Dr., Suite 210  
Oakland, CA 94612  
Telephone: (415) 314-0840  
Facsimile: (510) 898-9696  
Email: [mathew.swain@pge.com](mailto:mathew.swain@pge.com)

### **B. Competing Utilities**

CPUC Rule 3.1(b) (as incorporated by GO 131-D) requires an applicant to address utilities, corporations, persons, or other entities with which the proposed construction is likely to compete. This Project is located in within the City of Lodi and County of San Joaquin. The proposed construction lies entirely within the boundaries of PG&E's existing service territory, and as such, will not compete with any other utility, corporation or person.

**C. Required Permits**

CPUC Rule 3.1(d) (as incorporated by GO 131-D) requires an applicant to identify the franchises and such health and safety permits as the appropriate public authorities have required or may require for the Project. Section 3.10 of the PEA (Exhibit B) lists the potential permits that may be required by other public authorities.

**D. Alternatives To Transmission Facilities**

Pursuant to Public Utilities Code Section 1002.3, PG&E has included in its discussion of alternatives in Sections 4 and 6 of the PEA (Exhibit B) consideration of whether there are cost-effective alternatives to the Project that “meet the need for an efficient, reliable, and affordable supply of electricity, including but not limited to, demand-side alternatives....”

**E. Design And Construction Management Cost Control Plan**

Pursuant to Public Utilities Code Section 1003(e), PG&E describes below its plan for design and construction management and cost control for the Project. The Project is being managed by PG&E’s Electric Transmission Department using industry accepted project management tools. Activities are planned and tracked use the Primavera P6 scheduling tool. Costs are estimated, forecast and controlled using the P6 schedule and PG&E’s SAP business system. The project management team will plan, monitor and control Project activities and cost in relationship to the schedule. Monthly reports will be provided to PG&E management showing progress, status, planned work, cost information and issues and risks.

PG&E management will provide gated approvals for the Project. This allows management to set spending limits, provides opportunities to check the Project for compliance with project governance rules, provide input on major decisions and resolve issues that arise. Management will also control contingency funds approved for use with this Project.

The contracts for the engineering team are already in place and are managed by the project management team. The contracts for procurement and construction services and construction monitoring have not been put in place. The contract type will follow PG&E’s procurement standards and be managed by the project management team.

**F. Public Notice**

Pursuant to GO 131-D, Section XI.A, notice of this Application will be given within 10 days of filing the Application by mail,<sup>9</sup> by advertisement,<sup>10</sup> and by posting:<sup>11</sup> (1) to certain public agencies and legislative bodies; (2) to owners of property located on or within 300 feet of the Project area; (3) by advertisement in a newspaper or newspapers of general circulation; and (4) by posting a notice on-site and off-site at the Project location. PG&E has given, or will give, proper notice within the time limits prescribed in GO 131-D.

**G. Compliance with Rule 2.5**

CPUC Rule 2.5 provides that an applicant include a deposit, to be applied to the costs the Commission incurs to prepare a negative declaration or an environmental impact report, when the Commission is acting as the lead agency pursuant to CEQA. Pursuant to Rule 2.5, PG&E has calculated the total deposit to be \$156,000. Rule 2.5 additionally provides: “Proponent shall pay the applicable deposit in progressive payments due as follows: One-third of the deposit at the time the application or pleading is filed, an additional one-third no later than 120 days after the time the application or pleading is filed, and the remaining one-third no later than 180 days after the time the application or pleading is filed.” Therefore, PG&E has provided with this application a check payable to the Commission in the amount of \$52,000.

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<sup>9</sup> Pursuant to GO 131-D (Section XI.A.1), notice of the filing of an application for a CPCN must be sent by direct mail to “(a) The planning commission and the legislative body for each county or city in which the proposed facility would be located, the CEC, the State Department of Transportation and its Division of Aeronautics, the Secretary of Resources Agency, the Department of Fish and Game, the Department of Health Services, the State Water Resources Control Board, the Air Resources Board, and other interested parties having requested information. The utility shall also give notice to the following agencies and subdivisions in whose jurisdiction the proposed facility would be located: the Air Pollution Control District, the California Regional Water Quality Control Board, the State Department of Transportation’s District Office, and any other State or Federal agency which would have jurisdiction over the proposed construction; and (b) All owners of land on which the proposed facility would be located and owners of the property within 300 feet of the right-of-way as determined by the most recent local assessor's parcel roll available to the utility at the time notice is sent[.]”

<sup>10</sup> Pursuant to GO 131-D (Section XI.A.2), publication of the notice of the filing of an application for a CPCN must be “[b]y advertisement, not less than once a week, two weeks successively, in a newspaper or newspapers of general circulation in the county or counties in which the proposed facilities will be located, the first publication to be not later than ten days after filing of the application[.]”

<sup>11</sup> Pursuant to GO 131-D (Section XI.A.3), notice of the filing of an application for a CPCN must be posted “[b]y posting a notice on-site and off-site where the project would be located.”

## **H. PG&E's Financial Ability**

CPUC Rule 3.1(h) (as incorporated by GO 131-D) asks for: "Statements or exhibits showing the financial ability of the applicant to render the proposed service together with information regarding the manner in which applicant proposes to finance the cost of the proposed construction or extension."

PG&E will own the assets that comprise the Project, and such assets will be added to PG&E's utility rate base. PG&E intends to finance the Project's estimated cost of approximately \$ **152** million with the same proportion of debt and equity with which all other rate base assets are financed: 47% long-term debt; 1% preferred stock; and 52% common stock.

PG&E anticipates that the funds to finance the Project will be primarily derived from cash generated by PG&E's operations and, to the extent necessary, from external sources of funds. External sources of funds would come from the issuance of some combination of debt and equity securities. PG&E's ability to fund this Project is demonstrated through PG&E's financial statements contained in PG&E Corporation's Quarterly Report on Form 10-Q filed with the United States Securities and Exchange Commission on July 27, 2023 for the period ending June 30, 2023. PG&E believes that its utility operations will continue to generate substantial cash with which to fund its construction activities, including the Project.

## **I. Proposed Rates for the Project**

CPUC Rule 3.1(h) (as incorporated by GO 131-D) asks for a "statement of the proposed rates to be charged for service to be rendered by means of such construction or extension." The Project's costs are for transmission-related services, and PG&E therefore will seek to recover such costs through transmission rates under the jurisdiction of the Federal Energy Regulatory Commission. Accordingly, ratemaking issues are beyond the scope of this Application.

## **VII. APPLICATION EXHIBITS**

The following Exhibits are attached to this Application:

- A. Project Overview Map
- B. Proponent's Environmental Assessment (Filed Via Archival Grade DVD and Excluded Due to File Size and Format)
- C. Preliminary Project Schedule

- D. Map Showing the Location of Existing Electrical Transmission Lines Within One Mile of the Project
- E. Minutes of the March 22, 2018 California Independent System Operator Board of Governors Meeting
- F. Detailed Cost Estimate for Project
- G. Preliminary Transmission EMF Management Plan and Substation Checklist
- H. Letter from PG&E to the City of Lodi Seeking Position Statement, dated May 17, 2023
- I. Letter from the City of Lodi to PG&E Providing a Position Statement, dated June 13, 2023
- J. Letter from PG&E to San Joaquin County Seeking Position Statement, dated July 13, 2023
- K. CAISO 2017-2018 Transmission Plan (Filed Via Archival Grade DVD and Excluded Due to File Size and Format)
- L. CAISO 2017-2018 Final ISO Transmission Plan, Appendix B: Reliability Assessment (Confidential – Subject to Transmission Planning NDA)

### **VIII. CATEGORIZATION OF PROCEEDINGS AND NEED FOR HEARINGS**

Pursuant to CPUC Rule 2.1(c), the Application must contain: “The proposed category for the proceeding, the need for hearing, the issues to be considered including relevant safety considerations, and a proposed schedule. (See Article 7.) The proposed schedule shall be consistent with the proposed category, including a deadline for resolving the proceeding within 12 months or less (adjudicatory proceeding) or 18 months or less (ratesetting or quasi-legislative proceeding).” CPUC Rule 7.1(e)(2) provides: “When a proceeding does not clearly fit into any of the categories as defined in Rules 1.3(a), (d), and (e), the proceeding will be conducted under the rules applicable to the ratesetting category unless and until the Commission determines that the rules applicable to one of the other categories, or some hybrid of the rules, are best suited to the proceeding.”

The Commission has consistently found that applications for CPCNs under GO 131-D do not fit within any of the enumerated categories and should therefore be considered as “ratesetting proceedings.” Thus, even though transmission rates are set by FERC and are therefore beyond the scope of this proceeding, the ratesetting rules apply to this Application.



The issue in this proceeding, as set forth in GO 131-D, is whether the Project is necessary to promote the safety, health, comfort, and convenience of the public, and thus is required by the public convenience and necessity.

Safety considerations will be addressed in the following manner. The new switching station and rerouted underground cables will be constructed, operated and maintained in compliance with current safety requirements, including CPUC General Orders 95, 128, 165, 166 and 174, state and local building codes, and OSHA. PG&E workers will utilize construction Best Management Practices, standard health and safety procedures, and guard structures to ensure the safety of workers and nearby residents throughout construction. PG&E will also implement transportation safety practices and procedures and coordinate with local government agencies and transportation service providers to ensure safe access of emergency service providers during lane closures associated with construction. In addition, PG&E will prepare a Worker Environmental Awareness Program and will implement hazardous substance control/emergency response and fire risk procedures, and will comply with all measures and applicable laws, to address potential hazardous materials safety issues. Removed equipment and other waste generated during construction will be characterized and disposed of appropriately in accordance with applicable law.

Whether hearings are needed should be determined after protests, if any, are filed. PG&E's proposed certification schedule is set forth in Exhibit C.

## **IX. CONCLUSION**

PG&E respectfully requests that the Commission:

1. Issue a Decision and Order granting PG&E a Certificate of Public Convenience and Necessity, certifying an applicable environmental document for the Project, and granting any other permission and authority necessary to construct, operate and maintain the Project.
2. Determine that the public convenience and necessity does now, and will in the future, require the proposed Project.
3. Authorize Energy Division to approve requests by PG&E for minor project modifications that may be necessary during final engineering and construction of the Project so long as



Energy Division finds that such minor project modifications do not require a subsequent environmental document under Section 15162 of the CEQA Guidelines.

4. Grant such other and further relief as the CPUC finds just and reasonable.

Respectfully submitted,

DAVID T. KRASKA  
Pacific Gas and Electric Company  
Law Department, 19<sup>th</sup> Floor  
300 Lakeside Drive , Suite 210  
Oakland, CA 94612  
Telephone: (415) 314-0840  
Email: [david.kraska@pge.com](mailto:david.kraska@pge.com)

MATHEW J. SWAIN  
Senior Counsel  
Paragon Legal  
601 Montgomery Street, Suite 2030  
San Francisco, CA 94111  
Telephone: (415) 407-6066  
Email: [mathew.swain@pge.com](mailto:mathew.swain@pge.com)

By:                     /s/ Mathew Swain                      
Mathew J. Swain

Dated: September 1, 2023

Attorneys for Applicant  
PACIFIC GAS AND ELECTRIC COMPANY

## SCOPING MEMO INFORMATION

### Category:

Ratesetting. Pursuant to Rule 2.1(c) of the Commission's Rules of Practice and Procedure, the application must propose a category for the proceeding as defined in Rule 1.3. If none of the enumerated categories are applicable, proceedings will be categorized under the catch-all "ratesetting" category. (CPUC Rule 7.1 (e)(2).) The Commission has consistently found that applications for CPCNs and PTCs under GO 131-D do not fit within any of the enumerated categories and should therefore be considered as "ratesetting proceedings."

### Need for hearing:

No areas of environmental or other public concern are known. If environmental concerns are raised, those can be addressed in the environmental review process and do not require separate hearings. If other concerns about the Project are raised, PG&E recommends that a public participation hearing be held.

### Issues:

Whether the Project is necessary to promote the safety, health, comfort, and convenience of the public, and thus is required by the public convenience and necessity.

### Safety considerations:

This Project consists of bringing a new 230 kV source into the City of Lodi by looping in an existing double-circuit 230 kV line, expanding an existing 230 kV substation, constructing a new double-circuit 230 kV line, and a new 230 kV switching station. The expanded substation, new switching station and new 230 kV lines will be constructed, operated and maintained in compliance with current safety requirements, including CPUC General Orders 95, 128, 165, 166 and 174, state and local building codes, and OSHA. PG&E workers will utilize construction BMPs, standard health and safety procedures, and guard structures to ensure the safety of workers and nearby residents throughout construction. PG&E will also implement transportation safety practices and procedures and coordinate with local government agencies and transportation service providers to ensure safe access of emergency service providers during lane closures associated with construction. In addition, PG&E will prepare a Worker Environmental Awareness Program and will implement hazardous substance control/emergency response and fire risk procedures, and will comply with all measures and applicable laws, to address potential hazardous materials safety issues. Removed equipment and other waste generated during construction will be characterized and disposed of appropriately in accordance with applicable law.

### Proposed Schedule:

See Exhibit C, attached.

**VERIFICATION**

I, the undersigned, declare:

I am an officer of PACIFIC GAS AND ELECTRIC COMPANY, a corporation, and am authorized to make this verification on its behalf. The statements in the foregoing document are true of my own knowledge, except as to matters which are stated on information or belief, and as to those matters I believe them to be true.

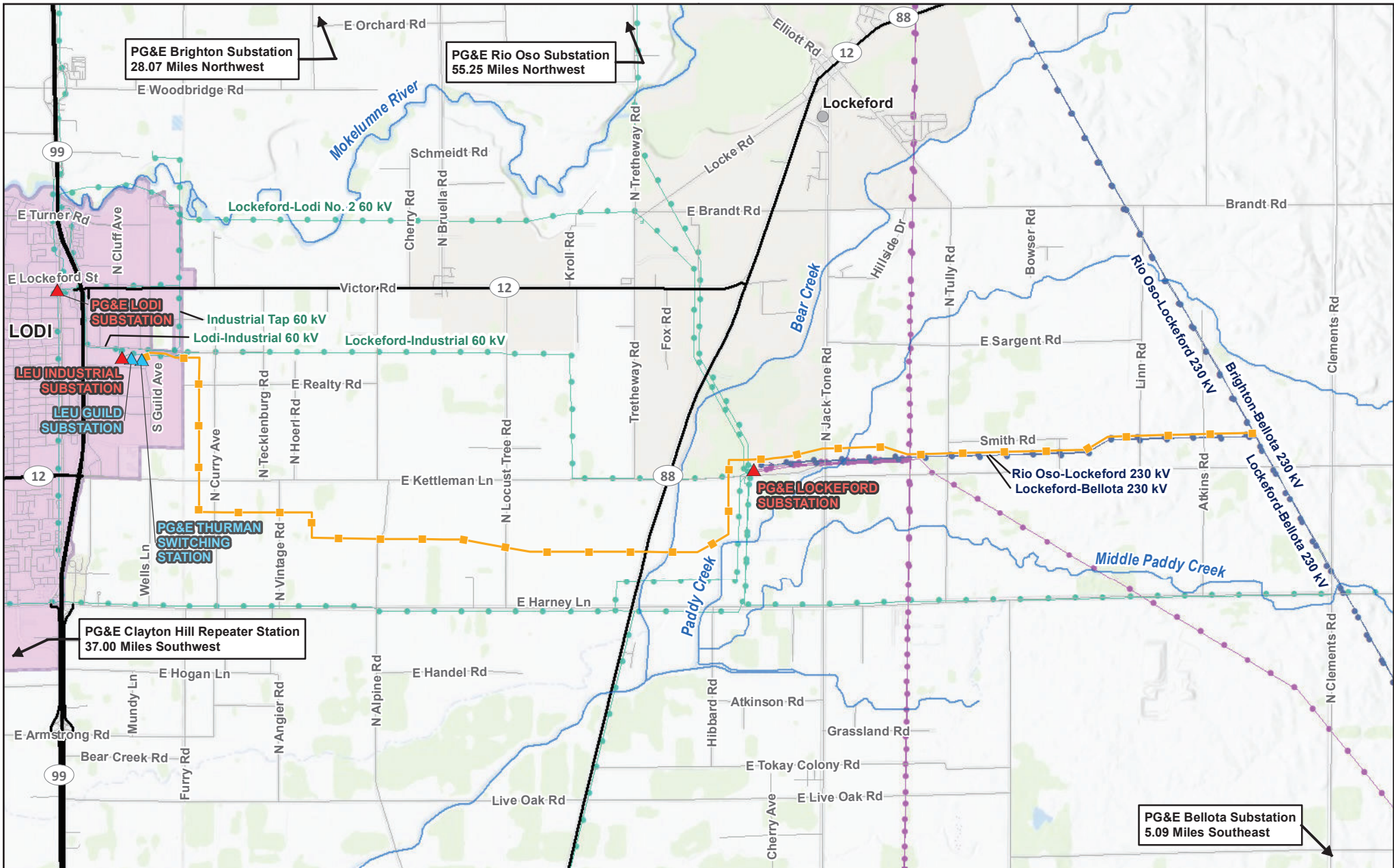
I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 23, 2023, at Oakland, California.

*/s/ Andrew Williams*  
Andrew Williams  
Vice President, Shared Services

# Exhibit A

## Project Overview Map

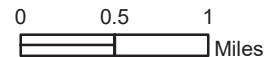


**Legend**

- ▲ Existing Substation
- ▲ New Substation/ Switching Station
- PG&E New 230 kV Transmission Line
- Existing PG&E Power and Transmission Lines
  - 60
  - 115
  - 230
- Major\_Roads
- Local Road
- River/Stream
- City Boundary

Source:  
1) Base Map Source:  
ESRI World Topo

Scale:  
1:65,000



**EXHIBIT A**  
**Project Location Overview**  
Northern San Joaquin 230 kV  
Transmission Project



## Exhibit B

Proponent's Environmental Assessment

***Contains Confidential Information  
Filed Via Archival Grade DVD And  
Excluded Due To File Size And Format***

# Exhibit C

## Preliminary Project Schedule

## EXHIBIT C

### NORTHERN SAN JOAQUIN 230 KV TRANSMISSION PROJECT

#### PRELIMINARY PROJECT SCHEDULE

CPCN Application Submitted	September 1, 2023
Protests and Notice of deficiencies, if any	October 1, 2023
Response to any deficiencies	November 30, 2023, or sooner
Application deemed complete	January 29, 2023, or sooner
Draft Environmental Impact Report (EIR) released <sup>1</sup> and Public Review Period Begins	August 23, 2024
Close of Public DEIR Review Period	October 6, 2024
EIR finalized	May 7, 2025
Proposed date for parties to CPCN proceeding to file Opening Testimony with the CPUC on project cost and need <sup>2</sup>	May 22, 2025
Proposed date for parties to CPCN proceeding to file Rebuttal Testimony with the CPUC	June 6, 2025

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<sup>1</sup> While the Proponent’s Environmental Assessment submitted with this Application determines that all environmental impacts from the proposed project will be less-than-significant, this certification schedule assumes that the Commission will issue a Draft Environmental Impact Report as indicated as expected by CPUC during the Prefiling Consultation with PG&E. The Commission will make the final determination regarding the appropriate CEQA process.

<sup>2</sup> The Commission has commonly bifurcated CPCN proceedings into two phases or tracks. In the “CEQA track,” the Commission has prepared the appropriate environmental review document, which also generally addresses the statutory criteria/factors contained in Section 1002 of the California Public Utilities Code. In a separate track, which often includes testimony and has the potential for hearings, the Commission examines the purpose and need of a proposed project in order to determine whether the project merits the issuance of a CPCN. PG&E recommends that this approach be used in the present project to avoid duplication and overlap between the issues raised in the CEQA track and the testimony/hearings track. In particular, PG&E recommends that formal hearings, if any, occur after the public has had an opportunity to comment on the Draft EIR and that document is finalized in order to limit the scope of the issues that need to be addressed through the formal hearing process.

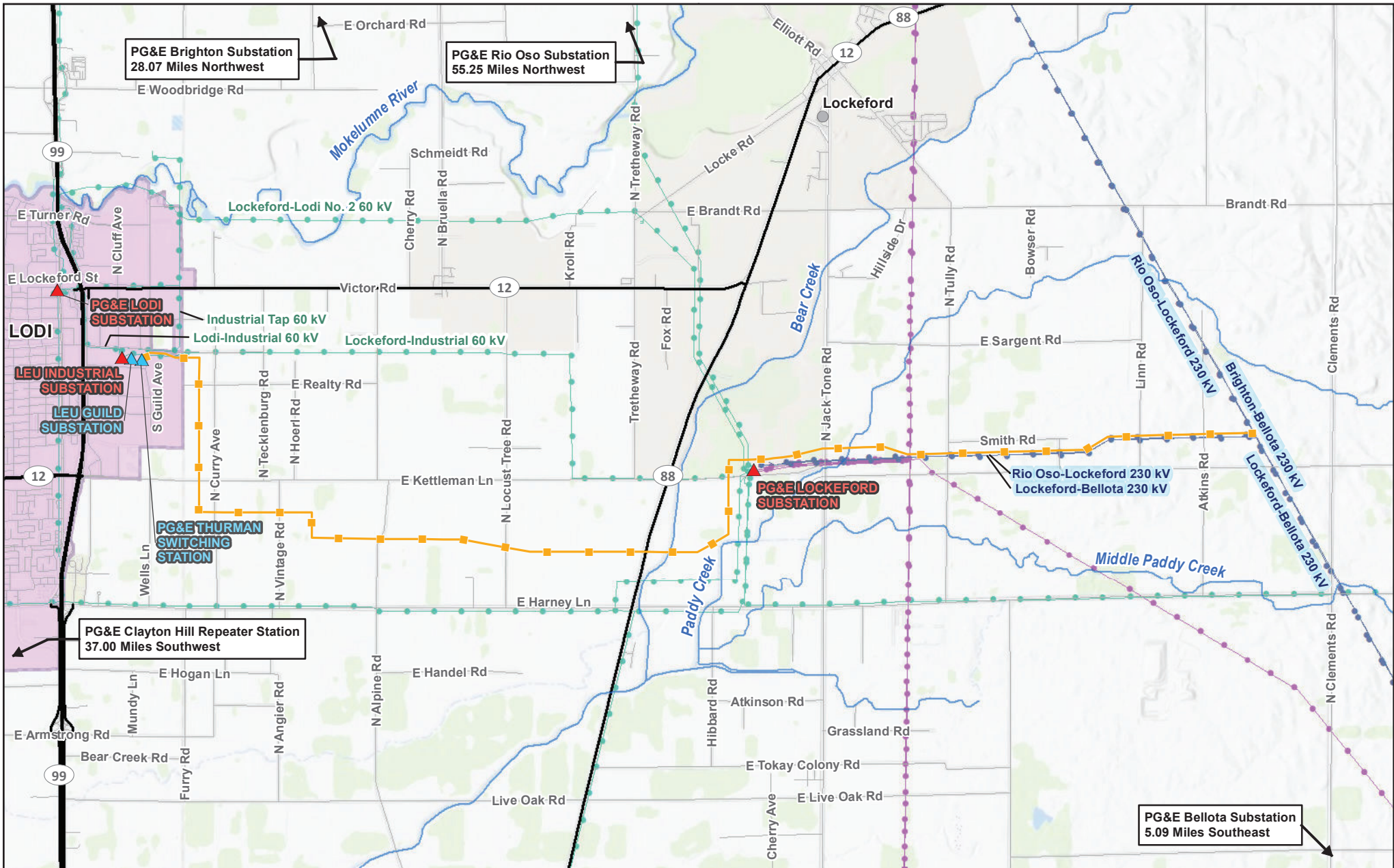


Proposed date for CPUC Evidentiary Hearings, if any	July 6, 2025
Proposed date for parties to CPCN proceeding to file Opening Briefs, if any, with the CPUC	July 27, 2025
Proposed date for parties to CPCN proceeding to file Reply Briefs, if any, with the CPUC. Matter is submitted for decision.	August 17, 2025
Proposed date for CPUC to issue proposed decision on CPCN Application	September 28, 2025
Proposed date for parties to CPCN proceeding to file comments on the CPUC's proposed decision on CPCN Application	October 18, 2025
Proposed date for parties to CPCN proceeding to file replies to comments on CPUC's proposed decision on CPCN Application	October 25, 2025
CPCN Decision Adopted and Effective and EIR Certified	October 28, 2025
Secondary permits issued by other governmental authorities	May 2026
Acquisition of Land Rights, as needed	July 2026
Materials Procurement	July 2026
Initial Notice to Proceed / Construction Begins <sup>3</sup>	July 2026
Construction Substantially Complete	March 2029
Project Operational	March 2029
Construction Complete	December 2029

<sup>3</sup> A detailed permitting and construction schedule may be found in Table 3.6-3 of the PEA appended to the Application as Exhibit B.

## Exhibit D

Map Showing the Location of Existing Electrical  
Transmission Lines  
Within One Mile of the Project

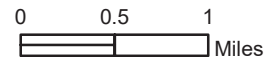


**Legend**

- ▲ Existing Substation
- ▲ New Substation/ Switching Station
- PG&E New 230 kV Transmission Line
- Existing PG&E Power and Transmission Lines**
- 60 kV
- 115 kV
- 230 kV
- Major\_Roads
- Local Road
- River/Stream
- City Boundary

Source:  
1) Base Map Source:  
ESRI World Topo

Scale:  
1:65,000



**EXHIBIT D**  
**Existing Transmission Lines**  
**Within 1 Mile of the Project**  
*Northern San Joaquin 230 kV*  
*Transmission Project*



## Exhibit E

Minutes of the March 22, 2018 California Independent  
System Operator Board of Governors Meeting

**GENERAL SESSION MINUTES  
BOARD OF GOVERNORS MEETING  
March 21-22, 2018  
ISO Headquarters  
Folsom, California**

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**March 22, 2018**

The ISO Board of Governors convened the general session meeting at approximately 10:30 a.m. and the presence of a quorum was established.

**ATTENDANCE**

The following members of the ISO Board of Governors were in attendance:

Dave Olsen, Chair  
Angelina Galiteva, Vice Chair  
Ash Bhagwat  
Mark Ferron  
Richard Maullin

The following members of the executive team were also present at times throughout the meeting: Steve Berberich, Keith Casey, Petar Ristanovic, Mark Rothleder, Eric Schmitt, Roger Collanton, Stacey Crowley, Ryan Seghesio and Jodi Ziemathis

**GENERAL SESSION**

The following agenda items were discussed in general session:

**PUBLIC COMMENT**

Mark Smith, on behalf of Calpine, provided an overview of the March 21 joint filing between Calpine, PG&E and the ISO to settle the reliability must-run cases.

**DECISION ON GENERAL SESSION MINUTES**

Governor Ferron moved for approval of the Board of Governors general session minutes for the February 15, 2018 meeting. The motion was seconded by Governor Galiteva and approved 5-0.

## CEO REPORT

Steve Berberich, President and CEO, provided an overview of the following sections of his report: overall system conditions, reliability coordinator services, Powerex and Idaho Power EIM readiness, congestion revenue rights, and renewable energy production.

## DECISION ON MARKET SURVEILLANCE COMMITTEE MEMBER REAPPOINTMENT

Mr. Berberich next informed the Board that Dr. James Bushnell has been a member of the Market Surveillance Committee since 2002, with his current term expiring on March 31. He described how Dr. Bushnell has provided invaluable expertise and advice to the Board, ISO Management and staff on numerous issues relating to the operation of the ISO market. Mr. Berberich requested that the Board reappoint Dr. Bushnell for a three-year term to end March 31, 2021. Brief discussion followed and the Board noted its appreciation for the work of the Market Surveillance Committee.

### Motion

#### Governor Ferron:

***Moved, that the ISO Board of Governors reappoint Dr. James Bushnell to the Market Surveillance Committee, an advisory committee to the ISO Board of Governors, for a three-year term to end March 31, 2021; and***

***Moved, that the Chief Executive Officer is authorized and directed to enter into an appropriate Consulting Agreement with Dr. James Bushnell to compensate him for his participation on the Market Surveillance Committee.***

The motion was seconded by Governor Bhagwat and approved 5-0.

## EIM GOVERNING BODY CHAIR REPORT

Doug Howe, Chair of the EIM Governing Body, provided highlights of the EIM Governing Body's meeting held on March 8 in Los Angeles, California. Mr. Howe provided an overview of recent outreach activities by members of the EIM Governing Body, including outreach to Southern California Edison and Los Angeles Department of Water and Power. Mr. Howe noted he would be providing comments later in the meeting on the EIM Governing Body's advisory opinion on the ISO's commitment costs and default energy bid enhancements proposal. Brief discussion followed regarding Mr. Howe's resignation from the EIM Governing Body and the Board noted its appreciation for his service and leadership on the Governing Body.



## DECISION TO MODIFY EIM GOVERNING BODY COMPENSATION

Greg Fisher, Senior Counsel, provided an overview of Management's recommendation to increase the overall compensation for EIM Governing Body members. Mr. Fisher stated that a recent compensation survey reflected that the EIM Governing Body's current compensation was positioned below the 25<sup>th</sup> percentile of the market rate. Mr. Fisher provided an overview of Management's recommendation, including increasing the EIM Governing Body's annual retainer from \$20,000 to \$40,000, and to increase in-person meeting preparation and participation fees from \$750 to \$1,000. Brief discussion followed and the Board noted the importance of the EIM Nominating Committee being able to find candidates and retain members who were financially able to serve as a result of the extensive independence screening process.

There was no public comment.

### Motion

**Governor Galiteva:**

***Moved, that in accordance with Article IV, Section 6 of the bylaws, the ISO Board of Governors hereby modifies the compensation to EIM Governing Body members for their service to the EIM Governing Body, effective July 1, 2018 as follows:***

- ***The standard annual retainer paid to a Governing Body member shall be \$40,000, paid in accrued quarterly installments, commencing with payment for the accrued quarterly installment for the 3rd quarter of 2018;***
- ***A fee of \$1,000 shall be paid for each day of participation at a noticed in-person Governing Body meeting, and a fee of \$500 shall be paid for each day of participation in a noticed teleconference Governing Body meeting;***
- ***A fee of \$1,000 for each meeting day shall be paid for time spent preparing for a noticed in-person Governing Body meeting, and a fee of \$500 for each meeting day shall be paid for time spent preparing for a noticed teleconference Governing Body meeting;***
- ***A fee of \$1,000 shall be paid to the Chair (or Chair's designee) for each day of participation at a noticed in-person Board of Governors meeting, and a fee of \$500 shall be paid for each day of participation in a noticed teleconference Board of Governors meeting;***
- ***A fee of \$1,000 for each meeting day shall be paid to the Chair (or Chair's designee) for time spent preparing for a noticed in-person Board of Governors meeting, and a fee of \$500 for each meeting day shall be paid for time spent preparing for a noticed teleconference Board of Governors meeting;***
- ***A fee of \$1,000 shall be paid for each day of in-person participation at ISO-***

***sponsored stakeholder events where the Chief Executive Officer or Chair of the Board of Governors specifically requests the Governing Body member's attendance;***

- ***A fee of \$1,000 shall be paid to new Governing Body members for each day of participation in the ISO's Governing Body member orientation process;***
- ***A fee of \$1,000 shall be paid to new Governing Body members for time spent preparing for each day of participation in the ISO's Governing Body member orientation process;***
- ***Reasonable expenses associated with in-person or teleconference meetings shall be reimbursed;***
- ***EIM Governing Body members who attend meetings or events as representatives of the EIM Governing Body, including ISO/RTO Council meetings and other electric utility or power industry meetings, at the request of the Chair of the EIM Governing Body or ISO Management in consultation with the Chair, are not eligible for compensation but shall be eligible for reimbursement of reasonable expenses, as deemed appropriate and approved by the Chair of the EIM Governing Body;***
- ***Governing Body members shall be eligible for conference fees and reasonable expenses associated with seminars, training and conferences related to corporate governance or best practices for Governing Boards, deemed appropriate and approved by the Chair of the EIM Governing Body; and***
- ***Reimbursements for reasonable expenses, as set forth above, shall be in compliance with the ISO Travel Policy for Governors.***

The motion was seconded by Governor Ferron and approved 5-0.

## **DECISION ON COMMITMENT COSTS AND DEFAULT ENERGY BID ENHANCEMENTS PROPOSAL**

Roger Collanton, Vice President, General Counsel and Chief Compliance Officer, acknowledged public comment letters received from the following: Portland General Electric Company, Environmental Defense Fund, NV Energy and Powerex.

Keith Casey, Vice President – Market and Infrastructure Development, provided introductory comments regarding Management's proposal and noted the proposal went through an extensive stakeholder process. Dr. Casey informed the Board that concerns regarding the proposed local market power mitigation design remained among some stakeholders as well as the Department of Market Monitoring. He emphasized Management's commitment to thoroughly test the design throughout the implementation process. Dr. Casey also informed the Board that Management recently modified the proposal regarding the circuit breaker bid cap, and noted that Management will continue to monitor these new rules after their activation.



Brad Cooper, Manager – Market Design Policy, provided an overview of Management’s commitment costs and default energy bid enhancements proposal. Mr. Cooper provided a background overview and stated the current commitment cost bidding design prevented suppliers from accurately reflecting commitment costs. He described how the proposal would enhance suppliers’ ability to accurately reflect commitment costs. Mr. Cooper reviewed a diagram that depicted how the commitment costs local market power mitigation test would run in every market commitment process for every interval. He described how the proposal phases in bid caps for commitment cost bidding flexibility to ensure local market power mitigation functions properly. Mr. Cooper stated the proposal would allow suppliers to seek adjustments to their reference levels based on changes in documented costs. He provided an overview of the reference level adjustment process and described how the proposal was in compliance with FERC Order No. 831. Mr. Cooper provided an overview of the stakeholder process and noted stakeholders were divided on the balance between allowing suppliers to accurately reflect costs versus protecting against market power. He concluded his presentation by providing an overview of the benefits of the proposal.

#### EIM Governing Body advisory input

Doug Howe, Chair of the EIM Governing Body, provided comments and informed the Board that the EIM Governing Body endorsed Management’s proposal, under the Governing Body’s advisory authority, with the condition that ISO staff brief the EIM Governing Body and the Board of Governors at the conclusion of the twelve month pilot period and prior to the automatic increase that would take place at the eighteen-month mark. Mr. Howe provided further comments regarding the importance of Management being able to test the design in real time. Dr. Casey committed to providing the follow-up briefing and noted the motion had been modified recently to reflect that commitment.

#### Public comment

Partha Malvadkar, on behalf of Pacific Gas and Electric, provided comments opposing Management’s proposal and noted support for the proposal recommended by the Department of Market Monitoring. Mr. Malvadkar also expressed support for the EIM Governing Body’s request for a follow-up briefing at the conclusion of the twelve-month pilot period.

Ellen Wolfe, on behalf of the Western Power Trading Forum, provided comments in support of Management’s proposal and noted appreciation to ISO staff on the extensive stakeholder process.

Brian Theaker, on behalf of NRG Energy, provided generally supportive comments on Management’s proposal as opposed to the recommendation of DMM, but noted NRG Energy does not support Management’s proposed commitment cost bid cap.

### Department of Market Monitoring

Eric Hildebrandt, Executive Director of Market Monitoring, provided highlights of the written comments DMM provided to the Board in opposition to the ISO's proposal and stated that while progress has been made on the ISO's proposal, gaps remained. Dr. Hildebrandt described how DMM continues to recommend that the ISO adopt a more dynamic approach, which would allow Management's proposed reasonableness thresholds to be adjusted by the ISO based on gas market trade data available at the start of each operating day. He described how the approach for determining reasonableness thresholds proposed by DMM would provide greater market efficiency, reliability and mitigation.

### Market Surveillance Committee

Dr. James Bushnell, member of the Market Surveillance Committee, provided highlights of the Market Surveillance Committee opinion titled "Opinion on Commitment Costs and Default Energy Bid Enhancements," and noted the importance of moving forward with the proposal at this time. Dr. Bushnell stated that overall, the MSC supports Management's proposal to transition to commitment cost reference levels that can be based on negotiated values or supplier updated cost information, consistent with the changes that have been introduced in the overall market power mitigation design of other ISOs over the past 5-7 years. He stated the MSC also continues to support the efforts by the ISO and DMM to base offer price mitigation on updated gas price information where this is available and sufficiently reliable.

### **Motion**

#### **Governor Ferron:**

***Moved, that the ISO Board of Governors approves the proposal to implement the commitment costs and default energy bid enhancements described in the memorandum dated March 14, 2018; with the addition of Management's commitment to provide to both the ISO Board of Governors and the EIM Governing Body an update and assessment of the market following the first 12 months of implementation; and***

***Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the commitment costs and default energy bid enhancements described in the memorandum dated March 14, 2018, including any filings that implement the overarching initiative policy but contain discrete revisions to incorporate Federal Energy Regulatory Commission guidance in any initial ruling on the proposed tariff amendment.***

**The motion was seconded by Governor Maullin and approved 5-0.**

## AUDIT COMMITTEE UPDATE

Governor Ferron provided an overview of the Audit Committee general session meeting held earlier in the day and requested that the Board accept the code of conduct certification process report as recommended by the Committee.

### Motion

#### Governor Galiteva:

*Moved, that the ISO Board of Governors, as recommended by the Audit Committee, accepts the Code of Conduct Certification Process Report issued on December 22, 2017 by PricewaterhouseCoopers LLP for the testing of the ISO's code of conduct certification procedures for 2017.*

The motion was seconded by Governor Bhagwat and approved 5-0.

## RECESSED

There being additional general session items to discuss, the session was recessed at approximately 12:00 p.m.

### March 22, 2018

## RECONVENED

The ISO Board of Governors reconvened the general session meeting at approximately 12:45 p.m. and the presence of a quorum was established.

## ATTENDANCE

The following members of the ISO Board of Governors were in attendance:

Dave Olsen, Chair  
Angelina Galiteva, Vice Chair  
Ash Bhagwat  
Mark Ferron  
Richard Maullin

The following members of the executive team were also present at times throughout the meeting: Steve Berberich, Keith Casey, Petar Ristanovic, Mark Rothleder, Eric Schmitt, Roger Collanton, Stacey Crowley, Ryan Seghesio and Jodi Ziemathis

## GENERAL SESSION

The following agenda items were discussed in general session:

### **DECISION ON CONGESTION REVENUE RIGHTS AUCTION EFFICIENCY PROPOSAL**

Roger Collanton, Vice President, General Counsel and Chief Compliance Officer, acknowledged public comment letters received from the following: Valley Electric Association, Inc., Powerex, Southern California Edison (with additional joint signatories), Calpine Energy Solutions, Velocity American Energy, Load Serving Entities Auction Supporters, Amber Power and DC Energy.

Keith Casey, Vice President – Market and Infrastructure Development, provided introductory remarks and described why the proposed enhancements were an important first step, and noted that additional enhancements were on track for Board decision on June 21 as well as later this fall. Dr. Casey noted the importance of the need to address the congestion revenue rights auction shortfall in a thoughtful and timely manner in order to address concerns from all market participants.

Greg Cook, Director – Market and Infrastructure Policy, provided an overview of Management's congestion revenue rights auction efficiency proposal and described how congestion revenue rights are a fundamental element of competitive wholesale energy markets. Mr. Cook stated that all ISOs/RTOs have a mechanism that allows all market participants to hedge congestion cost risk. He described how sustained auction payment deficiencies signaled potential flaws in the auction design. Mr. Cook stated that Management conducted an extensive analysis to understand drivers of auction inefficiency resulting in a multi-tracked initiative to address auction efficiency issues. He provided an overview of the following two near-term proposed enhancements: (1) limit the allowable source and sink pairs in the auction to correspond to supply delivery, and (2) require planned outages to be submitted prior to the annual allocation and auction process.

Mr. Cook explained that allowing congestion revenue rights sourcing and sinking at non-supply delivery locations was a major driver of auction revenue shortfall. He provided an overview of the stakeholder process and noted that stakeholders were divided on the proposal to limit the allowable source and sink pair in the auction but that most stakeholders supported the earlier outage reporting requirement. Mr. Cook provided an overview of next steps and stated that Management is pursuing further enhancements for the 2019 auction process to be brought to the Board in early summer. Brief discussion followed.

#### Public comment

Jeffrey Nelson, on behalf of Southern California Edison, provided comments on Management's proposal and provided an overview of the written comments submitted to the Board, noting support for the recommendation of the Department of Market Monitoring.

Brief discussion followed and Mr. Nelson noted it was important to address the current structural issues with the auction prior to expansion of the day ahead market.

Ken Kohtz, on behalf of Silicon Valley Power, provided comments on Management's proposal and provided an overview of the written comments submitted to the Board as a joint signatory with Southern California Edison.

Tony Braun, on behalf of California Municipal Utilities Association, provided comments on Management's proposal and provided an overview of the written comments submitted to the Board as a joint signatory with Southern California Edison. Mr. Braun noted the importance of sending the right message to neighboring states in the west.

Diana Lee, on behalf of Office of Ratepayer Advocates, provided comments on Management's proposal. She noted support for these interim solutions, but noted a longer-term solution like the recommendation proposed by Southern California Edison and the Department of Market Monitoring was needed.

Partha Malvadkar, on behalf of Pacific Gas and Electric Company, provided comments on Management's proposal. He noted support for the interim solutions, but provided further comments concurring with the views of Southern California Edison and others and noted support for the alternate recommendation for a longer-term solution.

Kallie Wells, on behalf of load serving entities auction supporters, provided generally supportive comments on Management's proposal, and provided highlights of the written comments provided to the Board. Ms. Wells noted concerns remain regarding the modeling and outage reporting element of the proposal. Ms. Wells stated they opposed the alternative recommendation by Southern California Edison and the Department of Market Monitoring.

Sue Mara, on behalf of Alliance for Retail Energy Markets, provided comments on Management's proposal and requested the Board reject the proposal. Ms. Mara noted they strongly oppose the alternative recommendation by Southern California Edison and the Department of Market Monitoring.

Ellen Wolfe, on behalf of Western Power Trading Forum, provided generally supportive comments on Management's proposal and noted appreciation to the ISO for the extensive stakeholder process. Ms. Wolfe noted that concerns remain regarding limited access to congestion revenue rights in the auction.

Mark Smith, on behalf of Calpine, commented in support of Management's proposal and provided an overview Calpine's written comments to the Board. Mr. Smith noted the importance of addressing issues with the auction incrementally.

Brian Theaker, on behalf of NRG Energy, provided generally supportive comments on Management's proposal. Mr. Theaker noted that concerns remain regarding some

elements of the proposal concerning bid pairs. He noted they oppose the alternative recommendation by Southern California Edison and the Department of Market Monitoring.

Seth Cochran, on behalf of DC Energy, provided comments on Management's proposal and provided highlights of the written comments provided to the Board. Mr. Cochran noted the importance of incremental implementation and continued review and assessment at each phase.

Dr. Casey provided responsive comments and agreed that the current congestion revenue rights auction situation must change, and that it was critical to ensure the right regionalism messaging was in place. He discussed the importance of allowing continued access to congestion revenue rights at this time. He noted the importance of taking an incremental approach and stated that Management would continue to explore the alternative recommendation by Southern California Edison and the Department of Market Monitoring as part of the ongoing stakeholder process.

#### Department of Market Monitoring

Eric Hildebrandt, Executive Director of Market Monitoring, provided highlights of the written comments the Department of Market Monitoring provided to the Board in opposition to the ISO's proposal. Mr. Hildebrandt described why the Department of Market Monitoring recommended that the Board direct the ISO to develop an auction design based on willing buyers and sellers that addresses the fundamental auction design flaws, such as the proposal by Southern California Edison, as soon as possible. He described how the approach proposed by SCE was less complex to implement than the changes proposed by Management, and directly addressed the flaw in the congestion revenue rights auction design.

#### Market Surveillance Committee

Dr. James Bushnell, member of the Market Surveillance Committee, provided highlights of the Market Surveillance Committee opinion titled "Opinion on Congestion Revenue Rights Auction Efficiency." Dr. Bushnell stated the Market Surveillance Committee supported the ISO's proposal, but anticipated that further changes would be necessary to either supplement or supplant those proposed in the ISO's proposal. Dr. Bushnell recommended that several analyses be undertaken as part of the Track 2 process that could quantify the impact of these and other potential changes. Brief discussion followed and the Board requested that Management continue to evaluate whether the market needs a congestion revenue rights auction.



## Motion

Governor Olsen:

***Moved, that the ISO Board of Governors approves the proposal to implement the congestion revenue rights auction efficiency proposal described in the memorandum dated March 14, 2018; and***

***Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the congestion revenue rights auction efficiency proposal described in the memorandum dated March 14, 2018, including any filings that implement the overarching initiative policy but contain discrete revisions to incorporate Federal Energy Regulatory Commission guidance in any initial ruling on the proposed tariff amendment.***

The motion was seconded by Governor Galiteva and approved 5-0.

## **DECISION ON ISO 2017-2018 TRANSMISSION PLAN**

Roger Collanton, Vice President, General Counsel and Chief Compliance Officer, acknowledged public comment letters received from the following: Alameda Municipal Power, Sierra Club and LS Power.

Neil Millar, Executive Director – Infrastructure Development, provided an overview of the proposed 2017-18 transmission plan. Mr. Millar explained that Board approval of the plan meant Board approval of the plan's determinations and recommendations. He next provided an overview of the transmission planning process. Mr. Millar next provided an overview of the 13 new reliability projects recommended for approval in the 2017-18 transmission plan. He also informed the Board that 18 previously approved local PG&E projects were no longer required, driven largely by changes to load forecast. He informed the Board that no policy-driven projects were recommended, but that four economic-driven projects were recommended for approval. He next provided an overview of other key findings of the transmission planning process. Mr. Millar reviewed a graph that projected the regional high-voltage transmission access charge. He next provided an overview of special study efforts conducted in 2017, and provided an overview of the feedback received during the stakeholder process. Brief discussion followed and Mr. Millar confirmed that no policy-driven projects had been cancelled or re-scoped as part of the planning process.

## Public comment

Jim Caldwell, on behalf of CEERT, provided supportive comments, and requested that the Board adopt the proposed transmission plan and further commented on recommended next steps, including extending outreach to stakeholders on future transmission planning study processes.

Sandeep Arora, on behalf of LS Power, noted appreciation to the ISO's transmission planning staff. Mr. Arora provided highlights of LS Power's written comments to the Board regarding recommended improvements to the next planning process cycle. Brief discussion followed regarding congestion scheduling rights.

Brian Theaker, on behalf of NRG Energy, provided background comments on the Moorpark 230 kV circuit reliability-driven transmission project and raised concerns with the overall evolution of the ISO's planning for the Moorpark area, and the approval of the Moorpark-Pardee 4th circuit. Mr. Theaker noted the importance of the Puente project, in light of the impact recent fires, had to the transmission corridor.

Nico Procos, on behalf of Alameda Municipal Power, provided highlights of Alameda Municipal Power's written comments to the Board, and requested that the Board defer approval of the Oakland Clean Energy Initiative until after Alameda Municipal Power's concerns have been addressed.

Dave Gabbard and Roy Kuga, on behalf of Pacific Gas and Electric Company, provided comments in support of the draft transmission plan and requested the Board adopt the plan. Mr. Kuga provided additional comments regarding the Oakland Clean Energy Initiative. Brief discussion followed and Mr. Berberich noted his appreciation to PG&E and that he looked forward to continued collaboration on these matters.

Elizabeth Kirkley, on behalf of the City of Lodi, provided supportive comments regarding the Lockeford-Lodi Area development project, and discussed clarifications that were necessary on the published project diagram regarding load. Mr. Millar provided responsive comments and committed to working with Ms. Kirkley to ensure any remaining concerns are addressed.

## **Motion**

### **Governor Ferron:**

***Moved, that the ISO Board of Governors approves the ISO 2017-2018 transmission plan attached to the memorandum dated March 14, 2018.***

**The motion was seconded by Governor Olsen and approved 5-0.**

## **BRIEFING ON RENEWABLES AND RECENT GRID OPERATIONS**

Clyde Loutan, Principle – Renewable Energy Integration, provided the Board a briefing on renewables and recent grid operations. Mr. Loutan provided a sampling of four operationally notable days that had high renewables production. He reviewed a graph that provided a comparison of load served by different combinations of resources. Mr.



Loutan provided an overview of a graph that reflected how ISO greenhouse gas emissions have been reduced by 23% since 2014. He informed the Board that the ISO's peak load of 50,116 MW was reached on Friday, September 1, 2017 at 15:58:24. Mr. Loutan described how actual net load and 3-hour ramps were about four years ahead of the ISO's original estimate, primarily due to under-forecasting rooftop solar PV installation. He described how the increasing trend of renewable curtailment varied with seasonal and hydro conditions. Mr. Loutan concluded his presentation by reviewing a summary of observations and noted that load reliability served by renewable resources continues to grow. Brief discussion followed.

### **INFORMATIONAL REPORTS**

There were no comments or questions on the following informational reports: regulatory report, state, regional and federal affairs update, business practice manual change management report, Market Surveillance Committee update, master stakeholder engagement and release plans, market performance report, quarterly financial report, investment performance report, and the Transmission Maintenance Coordination Committee update.

### **ADJOURNED**

There being no additional general session matters to discuss, the session was adjourned at approximately 3:30 p.m.

# Exhibit F

## Detailed Cost Estimate for Project

**Northern San Joaquin 230 kV Transmission Project - CPCN Cost Estimates : August 2023**

Description	August 2023 Estimate
PM 74000933: new double-circuit 230 kV Line: Lockeford to Thurman Switching Station (appx 6.9 mi) incl land cost for Tline corridor ROW	\$ 41,714,782
PM 74000934: Loop in Brighton Bellota 230 kV Tline (appx 3.9 mi) into Lockeford Substation incl land cost for Tline corridor ROW	\$ 23,528,128
PM: 74000935 - New 230kV Thurman Switching Station (BAAH) incl new control enclosure and Battery enclosures plus Land cost for new Thurman Switching Station parcel	\$ 29,707,757
PM 74007150 - Upgrade Lockeford 230kV Substation (new 230kV BAAH and Control and battery enclosures))	\$ 36,120,193
PM 740xxxx : Remote-end substation upgrades at Brighton, Bellota, Rio-Oso, Lodi substations	\$ 3,327,002
PM 740xxxx : 60kV Tline removal / reconfiguration	\$ 2,222,979
Point Estimate (Installed Cost)	\$ 136,620,841
EMF Low Cost/No Cost Mitigation	\$ 450,000
Point Estimate (w/ EMF Low Cost Mit)	\$ 137,070,841
Contingency	\$ 15,820
	<b>\$ 137,086,661</b>
<b>Major Cost Drivers</b>	<b>August 2023 Estimate</b>
Thurman SWT STA and Transmission Lines' right of way - Appraised Value	\$ 11,891,758
AFUDC	\$ 10,058,280
MPAC enclosures, Battery enclosure and Major Sub Equipment.	\$ 14,636,868
A&G Costs (OH)	\$ 26,395,297
Major T-Line Material	\$ 8,576,507

**NOTES:**

- 1) Costs include actual costs since inception thru March 2016
- 2) The land and easement costs estimates are based on independent appraisals - May 2023
- 3) The Scenario Builder assumes ACEE Class 4 (but did not apply to CPCN cost factor)

**Northern San Joaquin 230 kV Transmission Project - CPCN Cost Estimates : August 2023**

**Cost Summary , excluding contingency**

8/8/2023

<b>PM 74000933: Build a new 230 kV Tline Lockeford Sub - new 230kV Thurman Switching Station (appx 6.9mi)</b>		<b>Cost Estimate</b>
Transmission Line Engineering	\$	1,369,507
Land Rights and Land Acquisition	\$	7,334,616
Environmental Services	\$	2,309,941
Project Management and others (inspections, comm outreach)	\$	1,502,340
Line Construction Cost, excluding Major Material	\$	7,273,772
Tower Construction Cost, excluding Major Material	\$	5,268,844
Property Improvement (access road, crane pads & pull sites)	\$	980,072
Operations & Maintenance Support During Construction (Ops ENG, Switching)	\$	65,273
Major Transmission Line Material	\$	5,680,699
Material Overheads	\$	1,521,291
PG&E Indirect & Overhead Costs	\$	4,265,014
Escalation Allowance	\$	953,550
AFUDC (Cost of Capital)	\$	3,189,863
<b>Total</b>	<b>\$</b>	<b>41,714,782</b>
<b>PM 74000934: Loop-in Brighton Bellota 230kV Tline - Lockeford Sub (appx 3.8mi)</b>		
Transmission Line Engineering	\$	866,074
Land Rights and Land Acquisition	\$	4,557,142
Environmental Services	\$	1,431,310
Project Management and others (inspections, comm outreach)	\$	353,405
Line Construction Cost, excluding Major Material	\$	3,460,391
Tower Construction Cost, excluding Major Material	\$	3,029,116
Property Improvement (access road, crane pads & pull sites)	\$	522,591
Operations & Maintenance Support During Construction (Ops ENG, Switching)	\$	52,399
Major Transmission Line Material	\$	2,895,808
Material Overheads	\$	775,497
PG&E Indirect & Overhead Costs	\$	3,271,371
Escalation Allowance	\$	515,046
AFUDC (Cost of Capital)	\$	1,797,978
<b>Total</b>	<b>\$</b>	<b>23,528,128</b>
<b>PM 74000935: Build a new 230kV Thurman Switching Station &amp; Associated System Protection Upgrades</b>		
Substation Engineering(ENG) incl Telecom ENG and Civil ENG scope.	\$	2,477,769
Land & Environmental Services	\$	505,896
Project Management and others (inspections, comm outreach)	\$	446,382
Land Acquisition	\$	3,570,000
Property Improvement (grading, fencing, drainage, soil management- transport/disposal)	\$	1,708,014
Testing	\$	309,026
Removal (soil, existing equipment reconfig)	\$	31,359
Operations & Maintenance Support During Construction	\$	122,436
Major Station Equipment (Material)	\$	5,862,087
Construction Cost (electrical), Excluding Major Equipment	\$	2,332,629
Civil Foundations construction	\$	1,832,584
Material Overheads	\$	1,630,246
PG&E Indirect & Overhead Costs	\$	6,035,295
Escalation Allowance	\$	575,945
AFUDC (Cost of Capital)	\$	2,268,089
<b>Total</b>	<b>\$</b>	<b>29,707,757</b>

**Northern San Joaquin 230 kV Transmission Project - CPCN Cost Estimates : August 2023**

**Cost Summary , excluding contingency**

8/8/2023

<b>PM 74007150: Upgrade existing PG&amp;E's 230 kV Lockeford Sub</b>	
Substation Engineering(ENG) incl Telecom ENG and Civil ENG scope.	\$ 2,184,208
Land & Environmental Services	0
Project Management and others (inspections, comm outreach)	\$ 354,374
Land Acquisition	0
Property Improvement (grading, fencing, drainage, soil management- transport/disposal)	\$ 1,919,379
Testing (incl. insulation coating- touch up)	\$ 652,214
Removal (soil, existing equipment reconfig)	\$ 713,205
Operations & Maintenance Support During Construction	\$ 39,455
Major Station Equipment (Material)	\$ 8,774,781
Construction Cost (electrical), Excluding Major Equipment	\$ 3,496,250
Civil Foundations construction	\$ 1,765,136
Material Overheads	\$ 2,440,267
PG&E Indirect & Overhead Costs	\$ 10,590,637
Escalation Allowance	\$ 596,970
AFUDC (Cost of Capital)	\$ 2,593,317
Total	\$ 36,120,193
<b>PM 740xxxx : Remote-end substation upgrades at Brighton, Bellota, Rio Oso, Lodi substations</b>	
Substation Engineering(ENG) incl Telecom ENG and Civil ENG scope.	\$ 1,018,728
Land & Environmental Services	0
Project Management and others (inspections, comm outreach)	\$ 68,212
Land Acquisition	0
Property Improvement (grading, fencing, drainage, soil management- transport/disposal)	\$ 3,229
Testing	\$ 112,077
Removal (soil, existing equipment reconfig)	\$ 69,409
Operations & Maintenance Support During Construction	\$ 23,374
Major Station Equipment (Material)	\$ 112,206
Construction Cost (electrical), Excluding Major Station Equipment	\$ 201,898
Civil Foundations construction	0
Material Overheads	\$ 31,205
PG&E Indirect & Overhead Costs	\$ 1,519,196
Escalation Allowance	\$ 48,274
AFUDC (Cost of Capital)	\$ 119,194
Total	\$ 3,327,002
<b>PM 740xxxx : 60 kV Tline removal / reconfiguration</b>	
Transmission Line Engineering	\$ 216,528
Land Rights and Land Acquisition	0
Environmental Services	\$ 75,000
Project Management and others (inspections, comm outreach)	\$ 88,930
Line Construction Cost, excluding Major Material	0
Tower /Pole Construction Cost, excluding Major Material	\$ 50,000
Property Improvement (access road, crane pads & pull sites)	\$ 125,000
Operations & Maintenance Support During Construction (Ops ENG, Switching)	\$ 25,933
Removal (60kV Pole, conductor, insulators, soil disposal etc.)	\$ 796,624
Material Overheads	0
PG&E Indirect & Overhead Costs	\$ 713,784
Escalation Allowance	\$ 41,341
AFUDC (Cost of Capital)	\$ 89,839
Total	\$ 2,222,979
<b>Electro Magnetic Field (EMF) Reduction Allowance</b>	
Transmission Line Construction Cost to Increase Trench Depth	\$ 450,000
<b>Total Cost Estimate for Northern San Joaquin 230 kV Transmission Project</b>	<b>\$ 137,070,841</b>

## Exhibit G

### Preliminary Transmission EMF Management Plan and Substation Checklist

**NORTHERN SAN JOAQUIN 230 KV PROJECT  
PRELIMINARY TRANSMISSION EMF MANAGEMENT PLAN  
AND SUBSTATION CHECKLIST**

**A. Transmission EMF Field Management Plan**

**I. General Description of Project**

Project Lead: Sanjeev Bhatawadekar, Project Manager, Electric Transmission Operations

Transmission Lines: Thurman-Lockeford #1 & #2 230 kV lines  
Bellota-Brighton-Lockeford #1 & #2 230 kV lines.

Distribution line Underbuild: None.

Transmission Line Scope of Work:

This project proposes to construct a new 230kV double circuit tower line between the new Thurman substation and existing Lockeford 230kV substations, in addition to loop in the existing Brighton-Bellota 230kv line and upgrade Lockeford substation to accommodate the new 230kV double circuit line. This project is in the northern territory of San Joaquin County within the Stockton Division of PG&E territory and mostly serves the City of Lodi. The upgrades are necessary to mitigate overload and voltage issues with the three main 60kV lines through Industrial Substation. Completion of this project will provide additional transmission capacity to serve electric customers in San Joaquin County.

The estimated total cost of the proposed project is approximately \$60,000,000. Four percent of this estimated total cost is \$2,400,000.

**NORTHERN SAN JOAQUIN 230 KV PROJECT  
PRELIMINARY TRANSMISSION EMF MANAGEMENT PLAN  
AND SUBSTATION CHECKLIST**

**II. Background: CPUC Decision 93-11-013 and Decision D.06-01-042**

On January 15, 1991, the CPUC initiated an investigation to consider its role in mitigating the health effects, if any, of electric and magnetic fields (EMF) from utility facilities and power lines. A working group of interested parties, called the California EMF Consensus Group, was created by the CPUC to advise it on this issue. It consisted of 17 stakeholders representing citizens groups, consumer groups, environmental groups, state agencies, unions, and utilities. The Consensus Group's fact-finding process was open to the public, and its report incorporated concerns expressed by the public. The Consensus Group's recommendations were filed with the Commission in March 1992.

In August 2004 the CPUC began a proceeding known as a “rulemaking” (R.04-08-020) to explore whether changes should be made to existing CPUC policies and rules concerning EMF from electric transmission lines and other utility facilities.

Through a series of hearings and conferences, the Commission evaluated the results of its existing EMF mitigation policies and addressed possible improvements in implementation of these policies. The CPUC also explored whether new policies were warranted in light of recent scientific findings on the possible health effects of EMF exposure.

The CPUC completed the EMF rulemaking in January 2006 and presented these conclusions in Decision D.06-01-042:

- The CPUC affirmed its existing policy of requiring no-cost and low-cost mitigation measures to reduce EMF levels from new utility transmission lines and substation projects.
- The CPUC adopted rules and policies to improve utility design guidelines for reducing EMF, and established a utility workshop to implement these policies and standardize design guidelines.
- Despite numerous studies, including one ordered by the Commission and conducted by the California Department of Health Services, the CPUC stated “we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences.”
- The CPUC said it will “remain vigilant” regarding new scientific studies on EMF, and if these studies indicate negative EMF health impacts, the Commission will reconsider its EMF policies and open a new rulemaking if necessary.

In response to a situation of scientific uncertainty and public concern, the decision specifically requires utilities to consider “no-cost” and “low-cost” measures, where feasible, to reduce exposure from new or upgraded utility facilities. It directs that no-cost mitigation measures be



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undertaken, and that low-cost options, when they meet certain guidelines for field reduction and cost, be adopted through the project certification process. PG&E was directed to develop, submit and follow EMF guidelines to implement the CPUC decision. According to the guidelines, four percent of total project budgeted cost is the benchmark used to determine “low-cost” in implementing EMF mitigation, and mitigation measures should achieve incremental magnetic field reductions of at least 15% at the edge of right-of-way (ROW).

**III. General Description of Surrounding Land Uses**

**Schools or Daycare:** None

**Residential:** Fifteen structures

**Commercial/Industrial:** Eight structures

**Recreational:** None

**Agricultural, Rural, and Undeveloped Land:** Forty-Nine structures

**Priority Areas where Low Cost Measures Should Be Considered**

Fifteen structures in the residential land use areas are considered for magnetic field reduction.

**IV. No-Cost and Low-Cost Magnetic Field Mitigation**

**No Cost Field Reduction**

Optimal phase configurations can be used as a field cancellation technique. The phases from one circuit of a multi-circuit line can be used to reduce the field from another circuit, thereby reducing the total magnetic field strength. For this reason, multi-circuit lines may have lower magnetic fields than single circuit lines. Double circuit tower lines considered for optimal phasing:

	Base Case Phasing	<b>Proposed Optimal Phasing</b>
From Structure 1/1 to Structure 6/48		
<b>Thurman-Lockeford #1</b>	(T,M,B) = ABC	Parallel circuit.
<b>Thurman-Lockeford #2</b>	(T,M,B) = CBA	No change.
From Structure A1/1 to Structure A3/23		

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**Lockeford-Bellota-Brighton #1** (T,M,B) = ABC Loop circuit.  
**Lockeford-Bellota-Brighton #2** (T,M,B) = ABC No change.

Optimally Phase Circuits:

The phases of the Thurman-Lockeford #1 and Thurman-Lockeford #2 are designed for the minimum magnetic field level at the edge of the right of way. The phases of the Lockeford-Bellota-Brighton #1 and Lockeford-Bellota-Brighton #2 is looped circuit and designed for the minimum magnetic field level at the edge of the right of way. Both double circuit configurations are designed with optimal phasing. This FMP proposes no change to the phasing.

**Low Cost Magnetic Field Reduction Options**

Reducing magnetic field strength by increasing the distance from the source can be accomplished either by increasing the height or depth of the conductor from ground level. Furthermore, locating the power lines as far away from the edge of the ROW or as close to centerline as possible will result in lower field levels at the edge of the ROW.

Calculations are based on 1,287 amp current flow and a minimum conductor height of 40 feet at midspan. Below are the calculations for proposed the proposed structure raises:

Raising Calculations Segment	Base Case		Raise 10 Feet		Reduction	
	South ROW	North ROW	South ROW	North ROW	South ROW	North ROW
Bellota-Brighton-Lockeford #1 and #2 230kV Lines	33.6 mG	33.6 mG	25.6 mG	25.6 mG	23.6%	23.6%
Raising Calculations Segment	Base Case		Raise 10 Feet		Reduction	
	West ROW	East ROW	West ROW	East ROW	West ROW	East ROW
Thurman-Lockeford #1 and #2 230kV Lines	33.3 mG	33.3 mG	25.4 mG	25.4 mG	23.6%	23.6%

The purpose of magnetic field modeling is to evaluate relative effectiveness of various magnetic field reduction measures, not to predict magnetic field levels.

This FMP proposes to raise the height of Fifteen structures in the residential land use areas by ten feet taller than required for meeting clearance requirements. Structures in the residential land use areas proposed for raising are:

Bellota-Brighton-Lockeford 230kV Lines				
E5	E6	E17	E18	E19

Thurman-Lockeford 230kV Lines				
W3	W4	W12	W13	W19
W20	W24	W25	W40	W41

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The estimated cost of this mitigation is \$225,000.

**V. Conclusion - Field Reduction Options Selected**

The phases of the Thurman-Lockeford #1 and Thurman-Lockeford #2 are designed for the minimum magnetic field level at the edge of the right of way. The phases of the Lockeford-Bellota-Brighton #1 and Lockeford-Bellota-Brighton #2 is looped circuit and designed for the minimum magnetic field level at the edge of the right of way. Both double circuit configurations are designed with optimal phasing. This FMP proposes no change to the phasing.

This FMP proposes to raise the height of fifteen structures in the residential land use areas by ten feet taller than required for meeting clearance requirements.

The estimated cost of this mitigation is \$225,000.

**VI. References**

California Public Utilities Commission. 1993. Order instituting investigation on the Commission's own motion to develop policies and procedures for addressing the potential health effects of electric and magnetic fields of utility facilities. Decision 93-11-013. November 2.

California Public Utilities Commission. 2006. Order Instituting Rulemaking to update the Commission's policies and procedures related to electromagnetic fields emanating from regulated utility facilities. Decision 06-01-042 January 26.

Pacific Gas & Electric Company. 2006. EMF Design Guidelines for Electrical Facilities.

**NORTHERN SAN JOAQUIN 230 KV PROJECT  
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AND SUBSTATION CHECKLIST**

**B. Substation Checklist**

Lockeford Substation Scope of work: This project will expand Lockeford substation and convert the 4-position 230kV ring bus to a 4-bay, 8-position BAAH configuration. A new ~98'L MPAC building and ~34' Battery building will be installed. The Brighton-Bellota 230kV line will be looped into the substation and a new double circuit line will be installed to a greenfield 230kV switching station (Thurman SS). The Lockeford-Industrial and Lodi-Industrial 60kV lines will be tied together to create Lockeford-Lodi #4 60kV line (after the City of Lodi reconnects at 230kV from PG&E's new Thurman SS and City of Lodi's new 230/60kV sub).

No.	No Cost and Low Cost Magnetic Field Reduction Measures Evaluated for a Substation Project	Measures Adopted? (Yes/No)	Reason(s) if not Adopted
1	Keep high current devices, transformers, and capacitors, reactors away from the substation property lines.	Yes	
2	For underground duct banks, the minimum distance should be 12 feet from the adjacent property lines or as close to 12 feet as practical.	Yes	
3	Locate new substations close to existing power lines to the extent practical.	Yes	
4	Increase the substation property boundary to the extent practical.	Yes	

Thurman Substation Scope of work: This project will build a new, greenfield 230kV switching station (Thurman SS) in a 2-bay, 4-position BAAH configuration. A new ~64'L MPAC building and ~34' Battery building will be installed. A new double circuit line will be installed to Lockeford Sub.

No.	No Cost and Low Cost Magnetic Field Reduction Measures Evaluated for a Substation Project	Measures Adopted? (Yes/No)	Reason(s) if not Adopted
1	Keep high current devices, transformers, and capacitors, reactors away from the substation property lines.	Yes	
2	For underground duct banks, the minimum distance should be 12 feet from the adjacent property lines or as close to 12 feet as practical.	Yes	
3	Locate new substations close to existing power lines to the extent practical.	Yes	
4	Increase the substation property boundary to the extent practical.	Yes	

## Exhibit H

Letter from PG&E to the City of Lodi Seeking Position  
Statement, May 17, 2023

**From:** [George, Dylan](#)  
**To:** [Rice, Erin](#)  
**Subject:** FW: Request for City of Lodi position statement on transmission project  
**Date:** Wednesday, July 12, 2023 1:54:26 PM  
**Attachments:** [NSJTP Letter of Support City of Lodi.doc](#)

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Classification: Public

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**From:** George, Dylan <D2GF@pge.com>  
**Sent:** Wednesday, May 17, 2023 3:43 PM  
**To:** Steve Schwabauer (sschwabauer@lodi.gov) <sschwabauer@lodi.gov>  
**Cc:** Jeff Berkheimer (jberkheimer@lodi.gov) <jberkheimer@lodi.gov>; hshahriar@lodi.gov  
**Subject:** Request for City of Lodi position statement on transmission project

Classification: Public

Steve,

As you are likely aware, PG&E is in the final stages of officially submitting the Proponents Environmental Assessment to the California Public Utilities Commission for the Northern San Joaquin Power Connect project. As part of that process we are required to ask for what the CPUC calls position statement from involved cities and counties (I believe you and I briefly discussed this a year or two ago) so I am writing to ask you for that position statement from the City of Lodi.

Our project team put together the attached draft letter for that purpose, it mentions the coordination between the city and PG&E going back to 2015 and the resolution passed by the city council in support of the project on April 7, 2016. We were hoping that given that resolution, yourself or somebody from the city could sign on to this letter reiterating that support in a format more suited to the CPUC process. You should certainly feel free to make any edits you wish to this draft letter.

If you have any questions, or would like to discuss further, please give me a call. If it would be possible to complete this by 5/26 that would be most appreciated!

Thank you,  
Dylan George  
Local Government Affairs representative  
Pacific Gas and Electric  
4040 West Lane  
Stockton, CA 95204  
Cell: 209-479-0593  
[dylan.george@pge.com](mailto:dylan.george@pge.com)

## Exhibit I

Letter from the City of Lodi to PG&E Providing a  
Position Statement, June 13, 2023

**CITY COUNCIL**

Mikey Hothi, Mayor  
Lisa Craig, Mayor Pro Tempore  
Cameron Bregman  
Alan Nakanishi  
Ramon Yopez



Stephen Schwabauer  
**City Manager**

Olivia Nashed  
**City Clerk**

Janice D. Magdich  
**City Attorney**

June 13, 2023

RE: PG&E Northern San Joaquin Power Connect Project

Dear Mr. Dylan George, Local Government Relations PG&E,

The City of Lodi is pleased to offer this letter in recognition of coordination with Pacific Gas and Electric Company (PG&E) and support for the Lockeford Lodi Area 230kv Project (also known as the Northern San Joaquin Power Connect Project). The City of Lodi acknowledges coordination with PG&E since 2015 for the development of the proposed project.

The Lodi City Council passed a unanimous resolution in favor of the Northern San Joaquin Power Connect Project on April 7, 2016. We continue to support the proposed project and its purpose to help to address the area's reliability and capacity needs. Following the emergency load shedding events of 2022 due to loss of import capacity on the existing 60kV sub-transmission system, the completion of the Northern San Joaquin Power Connect Project is more critical than ever. The current infrastructure which serves the City of Lodi is substantially under built for our current energy needs and future economic development and expansion may be significantly impaired without the additional capacity and reliability this project will provide. We understand in March 2018, the California Independent System Operator (CAISO) Board decided to revise the scope of the project which now includes connecting PG&E's existing Brighton-Bellota 230 kV Transmission Line into PG&E's Lockeford Substation and building a new 230 kV double circuit transmission line from PG&E's Lockeford Substation to a new 230 kV switching station in Lodi. This new scope continues to meet the immediate and long-term capacity and reliability needs for our City.

As such, the City of Lodi supports the proposed project's overall goals to strengthen the grid and provide a highly reliable and stable electricity source for the area's leading businesses and industries. We understand these upgrades to the grid will help the region stay in front of growing energy demand, limiting the chances of the system becoming overloaded, especially during the summer when demand for electricity is highest. We understand that replacing older power lines and components with new technology maximizes PG&E's ability to move electricity safely and dependably to homes and businesses, as well as provides significant financial benefit for the City of Lodi through reduced transmission access charges.

The City of Lodi supports the advancement of this project for review to the California Public Utilities Commission and agree that this project will benefit the residents and businesses in the City of Lodi.

Sincerely,

  
Mikey Hothi (Jun 13, 2023 15:30 PDT)

Mikey Hothi  
Mayor  
City of Lodi



# PG&E Northern San Joaquin Power Connect Letter

Final Audit Report

2023-06-13

Created:	2023-06-13
By:	Olivia Nashed (onashed@lodi.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAA-fRQR9iou6ZHHBzxPfEGq693hn5X4S0

## "PG&E Northern San Joaquin Power Connect Letter" History

-  Document created by Olivia Nashed (onashed@lodi.gov)  
2023-06-13 - 5:01:15 PM GMT
-  Document emailed to mhothi@lodi.gov for signature  
2023-06-13 - 5:01:41 PM GMT
-  Email viewed by mhothi@lodi.gov  
2023-06-13 - 10:29:17 PM GMT
-  Signer mhothi@lodi.gov entered name at signing as Mikey Hothi  
2023-06-13 - 10:30:11 PM GMT
-  Document e-signed by Mikey Hothi (mhothi@lodi.gov)  
Signature Date: 2023-06-13 - 10:30:13 PM GMT - Time Source: server
-  Agreement completed.  
2023-06-13 - 10:30:13 PM GMT

Exhibit J

Letter from PG&E to San Joaquin County Seeking  
Position Statement, July 13, 2023

## Rice, Erin

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**From:** George, Dylan  
**Sent:** Thursday, July 13, 2023 3:53 PM  
**To:** cking@sjgov.org  
**Subject:** Request for letter of support from San Joaquin County regarding the PG&E Northern San Joaquin Transmission Project  
**Attachments:** NSJTP Draft Letter of Support San Joaquin County.docx

Classification: Public

Corinne,

You and I had exchanged phone messages a couple of weeks ago, but were never able to connect. As I said in my message, Pacific Gas and Electric Company (PG&E) is preparing to file the project permit application for the Northern San Joaquin Transmission Project to the California Public Utilities Commission (CPUC) in August 2023. You were part of a meeting about this project with numerous PG&E representatives and other county staff in October of 2016.

The California Public Utilities Commission (CPUC) is the state agency responsible for making a final decision on the project. To acknowledge ongoing coordination and to recognize the importance the project will bring to your community, PG&E requests San Joaquin County to consider signing the attached draft letter of support for the project. The City of Lodi provided a similar support letter last month.

PG&E has valued the ongoing coordination with San Joaquin County since 2015, and since then, during project development. PG&E has met with the County Board of Supervisors and staff to discuss the purpose, plan and benefits of the project, as well as coordination on timing and proposed route development. We truly appreciate the time and expertise your city has provided.

The Northern San Joaquin Transmission Project will bring upgrades to the grid that will help the region stay in front of growing energy demand, limiting the chances of the system becoming overloaded, especially during the summer when demand for electricity is highest. Strengthening the grid will provide a highly reliable and stable electricity source for the area's leading businesses and industries. These technology upgrades will provide greater ability to limit impacts from future outages to a confined area, while increasing the capacity of key transmission lines which will allow PG&E to move electricity more efficiently throughout the local electric system.

Once PG&E files the permit application, the CPUC will have jurisdiction over the outcome of project and will decide whether to approve the proposed route and construction of the project.

If you would like to discuss further, or have any questions, please let me know.

Thank you,  
Dylan George  
Local Government Affairs representative  
Pacific Gas and Electric  
4040 West Lane  
Stockton, CA 95204  
Cell: 209-479-0593  
[dylan.george@pge.com](mailto:dylan.george@pge.com)

Exhibit K

2018 Transmission Plan

*Filed Via Archival Grade DVD And  
Excluded Due To File Size And Format*

Exhibit L

CAISO 2017-2018 Final ISO Transmission Plan,  
Appendix B: Reliability Assessment. (Confidential –  
Subject to Transmission Planning NDA)

*(not included, to be provided if requested by CPUC)*