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# Minutes

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**To:** NCPA Facilities Committee

**From:** Carrie Pollo

**Subject:** May 1, 2024 Facilities Committee Meeting Minutes

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1. **Call meeting to order & Roll Call** – The meeting was called to order by Committee Chair Shiva Swaminathan (Redding) at 9:07 am. Attending via teleconference and on-line presentation were Alan Harbottle (Alameda), Josh Cook (Biggs), Nick Rossow (Redding), Basil Wong and Bill Her (Santa Clara) and Cindy Sauers (Ukiah). Peter Lorenz (non-voting Representative with TID) also attended via teleconference and on-line presentation. Those attending in person are listed on the attached Attendee Sign-in Sheet. Committee Representatives from BART, Gridley, Healdsburg, Lompoc, Plumas-Sierra, Port of Oakland, Shasta Lake, and TID were absent. A quorum of the Committee was not established at the time of roll call.

## **PUBLIC FORUM**

No public comment.

## **OPEN SESSION**

## **DISCUSSION / ACTION ITEMS**

2. **Approval of Minutes from the April 3, 2024 Facilities Committee meeting and the April 15, 2024 Facilities Committee Special meeting.**

**Motion:** A motion was made by Josh Cook and seconded by Shiva Swaminathan recommending approval of the minutes from the April 3, 2024 Regular Facilities Committee meeting and the April 15, 2024 Special Facilities Committee Meeting. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah. The motion passed.

3. **All NCPA Facilities, Members, SPCPA – Mechanical Analysis Repair, Inc. dba Martech MTGSA** – Staff presented background information and was seeking a recommendation for Commission approval of a five-year Multi-Task General Services Agreement with Mechanical Analysis Repair, Inc. dba Martech for machining and motor maintenance services, with a not to exceed amount of \$1,500,000, for use at all facilities owned and/or operated by NCPA, NCPA Members, SPCPA, and SPCPA Members.

This is a current NCPA vendor whose agreement is expiring. NCPA has utilized this vendor in the past, and has a good working relationship with this vendor. NCPA desires to enter into this agreement so established terms and conditions are in place should this vendor be the successful bidder on future purchases. This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are needed, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA has agreements in place with Atlas Copco Compressors (pending), Dahl-Beck Electric, Industrial Electrical Co., Industrial Service Solutions (pending), Caltrol, Inc. and Custom Valve Solutions for similar services. A draft Commission Staff Report and agreement were available for review. It is recommended to place this item on the Commission Consent Calendar.

**Motion:** A motion was made by Josh Cook and seconded by Shiva Swaminathan recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with Mechanical Analysis Repair, Inc. dba Martech for machining and motor maintenance related services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,500,000 over five years, for use at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA and SCPPA Members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah. The motion passed.

4. **All NCPA Facilities, Members, SCPPA – Environex, Inc. MTPSA** – Staff provided background information and was seeking a recommendation for Commission approval of a five-year Multi-Task Professional Services Agreement with Environex, Inc. for catalyst testing related services, with a not to exceed amount of \$1,000,000, for use at all facilities owned and/or operated by NCPA, NCPA Members, SCPPA, and SCPPA Members.

This is a current NCPA vendor whose agreement is expiring. NCPA has utilized this vendor in the past, and has a good working relationship with this vendor. NCPA desires to enter into this agreement so established terms and conditions are in place should this vendor be the successful bidder on future purchases. This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are needed, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA has agreements in place with Fossil Energy Research Corp (FerCo) and Groome Industrial Service Corp. for similar services. A draft Commission Staff Report and agreement were available for review. It is recommended to place this item on the Commission Consent Calendar.

**Motion:** A motion was made by Josh Cook and seconded by Shiva Swaminathan recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task Professional Services Agreement with Environex, Inc. for catalyst testing related services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,000,000 over five years, for use at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA and SCPPA Members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah. The motion passed.

5. **All NCPA Facilities, Members, SCPPA – KSB, Inc. MTGSA** – Staff presented background information and was seeking a recommendation for Commission approval of a five-year Multi-Task General Services Agreement with KSB, Inc. for pump maintenance related services, with a not to exceed amount of \$1,000,000, for use at all facilities owned and/or operated by NCPA, NCPA Members, SCPPA, and SCPPA Members.

This is a current NCPA vendor whose agreement is expiring. NCPA has utilized this vendor in the past, and has a good working relationship with this vendor. NCPA desires to enter into this



agreement so established terms and conditions are in place should this vendor be the successful bidder on future purchases. This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are needed, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA has agreements in place with Allied Power Group and Sulzer Turbo Services Houston for similar services. A draft Commission Staff Report and agreement were available for review. It is recommended to place this item on the Commission Consent Calendar.

**Motion:** A motion was made by Josh Cook and seconded by Elisa Arteaga recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with KSB, Inc. for pump maintenance related services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,000,000 over five years, for use at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA and SCPPA Members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah. The motion passed.

- During the presentation of item # 5 Elisa Arteaga (Gridley) joined the meeting, thus establishing a quorum. After the vote of item # 5, it was decided by the Committee to vote on the previous items presented.

- 6. All NCPA Facilities, Members, SCPPA – Kobelco Compressors America, Inc. MTEMS –** Staff provided background information and was seeking a recommendation for Commission approval of a five-year Multi-Task Agreement for Purchase of Equipment, Materials and Supplies with Kobelco Compressors America, Inc. for fuel gas compressor related materials, with a not to exceed amount of \$750,000, for use at all facilities owned and/or operated by NCPA, NCPA Members, SCPPA, and SCPPA Members.

NCPA has utilized this vendor in the past, and has a good working relationship with this vendor. NCPA desires to enter into this agreement so established terms and conditions are in place should this vendor be the successful bidder on future purchases. NCPA does not have other agreements in place for similar services at this time, Kobelco is the OEM for the Lodi Energy Center fuel gas compressors. This agreement is for materials only. A draft Commission Staff Report and agreement were available for review. It is recommended to place this item on the Commission Consent Calendar.

**Motion:** A motion was made by Cindy Sauers and seconded by Jiayo Chiang recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task Agreement for Purchase of Equipment, Materials and Supplies with Kobelco Compressors America, Inc. for fuel gas compressor material purchases, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$750,000 over five years, for use at any facilities owned and/or operated by NCPA. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah. The motion passed.

- 7. All NCPA Facilities, Members, SCPPA – Kimberly Fields dba K. Weatherman Logging MTGSA –** Staff presented background information and was seeking a recommendation for Commission approval of a five-year Multi-Task General Services Agreement with Kimberly Fields dba K. Weatherman Logging for vegetation management related services, with a not to exceed amount of \$1,000,000, for use at all facilities owned and/or operated by NCPA, NCPA Members, SCPPA, and SCPPA Members.

This is a current NCPA vendor whose agreement has expired. NCPA has utilized this vendor in the past, and has a good working relationship with this vendor. NCPA desires to enter into this agreement so established terms and conditions are in place should this vendor be the successful bidder on future purchases. This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are needed, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA has agreements in place for similar services with Cornerstone Land Services LLC, High Sierra Timber Management, LLC and Nate's Tree Service. A draft Commission Staff Report and agreement were available for review. It is recommended to place this item on the Commission Consent Calendar.

**Motion:** A motion was made by Jiayo Chiang and seconded by Cindy Sauers recommending Commission approval authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with Kimberly Fields dba K. Weatherman Logging for vegetation management related services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,000,000 over five years, for use at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA, and SCPPA Members. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah. The motion passed.

**8. All NCPA Facilities, Members, SCPPA – Cool the Earth First Amendment to MTCSA –**

Staff provided background information and was seeking a recommendation for Commission approval of a First Amendment to the Multi-Task Consulting Services Agreement with Cool the Earth for electrification education and outreach services, to extend the term of the Agreement for an additional two-year period, for continued use by NCPA, NCPA Members, SCPPA, and SCPPA Members.

NCPA entered into a three-year MTCSA with Cool the Earth effective August 24, 2021, for an amount not to exceed \$750,000. This agreement has been used by multiple NCPA Members through NCPA's Support Services program, and an NCPA Member has requested that the agreement be extended. This amendment will extend the term of the Agreement for an additional two-year period from the original expiration date of August 23, 2024, to a new date of August 23, 2026. This enabling agreement does not commit NCPA to any expenditure of funds. NCPA will issue purchase orders based on cost and availability of the services needed at the time the service is required. NCPA has agreements in place for similar services with Plug-In America and Acterra: Action for a Healthy Planet. A draft Commission Staff Report, original agreement, and first amendment were available for review. It is recommended to place this item on the Commission Consent Calendar.

**Motion:** A motion was made by Alan Harbottle and seconded by Brian Schinstock recommending Commission approval authorizing the General Manager or his designee to enter into a First Amendment to the Multi-Task Consulting Services Agreement (MTCSA) with Cool the Earth for Electrification Education and Outreach Services, with any non-substantial changes recommended and approved by the NCPA General Counsel, to extend the term of the Agreement for an additional two year period, for continued use by NCPA, NCPA Members, by SCPPA, and SCPPA Members. A vote was taken by roll call: YES = Alameda, Gridley, Lodi, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah. ABSTAIN = Biggs. The motion passed.

**9. Second Amendment to Resolution 24-02 Authorizing the Use of \$6,100,000 of Insurance Claim Proceeds and Reducing the Transfer of Geo Decommissioning Collections from \$7,200,000 to \$1,100,000 for Plant 1, Unit 2 Turbine Overhaul Project–**

Staff presented background information and was seeking a recommendation for Commission approval to amend Resolution 24-02 by authorizing the use of \$6,100,000 of Geo insurance claim proceeds and

reducing the transfer of Geo Decommissioning collections from \$7,200,000 to \$1,100,000 for Plant 1, Unit 2 Turbine Overhaul Project.

During the March 2023 planned outage, it was discovered that Plant 1, Unit 1 had a similar strainer basket damage that was experienced with Plant 2, Unit 4. On March 7, 2023, claim # 818701 was filed with FM Global to review the property loss associated with Plant 1, Unit 1 including business interruption losses. Over the last year, staff have worked closely with the FM Global adjusters inspecting the unit, monitoring the progress of repairs, and analyzing the repair invoices. In addition, NCPA staff provided FM Global with the details of the lost generation revenue including RECs and RA. After a thorough review, FM Global and NCPA agreed on a total claim recovery of \$6,169,682 broken down as follows:

Date	Claim No.	NCPA Asset	Description of Loss	Total Loss	Deductible	Recovery
3/7/2023	818701	Geo	Physical damage to strainer of unit 1	\$1,541,182.68	\$1,000,000	\$541,182
3/7/2023	818701	Geo	Business Interruption	\$10,802,221	\$5,173,721	\$5,628,500

At the January 5, 2024, Special Commission meeting, Resolution 24-02 was approved authorizing various actions related to the Geothermal (Geo) Plant 1, Unit 2 Turbine Overhaul Project but more specifically, the transfer of \$7,200,000 previously collected funds from the Geo Decommissioning Reserve, as needed, to pay for repairs associated with the Geo Plant 1, Unit 2 Turbine Overhaul Project. It was noted in the discussion that NCPA had a property insurance claim related to Plant 1, Unit 1 pending with property insurer FM Global, but the final settlement and timing of expected proceeds were unknown. Staff indicated they would return with a recommendation once that information was made available. The \$1,000,000 will be collected over the next three years reducing the Geo Decommissioning Reserves. No replenishment of funds is planned at this time.

**Motion:** A motion was made by Shiva Swaminathan and seconded by Cindy Sauers recommending Commission approval of the Second Amendment to Resolution 24-02 authorizing the use of \$6,100,000 Geo insurance claim proceeds and reducing the transfer of Geo Decommissioning Reserve funds from \$7,200,000 to \$1,100,000 for Plant 1, Unit 2 Turbine Overhaul Project. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Palo Alto, Roseville, Santa Clara, and Ukiah. ABSTAIN = Redding. The motion passed.

#### 10. NCPA Geothermal Facility – Geothermal Plant 2, Unit 4 Cooling Tower Improvement

**Project** – Staff provided background information and was seeking a recommendation for Commission approval of the Geothermal Plant 2, Unit 4 Cooling Tower Improvement Project and delegating authority to the General Manager or his designee to award bids, execute agreements, and to issue purchase orders for the project in accordance with NCPA purchasing policies and procedures, without further approval by the Commission, for a total not to exceed amount of \$800,000, to be funded from the FY24 Geothermal Facility budget.

The Geothermal Plant 2, Unit 4 cooling tower system is equipped with a six-cell mechanical draft cooling tower. The cooling tower is designed according to the counter-flow principle and incorporates a plastic heat transfer surface to assure maximum availability for operation at any time of the year. The tower consists of six major sections (1) Basic Support Structure; (2) Basin; (3) Fill; (4) The Distribution System; (5) The Drift Eliminator Section; and (6) the Fan Assembly and Drive Train for each cell.

The Unit 4 cooling tower is inspected annually to assess the condition of each major section as identified above. A final report is then prepared which identifies work items that need immediate attention, as well as those that can be deferred as part of a long-term maintenance strategy. In

May 2023, NCPA hired Tex Tenn Design & Consulting to perform the annual inspection on the Plant 2, Unit 4 cooling tower. The vendor identified structural issues with both stair towers (wood) and cracking/delamination of the fan blades (fiberglass). To ensure the safety of personnel on-site, the tower stairs were immediately taken out of service and a scaffolding system was installed to provide temporary access. The delaminated fan blades were patched as a temporary measure until the blades could be replaced.

NCPA is now seeking approval for the Geothermal Plant 2, Unit 4 Cooling Tower Improvement Project to address the issues identified in the last annual inspection report. The scope of this project includes replacement of the wood stair towers with a new fiberglass structure, replacement of the fan blades for each cell, and miscellaneous work which may be identified during the project.

**Motion:** A motion was made by Josh Cook and seconded by Brian Schinstock recommending Commission approval authorizing the Geothermal Plant 2, Unit 4 Cooling Tower Improvement Project and delegating authority to the General Manager or his designee to award bids, execute agreements, and to issue purchase orders for the project in accordance with NCPA purchasing policies and procedures, without further approval by the Commission, for a total not to exceed amount of \$800,000, to be funded from the FY24 Geothermal Facility budget.. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Roseville, Santa Clara, and Ukiah. ABSTAIN = Redding and Palo Alto The motion passed.

- 11. NCPA Geothermal Facility – SEGEP Surge Tank Refurbishment Project** – Staff presented background information and was seeking a recommendation for Commission approval of the Geothermal SEGEP Surge Tank Refurbishment Project and delegating authority to the General Manager or his designee to award bids execute agreements, and to issue purchase orders for the project in accordance with NCPA purchasing policies and procedures, without further approval by the Commission, for a total not exceed \$1,200,000, and delegating authority to the General Manager to authorize 50% of the funding to come from the Geothermal Facility FY 2024 budget with the remaining 50% of the funding to be billed to and collected from Calpine Corporation.

The Southeast Geysers Effluent Pipeline (SEGEP) brings treated wastewater up to the Geysers where it is injected into the geothermal reservoir to provide added steam reserves and reservoir pressure support. The water is shared between NCPA and Calpine. The operational and maintenance costs of the SEGEP system are also shared between NCPA and Calpine, with these costs being evenly split (50%) between the two entities.

The SEGEP pipeline has three pump stations, Bear Canyon #1, #2, and #3, that boost the pipeline water pressure and brings water up approximately 3,000 feet in elevation to be used in the steam field. Each pump station is equipped with inlet and outlet surge tanks. The tanks are normally half filled with water and then capped with air. Their purpose is to provide protection against water hammer of the pipeline during sudden surges in pressure. The air compressors that feed the surge tanks at each pump station are over twenty-five years old and have reached end of life, and are also undersized for current operations. New air compressors are required to maintain the safe operation of the SEGEP pipeline. NCPA hired HDR Engineering, Inc. to examine the surge protection system and to provide a detailed engineering package for refurbishment of the system. HDR Engineering, Inc. estimated the total combined cost of this project to be approximately \$1,200,000.

As detailed in the Amended and Restated Steam Suppliers Joint Operating Agreement Southeast Geysers Pipeline Project between NCPA and Calpine Corporation, dated September 18, 2003, NCPA is the operator of the pipeline and is responsible for initial payment of all project

costs, and Calpine is charged for their share of the work through monthly billing cycles. This cost sharing arrangement is detailed in Section 4 – Ownership Interests and Section 6 – Allocation and Payment of Costs in the above-mentioned agreement.

**Motion:** A motion was made by Brian Schinstock and seconded by Josh Cook recommending Commission approval authorizing the SEGEF Surge Tank Refurbishment Project and delegating authority to the General Manager or his designee to award bids, execute agreements, and to issue purchase orders for the project in accordance with NCPA purchasing policies and procedures, without further approval by the Commission, for a total not exceed amount of \$1,200,000, and delegating authority to the General Manager to authorize 50% of the funding to come from the Geothermal Facility FY 2024 budget with the remaining 50% of the funding to be billed to and collected from Calpine Corporation. A vote was taken by roll call: YES = Alameda, Biggs, Gridley, Lodi, Roseville, Santa Clara, and Ukiah. ABSTAIN = Palo Alto and Redding. The motion passed.

- 12. Grace Orchard Energy Center Renewable PPA and Third Phase Agreement –** Staff presented background information and was seeking a recommendation for Commission approval of (i) the Grace Orchard Energy Center, LLC Renewable Power Purchase Agreement, and (ii) the Third Phase Agreement for Renewable Power Purchase Agreement with Grace Orchard Energy Center, LLC.

Staff is still working on a few more items including updated CEQA language in the document so that CEQA requirements are met before buying output from this project. The buyer (NCPA) also needs to post collateral which is still being discussed and the Project Tax Credit (PTC) is still under negotiations. Members are not comfortable with a limited cap on the MWh price. Staff will continue to negotiate through these issues and bring this item back for final approval and a recommendation for Commission approval at a later date.

## **INFORMATIONAL ITEMS**

- 13. New Business Opportunities –** Staff provided an update regarding new business opportunities.

**Yuba City Strategic Reserve (SC Services) –** CDWR has inquired about NCPA supplying Scheduling Coordinator (SC) services for the Yuba City Strategic Reserve Project. This project consists of two 30 MW Combustion Turbines. This project is energy only and to be dispatched during emergency operations per CAISO 4420. CDWR is the owner with Calpine being the operator. The project is currently in operations and seeking prompt services. The estimated cost is under discussions. Staff is currently in negotiations for this project. This project will be run similar to the Lodi Strategic Reserve, with a similar price.

**NCPA RFP for Renewable Energy Resources –** Staff issued an RFP for Renewable Energy and Renewable Storage Resources on February 15, 2024. Responses to the RFP were due April 12, 2024. NCPA staff have received a number of questions regarding the RFP. Next steps include posting this information on NCPA Connect. A summary review meeting is scheduled for May 7, 2024. Based on Member feedback, NCPA will perform further project evaluations. Then respondents will be notified.

**Grace Solar Update –** Staff is currently engaged in active negotiations with NextEra. A draft PPA is being considered by both parties. Member interest includes Biggs, Gridley, Healdsburg, Lodi, Lompoc, Port of Oakland, Plumas-Sierra, Shasta Lake, Ukiah, and Santa Clara.

- 14. NCPA Disaster Recovery Center Update –** Staff provided an update on the status of activities regarding tenant improvements and buildout of the new property including decommissioning of the leased site.

NCPA has received the revised design development costs and 95% of the construction drawings for review. NCPA made comments and revisions on the construction drawings, including the security system, data, interior south vestibule EVCS, and server room HVAC sizing. Staff has requested an evaluation of the HVAC heat load from Capitol Engineering (ME) as staff anticipated 6-8 tons of refrigeration.

On April 24, 2024 staff met with ME to review the heat load requirements, server configuration, and long-term planning for the server / UPS room. Based on the server room configuration and long-term planning, ME recommended three 5-ton Heat Pumps (HP). Staff suggested ME consider two 5-ton HP and two 3-ton mini-split units for redundancy and supplemental cooling. The approach to using mini-splits provides NCPA with redundancy in the event of equipment failure and supplemental cooling during high-heat events. This approach would minimize the rooftop structural load, rooftop penetrations, and re-routing ductwork.

### **Upcoming Milestones**

- Finalize server room mechanical requirements – Capital Engineering and Lionakis
- Structural Analysis review to support additional heat pumps – Lionakis
- Provide final plans for review – Lionakis
- Technical manual – Lionakis
- Submit for plan check – Lionakis
- Submit for Public Works RFP – NCPA

SVP approached NCPA with a request to occupy available space at the current and future DRC location. Staff has developed a draft Shared Use and Occupancy Agreement.

- DRC's primary function is to serve as a backup site for mission-critical, 24x7 scheduling and dispatch operations
- Structured to allow Signatory Members the ability to access available "office space"
- Shield non-participating Members from liability, etc.
- Occupancy charge that reflects the incremental cost (janitorial, utilities, etc.) of a Member's assigned personnel use of the facility

NCPA requests feedback, comments, edits, etc. over the next month for review at the next meeting.

### **15. NCPA Generation Services Plant Updates – Plant Staff provided the Committee an update on current plant activities and conditions.**

**Geo –** The average net generation for the month of April was 73 MW. The total net generation was 52.5 GWh. FY 2024 net generation goal = 743.8 GWh. FY forecast net generation was 617.4 GWh. The FY actual net generation was 425.3 GWh at 31.1% below the forecast due to the recent unit outages at Geo. Unit 1 was back online March 30, 2024.

#### **▪ Safety**

**Incident/First Aid Reported –** An RTS welder cut his left index finger with a retractable box cutter while cutting a zip tie at the end of the shift while attaching welding screens. The employee was wearing leather gloves. He returned to work the next day without any restrictions. Safety discussions were conducted by RTS and the NCPA Geo Team. The Geo detailed asses report for FT 2024 was reviewed with the Committee.

▪ **Unit 1 – Unit 1 Update**

Balancing was performed on the # 5 exciter bearing. Eight ounces of weight was added. At 35 MW the vibration dropped from 4.5 mils to 3.5 mils.

▪ **Plant 1 – Unit 2 Update**

- Lube Oil Cooler Assembly
- Generator Stator Bore
- Right Side Hydrogen Cooler Removal
- Generator Retaining Ring Painted T/E

▪ **Establishing the Geo Team**

- Reservoir Engineer – Candidate accepted – Start Date is June 10
- Plant Engineer – Interviews scheduled for May 14
- Operation Technicians – 1 Lead retired, 1 resigned – Positions will be posted as needed

**Hydro** – During the month of April, Collierville (CV) Power House was at 100% availability with heavy generation volumes. New Spicer Meadows (NMS) Power House was at 81% availability due to PG&E TIGO with light generation volumes. The monthly generation profiles for CV and NMS were shared with the Committee. The snow water content is currently at 90% of normal for this time of year. Precipitation is at 31.3 inches. February and March were great hydro months. April was just below normal. Hydrology is now tracking slightly below seasonal normal range for snow and rain this year, after a slow start to the water year. There is currently 2 feet of snow at New Spicer Meadows Power House. During the April 5, 2024 storm, trees fell and blocked access to CV, phones went down to CV, the 17kV line to McKays went down, put on back up generator, and Utica WL also went down.

**Upper Reservoir Positions**

- Alpine/Union/Utica/Spicer: 77%/100%/100%/67%

**New Spicer Meadows Reservoir Storage**

- 37,706, acre feet decrease (42%) month-over-month
- 88,437-acre feet to 126,143-acre feet
- Optimizing stored water – Spicer drafts at minimums

**Current Events**

- Working to complete FY '24 projects
- Initiating work on projects approved in the FY '25
- Lake Alpine Handrail Project contractor to mobilize May 13<sup>th</sup>
  - FM Global has confirmed Alpine Handrail claim is coverable
- Filed 401 WQC and FERC application for CV Tailrace Repair Project
- McKays Point Sediment Removal Project
  - Held on-site discussion with interested local private landowner 4/30
  - Held meeting on 4/2 with new owner of Carsen Hill Mine as an alternative site
- Working to complete FY '24 projects
  - Initiating work on projects approved in the FY '25
- Lake Alpine Handrail Project contractor to mobilize May 13<sup>th</sup>
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- Filed 401 WQC and FERC application for CV Tailrace Repair Project
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**CTs** – CT1 had 1 start of 8 forecasted. FYTD total is 63 starts. CT2 had 0 starts of 0 forecasted. FYTD total is 27 starts.

- **Outages**
  - **CT1 Lodi** – Available
  - **CT1 Alameda U1/U2** – Available. On 4/4/24 @ 0533 thru 1138, Alameda U2 was forced out due to an RTD input card error. Rebooted card to re-establish comm's. This card is part of the upcoming controls upgrade.
  - **CT2 STIG** – Annual Planned Outage
- **CT1 Lodi Run Hours**
  - YTD hours 8.68 of 200 Allowed (based on calendar year)
- **CT1 Alameda Diesel Hours**
  - U1= 3.57 hrs. of 42 (during any consecutive 12-month period)
  - U2= 1.85 hrs. of 42 (during any consecutive 12-month period)
- **Safety**
  - **Near Miss** – We have experienced a near miss associated with the LEC Sulfuric Acid system. An operator found the acid feed piping to the cooling tower basin had Chicago fittings installed for a vent cap. In the photo below, you can see the original cap that was removed from the vent and sitting on the containment wall. The original cap was removed, and a Chicago fitting installed to attach a hose for flushing the acid line for repair work. Once the work was completed, a Chicago cap was installed instead of reinstalling the original cap.
  - **Issues with this Decision**
    - The Chicago fittings are made of material that is incompatible with sulfuric acid. This can lead to corrosion and leaks.
    - The Chicago fittings are made of dissimilar metal as the process piping. This can lead to corrosion and leaks.
    - A high hazard system was modified without proper MOC procedures. (Management of Change).
  - **Resolution** – If a technician must temporarily modify any system this type of evolution must be captured, to prevent these modifications from being forgotten. CT group will use information tags or include them as LOTOT points. If an information tag is used, zip-tie it to the LOTOT box with a description and instructions for restoration.
- **Environmental**
  - No issues to report
- **2024 Planned Outages – CT1 Alameda U1 & U2- 5/1/24 thru 5/31/24** – Controls Upgrade, BOP Maintenance & Borescope Inspections

Staff reviewed the CAISO Commitment Runs for March 2024.

## 16. Planning and Operations Update

- **Resource Integrations**
  - Lodi Strategic Reserve Resource – Testing in progress
  - Scarlet Solar / BESS – May 2024
  - Proxima Solar / BESS – May 2024
  - Other BESS integrations
- **SCPA SC Transition Activities – June 1, 2024**
- **Resource Development**



- ZWEDC – negotiations complete
  - Grace Solar Project – active negotiation
  - NCPA has issued the refreshed Renewable RFP – Responses are under review
- **Ongoing daily operational activities**

The forward price curve, distribution of DLAP prices, gas storage in the Pacific Region, and reservoir levels were reviewed and discussed.

**17. Next Meeting** – The next regular Facilities Committee meeting is scheduled for June 5, 2024.

### **ADJOURNMENT**

The meeting was adjourned at 12:08 pm by the Committee Chair.

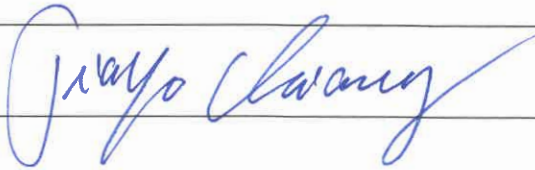

DRAFT

NCPA Facilities Committee Members, Alternates & Staff are requested to sign, but signature by members of the public is voluntary.

[illegible]

**Northern California Power Agency  
May 1, 2024 Facilities Committee Meeting  
Attendance List**

NCPA Facilities Committee Members are requested to sign, but signature by members of the public is voluntary.

<u>MEMBER</u>	<u>NAME</u>
ALAMEDA	
BART	
BIGGS	
GRIDLEY	
HEALDSBURG	
LODI	
LOMPOC	
PALO ALTO	
PLUMAS-SIERRA REC	
PORT OF OAKLAND	
REDDING	
ROSEVILLE	
SANTA CLARA	
SHASTA LAKE	
TID	
UKIAH	



# Commission Staff Report – *DRAFT*

**COMMISSION MEETING DATE:** June 27, 2024

**SUBJECT:** Air Hygiene International, Inc. – Five Year Multi-Task Consulting Services Agreement for Rata and Source Testing Related Services; Applicable to the following: All Northern California Power Agency (NCPA) Facilities, NCPA Members, Southern California Public Power Authority (SCPPA), and SCPPA Members

**AGENDA CATEGORY:** Consent

<b>FROM:</b>	Michael DeBortoli	<b>METHOD OF SELECTION:</b>
	Assistant General Manager	N/A
<b>Division:</b>	Generation Services	<i>If other, please describe:</i>
<b>Department:</b>	Combustion Turbines	

<b>IMPACTED MEMBERS:</b>		
All Members	<input checked="" type="checkbox"/>	
Alameda Municipal Power	<input type="checkbox"/>	
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	
City of Biggs	<input type="checkbox"/>	
City of Gridley	<input type="checkbox"/>	
City of Healdsburg	<input type="checkbox"/>	
City of Lodi	<input type="checkbox"/>	
City of Lompoc	<input type="checkbox"/>	
City of Palo Alto	<input type="checkbox"/>	
City of Redding	<input type="checkbox"/>	
City of Roseville	<input type="checkbox"/>	
City of Santa Clara	<input type="checkbox"/>	
City of Shasta Lake	<input type="checkbox"/>	
City of Ukiah	<input type="checkbox"/>	
Plumas-Sierra REC	<input type="checkbox"/>	
Port of Oakland	<input type="checkbox"/>	
Truckee Donner PUD	<input type="checkbox"/>	
Other	<input type="checkbox"/>	
<i>If other, please specify</i>		
<hr/>		
<hr/>		

## **RECOMMENDATION:**

Approve Resolution 24-XX authorizing the General Manager or his designee to enter into a Multi-Task Consulting Services Agreement with Air Hygiene International, Inc. for rata and source testing related services, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$500,000 over five years, for use at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA and SCPPA Members.

## **BACKGROUND:**

Various rata and source testing related services are required from time to time for the operation and maintenance of facilities owned and/or operated by NCPA, NCPA Members, by SCPPA and SCPPA Members. NCPA has utilized this vendor in the past, and has a good working relationship with this vendor. NCPA desires to enter into this agreement so established terms and conditions are in place should this vendor be the successful bidder on future purchases. NCPA has agreements in place with Blue Sky Environmental and Montrose Air Quality Services for similar services.

## **FISCAL IMPACT:**

Upon execution, the total cost of the agreement is not to exceed \$500,000 over five years. Purchase orders referencing the terms and conditions of the agreement will be issued following NCPA procurement policies and procedures.

## **SELECTION PROCESS:**

This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are needed, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA seeks bids from qualified providers as required. Bids are awarded to the vendor providing the best overall value to NCPA. NCPA will issue purchase orders based on cost and availability of the services needed at the time the service is required.

## **ENVIRONMENTAL ANALYSIS:**

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 of the California Environmental Quality Act. No environmental review is necessary.

## **COMMITTEE REVIEW:**

Pending Committee review and approval.

**AFTER FACILITIES APPROVAL:** On June 5, 2024 the Facilities Committee reviewed and endorsed the recommendation above for Commission approval.

**AFTER LEC PPC APPROVAL:** On June 10, 2024 the Lodi Energy Center Project Participant Committee reviewed and approved the recommendation above for Commission approval.

Respectfully submitted,

RANDY S. HOWARD  
General Manager

Attachments (2):

- Resolution 24-XX
- Multi-Task Consulting Services Agreement with Air Hygiene International, Inc.

**RESOLUTION 24-XX**

**RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY  
APPROVING A MULTI-TASK CONSULTING SERVICES AGREEMENT WITH AIR HYGIENE  
INTERNATIONAL, INC.**

**(reference Staff Report XXX:24)**

WHEREAS, various rate and source testing related services are required from time to time for the operation and maintenance of facilities owned and/or operated by the Northern California Power Agency (NCPA), NCPA Members, by the Southern California Public Power Authority (SCPPA), and SCPPA Members; and

WHEREAS, Air Hygiene International, Inc. is a provider of these services; and

WHEREAS, the NCPA Commission has reviewed the Multi-Task Consulting Services Agreement with Air Hygiene International, Inc. to provide such services as needed at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA, and SCPPA Members; and

WHEREAS, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency authorizes the General Manager or his designee to enter into said Multi-Task Consulting Services Agreement, with any non-substantial changes as approved by the NCPA General Counsel, which shall not exceed \$500,000 over five years, for use at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA, and SCPPA Members.

PASSED, ADOPTED and APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2024 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

\_\_\_\_\_  
JERRY SERVENTI  
CHAIR

ATTEST:

\_\_\_\_\_  
CARRIE POLLO  
ASSISTANT SECRETARY



## **MULTI-TASK CONSULTING SERVICES AGREEMENT BETWEEN THE NORTHERN CALIFORNIA POWER AGENCY AND AIR HYGIENE INTERNATIONAL, INC.**

This Consulting Services Agreement ("Agreement") is made by and between the Northern California Power Agency, a joint powers agency with its main office located at 651 Commerce Drive, Roseville, CA 95678-6420 ("Agency") and Air Hygiene International, Inc., an Oklahoma corporation, with its office located at 1600 W. Tacoma Street, Broken Arrow, OK 74012 ("Consultant") (together sometimes referred to as the "Parties") as of \_\_\_\_\_, 2024 ("Effective Date") in Roseville, California.

**Section 1. SERVICES.** Subject to the terms and conditions set forth in this Agreement, Consultant shall provide to Agency the services described in the Scope of Services attached hereto as Exhibit A and incorporated herein ("Services"), at the time and place and in the manner specified therein.

- 1.1 Term of Agreement.** The term of this Agreement shall begin on the Effective Date and shall end when Consultant completes the Services, or no later than five (5) year from the date this Agreement was signed by Agency, whichever is shorter.
- 1.2 Standard of Performance.** Consultant shall perform the Services in the manner and according to the standards observed by a competent practitioner of the profession in which Consultant is engaged and for which Consultant is providing the Services. Consultant represents that it is licensed, qualified and experienced to provide the Services set forth herein.
- 1.3 Assignment of Personnel.** Consultant shall assign only competent personnel to perform the Services. In the event that Agency, in its sole discretion, at any time during the term of this Agreement, requests the reassignment of any such personnel, Consultant shall, immediately upon receiving written notice from Agency of such request, reassign such personnel.
- 1.4 Services Provided.** Services provided under this Agreement by Consultant may include Services directly to the Agency or, as requested by the Agency and consistent with the terms of this Agreement, to Agency members, Southern California Public Power Authority ("SCPPA") or SCPPA members.
- 1.5 Request for Services.** At such time that Agency determines to use Consultant's Services under this Agreement, Agency shall issue a Purchase Order. The Purchase Order shall identify the specific services to be performed ("Requested Services"), may include a not-to-exceed monetary cap on Requested Services and expenditures authorized by that Purchase Order, and a time by which the Requested Services shall be completed. Consultant shall have seven calendar days from the date of the Agency's issuance of the Purchase Order in which to respond in writing that Consultant chooses not to perform the Requested Services. If Consultant agrees to perform the Requested Services, begins to perform the Requested Services, or does not respond within the seven day



period specified, then Consultant will have agreed to perform the Requested Services on the terms set forth in the Purchase Order, this Agreement and its Exhibits.

**Section 2. COMPENSATION.** Agency hereby agrees to pay Consultant an amount **NOT TO EXCEED** FIVE HUNDRED THOUSAND dollars (\$500,000.00) for the Services, which shall include all fees, costs, expenses and other reimbursables, as set forth in Consultant's fee schedule, attached hereto and incorporated herein as Exhibit B. This dollar amount is not a guarantee that Agency will pay that full amount to the Consultant, but is merely a limit of potential Agency expenditures under this Agreement.

**2.1 Invoices.** Consultant shall submit invoices, not more often than once a month during the term of this Agreement, based on the cost for services performed and reimbursable costs incurred prior to the invoice date. Invoices shall contain the following information:

- The beginning and ending dates of the billing period;
- Services performed;
- The Purchase Order number authorizing the Services;
- At Agency's option, the total number of hours of work performed under the Agreement by Consultant and each employee, agent, and subcontractor of Consultant performing services hereunder; and
- At Agency's option, when the Consultant's Scope of Work identifies tasks, for each work item in each task, a copy of the applicable time entries showing the name of the person doing the work, the hours spent by each person, a brief description of the work, and each reimbursable expense, with supporting documentation, to Agency's reasonable satisfaction.

Invoices shall be sent to:

Northern California Power Agency  
651 Commerce Drive  
Roseville, California 95678  
Attn: Accounts Payable  
[AcctsPayable@ncpa.com](mailto:AcctsPayable@ncpa.com)

**2.2 Monthly Payment.** Agency shall make monthly payments, based on invoices received, for services satisfactorily performed, and for authorized reimbursable costs incurred. Agency shall have thirty (30) days from the receipt of an invoice that complies with all of the requirements above to pay Consultant. Projects are invoiced based on the following milestone schedule: 30% of the Project Bid will be invoiced following the submittal of the Test Protocol and 50% of the Project Bid plus any overages, if applicable, will be invoiced upon completion of the Site Work, and 20% upon completion of the final report.

- 2.3 Payment of Taxes.** Consultant is solely responsible for the payment of all federal, state and local taxes, including employment taxes, incurred under this Agreement.
- 2.4 Authorization to Perform Services.** The Consultant is not authorized to perform any Services or incur any costs whatsoever under the terms of this Agreement until receipt of written authorization from the Contract Administrator.
- 2.5 Timing for Submittal of Final Invoice.** Consultant shall have ninety (90) days after completion of its Services to submit its final invoice for the Requested Services. In the event Consultant fails to submit an invoice to Agency for any amounts due within the ninety (90) day period, Consultant is deemed to have waived its right to collect its final payment from Agency.

**Section 3. FACILITIES AND EQUIPMENT.** Except as set forth herein, Consultant shall, at its sole cost and expense, provide all facilities and equipment that may be necessary to perform the Services.

**Section 4. INSURANCE REQUIREMENTS.** Before beginning any work under this Agreement, Consultant, at its own cost and expense, shall procure the types and amounts of insurance listed below and shall maintain the types and amounts of insurance listed below for the period covered by this Agreement.

- 4.1 Workers' Compensation.** If Consultant employs any person, Consultant shall maintain Statutory Workers' Compensation Insurance and Employer's Liability Insurance for any and all persons employed directly or indirectly by Consultant with limits of not less than one million dollars (\$1,000,000.00) per accident.
- 4.2 Commercial General and Automobile Liability Insurance.**
- 4.2.1 Commercial General Insurance.** Consultant shall maintain commercial general liability insurance for the term of this Agreement, including products liability, covering any loss or liability, including the cost of defense of any action, for bodily injury, death, personal injury and broad form property damage which may arise out of the operations of Consultant. The policy shall provide a minimum limit of \$2,000,000 per occurrence/\$2,000,000 aggregate. Commercial general coverage shall be at least as broad as ISO Commercial General Liability form CG 0001 (current edition) on "an occurrence" basis covering comprehensive General Liability, with a self-insured retention or deductible of no more than \$100,000. No endorsement shall be attached limiting the coverage.
- 4.2.2 Automobile Liability.** Consultant shall maintain automobile liability insurance form CA 0001 (current edition) for the term of this Agreement covering any loss or liability, including the cost of defense of any action, arising from the operation, maintenance or use of any vehicle (symbol 1),

whether or not owned by the Consultant, on or off Agency premises. The policy shall provide a minimum limit of \$2,000,000 per each accident, with a self-insured retention or deductible of no more than \$100,000. This insurance shall provide contractual liability covering all motor vehicles and mobile equipment to the extent coverage may be excluded from general liability insurance.

**4.2.3 General Liability/Umbrella Insurance.** The coverage amounts set forth above may be met by a combination of underlying and umbrella policies as long as in combination the limits equal or exceed those stated.

**4.3 Professional Liability Insurance.** Not Applicable.

**4.4 All Policies Requirements.**

**4.4.1 Verification of coverage.** Prior to beginning any work under this Agreement, Consultant shall provide Agency with (1) a Certificate of Insurance that demonstrates compliance with all applicable insurance provisions contained herein and (2) policy endorsements to the policies referenced in Section 4.2, adding the Agency as an additional insured and declaring such insurance primary in regard to work performed pursuant to this Agreement.

**4.4.2 Notice of Reduction in or Cancellation of Coverage.** Consultant shall provide at least thirty (30) days prior written notice to Agency of any reduction in scope or amount, cancellation, or modification adverse to Agency of the policies referenced in Section 4.

**4.4.3 Higher Limits.** If Consultant maintains higher limits than the minimums specified herein, the Agency shall be entitled to coverage for the higher limits maintained by the Consultant.

**4.4.4 Additional Certificates and Endorsements.** If Consultant provides services to Agency members, SCPPA, and/or SCPPA members pursuant to this Agreement, Consultant shall provide certificates of insurance and policy endorsements, as referenced in Section 4.4.1, naming the specific Agency member, SCPPA or SCPPA member.

**4.4.5 Waiver of Subrogation.** Consultant agrees to waive subrogation which any insurer of Consultant may acquire from Consultant by virtue of the payment of any loss. Consultant agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. In addition, the Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of Agency for all work performed by Consultant, its employees, agents and subcontractors.

- 4.5 **Consultant's Obligation.** Consultant shall be solely responsible for ensuring that all equipment, vehicles and other items utilized in the performance of Services are operated, provided or otherwise utilized in a manner that ensures they are and remain covered by the policies referenced in Section 4 during this Agreement. Consultant shall also ensure that all workers involved in the provision of Services are properly classified as employees, agents or independent contractors and are and remain covered by any and all workers' compensation insurance required by applicable law during this Agreement.

## **Section 5. INDEMNIFICATION AND CONSULTANT'S RESPONSIBILITIES.**

- 5.1 **Effect of Insurance.** Agency's acceptance of insurance certificates and endorsements required under this Agreement does not relieve Consultant from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply to any damages or claims for damages whether or not such insurance policies shall have been determined to apply. By execution of this Agreement, Consultant acknowledges and agrees to the provisions of this Section and that it is a material element of consideration.
- 5.2 **Scope.** Consultant shall indemnify, defend with counsel reasonably acceptable to the Agency, and hold harmless the Agency, and its officials, commissioners, officers, employees, agents and volunteers from and against all losses, liabilities, claims, demands, suits, actions, damages, expenses, penalties, fines, costs (including without limitation costs and fees of litigation), judgments and causes of action of every nature arising out of or in connection with any acts or omissions by Consultant, its officers, officials, agents, and employees, except as caused by the sole or gross negligence of Agency. Notwithstanding, should this Agreement be construed as a construction agreement under Civil Code section 2783, then the exception referenced above shall also be for the active negligence of Agency.

## **Section 6. STATUS OF CONSULTANT.**

- 6.1 **Independent Contractor.** Consultant is an independent contractor and not an employee of Agency. Agency shall have the right to control Consultant only insofar as the results of Consultant's Services and assignment of personnel pursuant to Section 1; otherwise, Agency shall not have the right to control the means by which Consultant accomplishes Services rendered pursuant to this Agreement. Notwithstanding any other Agency, state, or federal policy, rule, regulation, law, or ordinance to the contrary, Consultant and any of its employees, agents, and subcontractors providing services under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any and all claims to, any compensation, benefit, or any incident of employment by Agency, including but not limited to eligibility to enroll in the California Public Employees Retirement System (PERS) as an employee of Agency and entitlement to any contribution to be paid by Agency for employer contributions and/or employee contributions for PERS benefits.

Consultant shall indemnify, defend, and hold harmless Agency for the payment of any employee and/or employer contributions for PERS benefits on behalf of Consultant or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of Agency. Consultant and Agency acknowledge and agree that compensation paid by Agency to Consultant under this Agreement is based upon Consultant's estimated costs of providing the Services, including salaries and benefits of employees, agents and subcontractors of Consultant.

Consultant shall indemnify, defend, and hold harmless Agency from any lawsuit, administrative action, or other claim for penalties, losses, costs, damages, expense and liability of every kind, nature and description that arise out of, pertain to, or relate to such claims, whether directly or indirectly, due to Consultant's failure to secure workers' compensation insurance for its employees, agents, or subcontractors.

Consultant agrees that it is responsible for the provision of group healthcare benefits to its fulltime employees under 26 U.S.C. § 4980H of the Affordable Care Act. To the extent permitted by law, Consultant shall indemnify, defend and hold harmless Agency from any penalty issued to Agency under the Affordable Care Act resulting from the performance of the Services by any employee, agent, or subcontractor of Consultant.

- 6.2 Consultant Not Agent.** Except as Agency may specify in writing, Consultant shall have no authority, express or implied, to act on behalf of Agency in any capacity whatsoever as an agent. Consultant shall have no authority, express or implied, pursuant to this Agreement to bind Agency to any obligation whatsoever.
- 6.3 Assignment and Subcontracting.** This Agreement contemplates personal performance by Consultant and is based upon a determination of Consultant's unique professional competence, experience, and specialized professional knowledge. A substantial inducement to Agency for entering into this Agreement was and is the personal reputation and competence of Consultant. Consultant may not assign this Agreement or any interest therein without the prior written approval of the Agency. Consultant shall not subcontract any portion of the performance contemplated and provided for herein, other than to the subcontractors identified in Exhibit A, without prior written approval of the Agency. Where written approval is granted by the Agency, Consultant shall supervise all work subcontracted by Consultant in performing the services and shall be responsible for all work performed by a subcontractor as if Consultant itself had performed such work. The subcontracting of any work to subcontractors shall not relieve Consultant from any of its obligations under this Agreement with respect to the services and Consultant is obligated to ensure that any and all subcontractors performing any services shall be fully insured in all

respects and to the same extent as set forth under Section 4, to Agency's satisfaction.

- 6.4 Certification as to California Energy Commission.** If requested by the Agency, Consultant shall, at the same time it executes this Agreement, execute Exhibit C.

## **Section 7. LEGAL REQUIREMENTS.**

- 7.1 Governing Law.** The laws of the State of California shall govern this Agreement.
- 7.2 Compliance with Applicable Laws.** Consultant and its subcontractors and agents, if any, shall comply with all laws applicable to the performance of the work hereunder.
- 7.3 Licenses and Permits.** Consultant represents and warrants to Agency that Consultant and its employees, agents, and subcontractors (if any) have and will maintain at their sole expense during the term of this Agreement all licenses, permits, qualifications, and approvals of whatever nature that are legally required to practice their respective professions.

## **Section 8. TERMINATION AND MODIFICATION.**

- 8.1 Termination.** Agency may cancel this Agreement at any time and without cause upon ten (10) days prior written notice to Consultant.

In the event of termination, Consultant shall be entitled to compensation for Services satisfactorily completed as of the effective date of termination; Agency, however, may condition payment of such compensation upon Consultant delivering to Agency any or all records or documents, as referenced in Section 9.1 hereof.

- 8.2 Amendments.** The Parties may amend this Agreement only by a writing signed by all the Parties.
- 8.3 Survival.** All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between Agency and Consultant shall survive the termination of this Agreement.
- 8.4 Options upon Breach by Consultant.** If Consultant materially breaches any of the terms of this Agreement, including but not limited to those set forth in Section 4, Agency's remedies shall include, but not be limited to, the following:

**8.4.1** Immediately terminate the Agreement;

- 8.4.2 Retain the plans, specifications, drawings, reports, design documents, and any other work product prepared by Consultant pursuant to this Agreement;
- 8.4.3 Retain a different consultant to complete the Services not finished by Consultant; and/or
- 8.4.4 Charge Consultant the difference between the costs to complete the Services that is unfinished at the time of breach and the amount that Agency would have paid Consultant pursuant hereto if Consultant had completed the Services.

8.5 **Modification to Schedule.** If Agency reschedules the Project with fewer than seven (7) days' notice prior to a scheduled mobilization, then Consultant's Rescheduling Fee shall apply. Delays that occur that are outside of the control of Consultant, will be billed and paid according to the rates quoted on the Project Bid. If test delays are anticipated and Agency requests Consultant to demobilize from the Site, Consultant's crew will remain on stand-by, leave equipment onsite and invoice the appropriate charges if there are fewer than five (5) days before Agency requests that Consultant will return to the Site. For delays anticipated to extend beyond five (5) days, Agency can request that Consultant demobilize and remobilize at a later date or remain on stand-by and incur the appropriate charges according to the option requested.

## **Section 9. KEEPING AND STATUS OF RECORDS.**

- 9.1 **Records Created as Part of Consultant's Performance.** All reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, records, files, or any other documents or materials, in electronic or any other form, that Consultant prepares or obtains pursuant to this Agreement and that relate to the matters covered hereunder shall be the property of the Agency. Consultant hereby agrees to deliver those documents to the Agency upon termination of the Agreement. Agency and Consultant agree that, unless approved by Agency in writing, Consultant shall not release to any non-parties to this Agreement any data, plans, specifications, reports and other documents.
- 9.2 **Consultant's Books and Records.** Consultant shall maintain any and all records or other documents evidencing or relating to charges for Services or expenditures and disbursements charged to the Agency under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to the Consultant to this Agreement.
- 9.3 **Inspection and Audit of Records.** Any records or documents that this Agreement requires Consultant to maintain shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon

oral or written request of the Agency. Under California Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds ten thousand dollars (\$10,000.00), the Agreement shall be subject to the examination and audit of the State Auditor, at the request of Agency or as part of any audit of the Agency, for a period of three (3) years after final payment under the Agreement.

#### **9.4 Confidential Information and Disclosure.**

**9.4.1 Confidential Information.** The term "Confidential Information", as used herein, shall mean any and all confidential, proprietary, or trade secret information, whether written, recorded, electronic, oral or otherwise, where the Confidential Information is made available in a tangible medium of expression and marked in a prominent location as confidential, proprietary and/or trade secret information. Confidential Information shall not include information that: (a) was already known to the Receiving Party or is otherwise a matter of public knowledge, (b) was disclosed to Receiving Party by a third party without violating any confidentiality agreement, (c) was independently developed by Receiving Party without reverse engineering, as evidenced by written records thereof, or (d) was not marked as confidential Information in accordance with this section.

**9.4.2 Non-Disclosure of Confidential Information.** During the term of this Agreement, either party may disclose ("The Disclosing Party") confidential Information to the other party ("the Receiving Party"). The Receiving Party: (a) shall hold the Disclosing Party's Confidential Information in confident; and (b) shall take all reasonable steps to prevent any unauthorized possession, use, copying, transfer or disclosure of such Confidential Information.

**9.4.3 Permitted Disclosure.** Notwithstanding the foregoing, the following disclosures of Confidential Information are allowed. Receiving Party shall endeavor to provide prior written notice to Disclosing Party of any permitted disclosure made pursuant to Section 9.4.3.2 or 9.4.3.3. Disclosing Party may seek a protective order, including without limitation, a temporary restraining order to prevent or contest such permitted disclosure; provided, however, that Disclosing Party shall seek such remedies at its sole expense. Neither party shall have any liability for such permitted disclosures:

**9.4.3.1** Disclosure to employees, agents, consultants, contractors, subcontractors or other representatives of Receiving Party that have a need to know in connection with this Agreement.

**9.4.3.2** Disclosure in response to a valid order of a court, government or regulatory agency or as may otherwise be required by law; and



**9.4.3.3 Disclosure by Agency in response to a request pursuant to the California Public Records Act.**

**9.4.4 Handling of Confidential Information.** Upon conclusion or termination of the Agreement, Receiving Party shall return to Disclosing Party or destroy Confidential Information (including all copies thereof), if requested by Disclosing Party in writing. Notwithstanding the foregoing, the Receiving Party may retain copies of such Confidential Information, subject to the confidentiality provisions of this Agreement: (a) for archival purposes in its computer system; (b) in its legal department files; and (c) in files of Receiving Party's representatives where such copies are necessary to comply with applicable law. Party shall not disclose the Disclosing Party's Information to any person other than those of the Receiving Party's employees, agents, consultants, contractors and subcontractors who have a need to know in connection with this Agreement.

**Section 10. MISCELLANEOUS PROVISIONS.**

- 10.1 Attorneys' Fees.** If a party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provision of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees in addition to any other relief to which that party may be entitled. The court may set such fees in the same action or in a separate action brought for that purpose.
- 10.2 Venue.** In the event that either party brings any action against the other under this Agreement, the Parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of Placer or in the United States District Court for the Eastern District of California.
- 10.3 Severability.** If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.
- 10.4 No Implied Waiver of Breach.** The waiver of any breach of a specific provision of this Agreement does not constitute a waiver of any other breach of that term or any other term of this Agreement.
- 10.5 Successors and Assigns.** The provisions of this Agreement shall inure to the benefit of and shall apply to and bind the successors and assigns of the Parties.
- 10.6 Conflict of Interest.** Consultant may serve other clients, but none whose activities within the corporate limits of Agency or whose business, regardless of

location, would place Consultant in a “conflict of interest,” as that term is defined in the Political Reform Act, codified at California Government Code Section 81000 *et seq.*

Consultant shall not employ any Agency official in the work performed pursuant to this Agreement. No officer or employee of Agency shall have any financial interest in this Agreement that would violate California Government Code Sections 1090 *et seq.*

**10.7 Contract Administrator.** This Agreement shall be administered by the Assistant General Manager, Generation Services, or his/her designee, who shall act as the Agency’s representative. All correspondence shall be directed to or through the representative.

**10.8 Notices.** Any written notice to Consultant shall be sent to:

Air Hygiene International, Inc.  
Attention: Stephen Shreve  
1600 W. Tacoma Street  
Broken Arrow, OK 74012

Any written notice to Agency shall be sent to:

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

With a copy to:

Jane E. Luckhardt  
General Counsel  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

**10.9 Professional Seal.** Where applicable in the determination of the Agency, the first page of a technical report, first page of design specifications, and each page of construction drawings shall be stamped/sealed and signed by the licensed professional responsible for the report/design preparation.

**10.10 Integration; Incorporation.** This Agreement, including all the exhibits attached hereto, represents the entire and integrated agreement between Agency and Consultant and supersedes all prior negotiations, representations, or

agreements, either written or oral. All exhibits attached hereto are incorporated by reference herein.

**10.11 Alternative Dispute Resolution.** If any dispute arises between the Parties that cannot be settled after engaging in good faith negotiations, Agency and Consultant agree to resolve the dispute in accordance with the following:

- 10.11.1** Each party shall designate a senior management or executive level representative to negotiate any dispute;
- 10.11.2** The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.
- 10.11.3** If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiation between legal counsel. If the above process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.
- 10.11.4** The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.
- 10.11.5** The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.
- 10.11.6** The alternative dispute resolution process is a material condition to this Agreement and must be exhausted as an administrative prior to either Party initiating legal action. This alternative dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 *et seq.*

**10.12 Controlling Provisions.** In the case of any conflict between the terms of this Agreement and the Exhibits hereto, a Purchase Order, or Consultant's Proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and a Purchase Order or the Consultant's Proposal, the Exhibits shall control. In the case of any conflict between the terms of a Purchase Order and the Consultant's Proposal, the Purchase Order shall control.

**10.13 Counterparts.** This Agreement may be executed in multiple counterparts, each of which shall be an original and all of which together shall constitute one agreement.

**10.14 Construction of Agreement.** Each party hereto has had an equivalent opportunity to participate in the drafting of the Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting party shall not apply hereto.

**10.15 No Third Party Beneficiaries.** This Agreement is made solely for the benefit of the parties hereto, with no intent to benefit any non-signator third parties. However, should Consultant provide Services to an Agency member, SCCPA and/or a SCPPA member (collectively for the purposes of this section only "Member") pursuant to section 1.4, the parties recognize that such Member may be a third party beneficiary solely as to the Purchase Order and Requested Services relating to such Member.

The Parties have executed this Agreement as of the date signed by the Agency.

NORTHERN CALIFORNIA POWER AGENCY

AIR HYGIENE INTERNATIONAL, INC.

Date\_\_\_\_\_

Date\_\_\_\_\_

\_\_\_\_\_  
**RANDY S. HOWARD,**  
General Manager

\_\_\_\_\_  
**CLINT DAVIS,**  
CFO

Attest:

\_\_\_\_\_  
Assistant Secretary of the Commission

Approved as to Form:

\_\_\_\_\_  
Jane E. Luckhardt, General Counsel

## **EXHIBIT A**

### **SCOPE OF SERVICES**

Air Hygiene International, Inc. ("Consultant") shall provide testing related services as requested by the Northern California Power Agency ("Agency") at any facilities owned or operated by Agency, NCPA Members, Southern California Public Power Authority (SCPPA) or SCPPA members.

Services to include, but not be limited to the following:

- Rata Testing
- Source Testing
- Emission Testing

These testing services are not maintenance and thus, are not subject to prevailing wage per Labor Code section 1773.5 and Title 8 CCR 16001 (a).

## EXHIBIT B

### COMPENSATION SCHEDULE AND HOURLY FEES

Compensation for all tasks, including hourly fees and expenses, shall not exceed Amount as set forth in Section 2 of this Agreement. The hourly rates and or compensation break down and an estimated amount of expenses is as follows:

<u>Per Run/Sample Testing Fees</u>	<u>Effective Date: January 1<sup>st</sup>, 2024</u>	
O <sub>2</sub> & NO <sub>x</sub> Stratification Traverse	\$300	per traverse
Methane/Ethane Analysis (EPA Method 18)	\$500	per run
Fuel Analysis (natural gas, fuel oil, coal)	\$750	per sample
Exhaust Flow and Moisture Run w/o PM (EPA Method 2-4)	\$575	per run
FTIR Analysis (formaldehyde, ammonia, methane/ethane, etc.)	\$575	per hour/run
HCl testing (EPA Method 26(a)) with on-site analysis	\$575	per run
Opacity Reading (EPA Method 9 or 22)	\$865	per day
Sulfuric Acid Mist Testing (EPA Method 8a – control condensate) with on-site analysis	\$1,150	per run
Ammonia Testing & Analysis (CTM-027, BAAQMD ST-1B, 320)	\$1,150	per hour/run
Mercury (EPA Method 30B – sorbent traps)	\$1,150	per paired train run
PM-10 (EPA Method 5-front & 202-back) Test	\$1,150	per run
PM-10 (EPA Method 201a & 202) Test	\$1,725	per run
<b><u>CEMS Support Service Fees</u></b>		
Linearity Gases for 14 days/500 psi (EPA Protocol) – Single <small>(30-day notification required to assure gases are in stock at these prices, otherwise subject to actual Air Hygiene cost plus 10%)</small>	\$175	per bottle
Linearity & Cycle Response Time Testing/Reporting	\$575	per CEMS
CEMS ERT/XML Reporting of RATA	\$575/\$375	per CEMS
CEMS Complete Performance Test Reporting – hardcopy <small>(7-day drift, linearity, cycle response, DAHS certification, etc.)</small>	\$1,150	per CEMS
<ul style="list-style-type: none"> <li>CEMS Support Service Fees are subject to rush charges (1.5 times rate) if shorter than standard turn-around time (7 days for reports &amp; RATA EDR submittal and 45 days after receipt of requested data for plans &amp; CEMS EDR submittal)</li> </ul>		

### Day & Hourly Testing Rates

Hourly Rate	Day Rate/10	per hour
Overtime Rate (see billing notes item 6 for details)	Hourly rate x 1.5	per hour
Rush Testing Rates (mobilization < 5 days' notice)	Project Bid x 1.5	
Emergency Rush Testing Rate (mobilization < 2 days' notice)	Project Bid x 2.0	
ERT Reporting Compliance Testing (by ECMPS)	\$575	per source
Day Rate – portable analyzer testing	\$1,800	per day
Day Rate – mini-rack with NOx, CO, O <sub>2</sub> , & CO <sub>2</sub>	\$2,300	per day
Day Rate – single lab, gases	\$2,875	per day
Day Rate – RATA lab, gases	\$3,750	per day
Day Rate – FTIR mini-rack	\$4,900	per day
Day Rate – single lab, gases, NH <sub>3</sub>	\$4,900	per day
Day Rate – single lab, gases, PM	\$4,900	per day
Day Rate – single lab with FTIR for VOCs or HAPS	\$4,900	per day
Day Rate – single lab with GC for VOCs	\$4,900	per day
Day Rate – dual lab (gases only main rack + mini-rack)	\$4,900	per day
Day Rate – single lab, gases, PM, NH <sub>3</sub>	\$6,025	per day
Day Rate – YYYY (< 91ppb HCHO) STARBOOST	\$6,025	per day
Day Rate – single lab, gases, PM, NH <sub>3</sub> , SO <sub>3</sub> /H <sub>2</sub> SO <sub>4</sub>	\$7,190	per day
Day Rate – single lab, gases, PM, NH <sub>3</sub> , SO <sub>3</sub> /H <sub>2</sub> SO <sub>4</sub> /FTIR	\$8,900	per day
• Days with a trailer on-site with no crew may be charged at a reduced day rate, subject to project specific agreement. Rates listed above are basic day rates, specialized rates may also apply.		

### Project Support Rates

Project Support (test protocol, test reports, project administration, etc.)	\$1,150 (minimum)	per mobilization or as quoted
Pre-test meeting (1 person within 500 miles of Tulsa)	\$2,300 (minimum)	per person or as quoted

### Simultaneous Testing Options

Two (2) Sources/Points	plus 15%
Three (3) Sources/Points	plus 25%
Four (4) Sources/Points	plus 35%

### Mobilization Rates

Source setup charges beyond original quote	\$575	per setup
Truck & Trailer Mileage (from nearest AHI field office)	\$2.00	per mile from nearest field office
Truck only Mileage (from nearest AHI field office)	\$1.25	per mile from nearest field office
Initial site mobilization (one round trip) (Rush mobilization (< 5 days' notice) charged at 1.5 times listed rate)	\$3,750 (minimum)	per lab per round trip
Personnel remobilization (per person) (Equipment remains on-site and charged per day rate as defined in "Day and Hourly Testing Rates" section)	\$1150 (minimum)	per person per round trip
Lab remobilization (per lab)	\$3,750 (minimum)	per lab per round trip
Per Diem	\$175 (minimum)	per day per crew member

### Rescheduling & Cancellation Rates

Rescheduling fee (with < 10 days' notice prior to scheduled mobilization date)	Proposed Day Rate x 1 day
--------------------------------------------------------------------------------	---------------------------

(Rescheduling is defined as changing a planned test date)

### Methodology

Gas testing assumes no more than 60-minute test runs and particulate testing assumes no more than 180-minute test runs. **AIR HYGIENE** will conduct emission testing following EPA Reference Methods (RM) as listed below:

Nitrogen Oxides (NOx) – RM 7e &/or 20	Carbon Monoxide (CO) – RM 10
Sulfur Dioxide (SO <sub>2</sub> ) – RM 6c or ASTM fuel gas analysis	Carbon Dioxide (CO <sub>2</sub> ) – RM 3a
Total Hydrocarbons (THC) – RM 25a	Volatile Organic Compounds (VOC) RM 18/320 and 25a
Particulates (PM) – RM 5-front & 202-backhalf condensables	PM < 10 microns (PM <sub>10</sub> ) – RM 201a-front & 202-backhalf condensables
Opacity – RM 9	PM < 2.5 microns (PM <sub>2.5</sub> ) – RM 201a-front & 202-backhalf condensable
Exhaust Flow – RM 2 &/or 19	Mercury – 30B, Ontario-Hydro
Oxygen (O <sub>2</sub> ) – RM 3a &/or 20	Ammonia analysis (CTM-027, BAAQMD ST-1B, 320-FTIR)
Formaldehyde – (320-FTIR or RM323)	Methane/Ethane analysis (RM 18 or 320-FTIR)

Pricing for services to be performed at NCPA Member or SCPPA locations will be quoted at the time services are requested.

Consultant may revise the hourly rates upon 30 days' advance written notice to NCPA. If the Parties cannot agree on revised rates, NCPA may terminate the Agreement.

NOTE: As a public agency, NCPA shall not reimburse Consultant for travel, food and related costs in excess of those permitted by the Internal Revenue Service.

**EXHIBIT C**

**CERTIFICATION**

**Affidavit of Compliance for Contractors**

I, \_\_\_\_\_  
(Name of person signing affidavit)(Title)

do hereby certify that background investigations to ascertain the accuracy of the identity and employment history of all employees of

Air Hygiene International, Inc.  
(Company name)

for contract work at:

LODI ENERGY CENTER, 12745 N. THORNTON ROAD, LODI, CA 95242

(Project name and location)

have been conducted as required by the California Energy Commission Decision for the above-named project.

\_\_\_\_\_  
(Signature of officer or agent)

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.





## **Air Hygiene International, Inc. Multi-Task Consulting Services Agreement**

Facilities Committee  
June 5, 2024

## Background

- This is a current NCPA vendor.
- The current agreement with Air Hygiene is expiring.
- It is recommended to place this item on the consent calendar.
- For use at all facilities owned and/or operated by NCPA, NCPA Members, SCPPA and SCPPA Members
- Similar Agreements in Place:
  - Blue Sky Environmental
  - Montrose Air Quality Services

## **General Scope of Work**

- Term of Agreement = 5 years
- Cost = Not to Exceed \$500,000
- Services Provided:
  - Rata Testing
  - Source Testing
  - Emissions Testing

## **Environmental Analysis**

- As an enabling agreement, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a “project” for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

## Proposal

- Staff is seeking a recommendation from the Facilities Committee for Commission approval of the Five Year Multi-Task Consulting Services Agreement between NCPA and Air Hygiene International, Inc., in an amount not to exceed \$500,000, for use at any facilities owned and/or operated by NCPA, NCPA Members, SCPPA and SCPPA Members.



# Commission Staff Report – *DRAFT*

**COMMISSION MEETING DATE:** June 27, 2024

**SUBJECT:** Hudson Mechanical, Inc. – Five Year Multi-Task General Services Agreement for General Maintenance Services and Related Labor and Materials; Applicable to the following: All Northern California Power Agency (NCPA) Facilities (with the exception of NCPA's Lodi Energy Center), NCPA Members, Southern California Public Power Authority (SCPPA), and SCPPA Members

**AGENDA CATEGORY:** Consent

<b>FROM:</b>	Michael DeBortoli	<b>METHOD OF SELECTION:</b>
	Assistant General Manager	N/A
<b>Division:</b>	Generation Services	<i>If other, please describe:</i>
<b>Department:</b>	Geothermal	

<b>IMPACTED MEMBERS:</b>		
All Members	<input checked="" type="checkbox"/>	City of Lodi <input type="checkbox"/> City of Shasta Lake <input type="checkbox"/>
Alameda Municipal Power	<input type="checkbox"/>	City of Lompoc <input type="checkbox"/> City of Ukiah <input type="checkbox"/>
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	City of Palo Alto <input type="checkbox"/> Plumas-Sierra REC <input type="checkbox"/>
City of Biggs	<input type="checkbox"/>	City of Redding <input type="checkbox"/> Port of Oakland <input type="checkbox"/>
City of Gridley	<input type="checkbox"/>	City of Roseville <input type="checkbox"/> Truckee Donner PUD <input type="checkbox"/>
City of Healdsburg	<input type="checkbox"/>	City of Santa Clara <input type="checkbox"/> Other <input type="checkbox"/>
<i>If other, please specify</i>		
<hr/>		
<hr/>		

## **RECOMMENDATION:**

Approve Resolution 24-XX authorizing the General Manager or his designee to enter into a Multi-Task General Services Agreement with Hudson Mechanical, Inc. for general maintenance services and related labor and materials, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,000,000 over five years, for use at any facilities owned and/or operated by NCPA (with the exception of NCPA's Lodi Energy Center), NCPA Members, by SCPPA, and SCPPA Members.

## **BACKGROUND:**

General maintenance services and related labor and materials are required from time to time for the operation and maintenance of facilities owned and/or operated by NCPA (with the exception of NCPA's Lodi Energy Center), NCPA Members, by SCPPA, and SCPPA Members. NCPA currently has an agreement in place with Hudson Mechanical Inc., which is expiring. NCPA has utilized this vendor in the past, and has a good working relationship with the vendor. NCPA desires to enter into this agreement so established terms and conditions are in place should this vendor be the successful bidder on future projects. NCPA has agreements in place for similar services with Northern Industrial Construction, and Epidendio Construction.

## **FISCAL IMPACT:**

Upon execution, the total cost of the agreement is not to exceed \$1,000,000 over five years. Purchase orders referencing the terms and conditions of the agreement will be issued following NCPA procurement policies and procedures.

## **SELECTION PROCESS:**

This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are needed, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA seeks bids from qualified providers as required. Bids are awarded to the vendor providing the best overall value to NCPA. NCPA will issue purchase orders based on cost and availability of the services needed at the time the service is required.

## **ENVIRONMENTAL ANALYSIS:**

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 of the California Environmental Quality Act. No environmental review is necessary.

## **COMMITTEE REVIEW:**

Pending Committee review and approval.

**AFTER FACILITIES APPROVAL:** On June 5, 2024, the Facilities Committee reviewed and endorsed the recommendation above for Commission approval.

Respectfully submitted,

RANDY S. HOWARD  
General Manager

Attachments (2):

- Resolution 24-XX
- Multi-Task General Services Agreement with Hudson Mechanical, Inc.



**RESOLUTION 24-XX**

**RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY  
APPROVING A MULTI-TASK GENERAL SERVICES AGREEMENT WITH HUDSON  
MECHANICAL, INC.**

**(reference Staff Report #XXX:24)**

WHEREAS, general maintenance services and related labor and materials are required from time to time for the operation and maintenance of facilities owned and/or operated by the Northern California Power Agency (NCPA) (with the exception of NCPA's Lodi Energy Center), NCPA Members, by the Southern California Public Power Authority (SCPPA), and SCPPA Members; and

WHEREAS, Hudson Mechanical, Inc is a provider of these services; and

WHEREAS, the NCPA Commission has reviewed the Multi-Task General Services Agreement with Hudson Mechanical, Inc to provide such services as needed at any facilities owned and/or operated by NCPA (with the exception of NCPA's Lodi Energy Center), NCPA Members, by SCPPA, and SCPPA Members; and

WHEREAS, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 of the California Environmental Quality Act. No environmental review is necessary; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency authorizes the General Manager or his designee to enter into said Multi-Task General Services Agreement, with any non-substantial changes as approved by the NCPA General Counsel, which shall not exceed \$1,000,000 over five years, for use at any facilities owned and/or operated by NCPA (with the exception of NCPA's Lodi Energy Center), NCPA Members, by SCPPA, and SCPPA Members.

PASSED, ADOPTED and APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2024 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

\_\_\_\_\_  
JERRY SERVENTI  
CHAIR

ATTEST:

\_\_\_\_\_  
CARRIE POLLO  
ASSISTANT SECRETARY



**MULTI-TASK  
GENERAL SERVICES AGREEMENT BETWEEN  
THE NORTHERN CALIFORNIA POWER AGENCY AND  
HUDSON MECHANICAL, INC.**

This Multi-Task General Services Agreement ("Agreement") is made by and between the Northern California Power Agency, a joint powers agency with its main office located at 651 Commerce Drive, Roseville, CA 95678-6420 ("Agency") and Hudson Mechanical Inc., a corporation with its office located at Mailing Address: P.O. Box 1337, Anderson, CA 96007; Physical Address: 5214 Industrial Way, Anderson, CA 96007 ("Contractor") (together sometimes referred to as the "Parties") as of \_\_\_\_\_, 2024 ("Effective Date") in Roseville, California.

**Section 1. SCOPE OF WORK.** Subject to the terms and conditions set forth in this Agreement, Contractor is willing to provide to Agency the range of services and/or goods described in the Scope of Work attached hereto as Exhibit A and incorporated herein ("Work").

- 1.1 Term of Agreement.** The term of this Agreement shall begin on the Effective Date and shall end when Contractor completes the Work, or no later than five (5) years from the date this Agreement was signed by Agency, whichever is shorter.
- 1.2 Standard of Performance.** Contractor shall perform the Work in the manner and according to the standards observed by a competent practitioner of the profession in which Contractor is engaged and for which Contractor is providing the Work. Contractor represents that it is licensed, qualified and experienced to provide the Work set forth herein.
- 1.3 Assignment of Personnel.** Contractor shall assign only competent personnel to perform the Work. In the event that Agency, in its sole discretion, at any time during the term of this Agreement, requests the reassignment of any such personnel, Contractor shall, immediately upon receiving written notice from Agency of such request, reassign such personnel.
- 1.4 Work Provided.** Work provided under this Agreement by Contractor may include Work directly to the Agency, with the exception of NCPA's Lodi Energy Center facility, or, as requested by the Agency and consistent with the terms of this Agreement, to Agency members, Southern California Public Power Authority ("SCPPA") or SCPPA members.
- 1.5 Request for Work to be Performed.** At such time that Agency determines to have Contractor perform Work under this Agreement, Agency shall issue a Purchase Order. The Purchase Order shall identify the specific Work to be performed ("Requested Work"), may include a not-to-exceed cap on monetary cap on Requested Work and all related expenditures authorized by that Purchase Order, and shall include a time by which the Requested Work shall be completed. Contractor shall have seven calendar days from the date of the Agency's issuance of the Purchase Order in which to respond in writing that Contractor chooses not to perform the Requested Work. If Contractor agrees to

perform the Requested Work, begins to perform the Requested Work, or does not respond within the seven day period specified, then Contractor will have agreed to perform the Requested Work on the terms set forth in the Purchase Order, this Agreement and its Exhibits.

**Section 2. COMPENSATION.** Agency hereby agrees to pay Contractor an amount **NOT TO EXCEED** ONE MILLION dollars (\$1,000,000) for the Work, which shall include all fees, costs, expenses and other reimbursables, as set forth in Contractor's fee schedule, attached hereto and incorporated herein as Exhibit B. This dollar amount is not a guarantee that Agency will pay that full amount to the Contractor, but is merely a limit of potential Agency expenditures under this Agreement.

**2.1 Invoices.** Contractor shall submit invoices, not more often than once a month during the term of this Agreement, based on the cost for services performed and reimbursable costs incurred prior to the invoice date. Invoices shall contain the following information:

- The beginning and ending dates of the billing period;
- Work performed;
- The Purchase Order number authorizing the Requested Work;
- At Agency's option, for each work item in each task, a copy of the applicable time entries or time sheets shall be submitted showing the name of the person doing the work, the hours spent by each person, a brief description of the work, and each reimbursable expense, with supporting documentation, to Agency's reasonable satisfaction;
- At Agency's option, the total number of hours of work performed under the Agreement by Contractor and each employee, agent, and subcontractor of Contractor performing work hereunder.

Invoices shall be sent to:

Northern California Power Agency  
651 Commerce Drive  
Roseville, California 95678  
Attn: Accounts Payable  
[AcctsPayable@ncpa.com](mailto:AcctsPayable@ncpa.com)

**2.2 Monthly Payment.** Agency shall make monthly payments, based on invoices received, for Work satisfactorily performed, and for authorized reimbursable costs incurred. Agency shall have thirty (30) days from the receipt of an invoice that complies with all of the requirements above to pay Contractor.

**2.3 Payment of Taxes.** Contractor is solely responsible for the payment of all federal, state and local taxes, including employment taxes, incurred under this Agreement.

- 2.4 **Authorization to Perform Work.** The Contractor is not authorized to perform any Work or incur any costs whatsoever under the terms of this Agreement until receipt of a Purchase Order from the Contract Administrator.
- 2.5 **Timing for Submittal of Final Invoice.** Contractor shall have ninety (90) days after completion of the Requested Work to submit its final invoice for the Requested Work. In the event Contractor fails to submit an invoice to Agency for any amounts due within the ninety (90) day period, Contractor is deemed to have waived its right to collect its final payment for the Requested Work from Agency.

**Section 3. FACILITIES AND EQUIPMENT.** Except as set forth herein, Contractor shall, at its sole cost and expense, provide all facilities and equipment that may be necessary to perform the Work.

**Section 4. INSURANCE REQUIREMENTS.** Before beginning any Work under this Agreement, Contractor, at its own cost and expense, shall procure the types and amounts of insurance listed below and shall maintain the types and amounts of insurance listed below for the period covered by this Agreement.

- 4.1 **Workers' Compensation.** If Contractor employs any person, Contractor shall maintain Statutory Workers' Compensation Insurance and Employer's Liability Insurance for any and all persons employed directly or indirectly by Contractor with limits of not less than one million dollars (\$1,000,000.00) per accident.
- 4.2 **Commercial General and Automobile Liability Insurance.**
- 4.2.1 **Commercial General Insurance.** Contractor shall maintain commercial general liability insurance for the term of this Agreement, including products liability, covering any loss or liability, including the cost of defense of any action, for bodily injury, death, personal injury and broad form property damage which may arise out of the operations of Contractor. The policy shall provide a minimum limit of \$2,000,000 per occurrence/\$2,000,000 aggregate. Commercial general coverage shall be at least as broad as ISO Commercial General Liability form CG 0001 (current edition) on "an occurrence" basis covering comprehensive General Liability, with a self-insured retention or deductible of no more than \$100,000. No endorsement shall be attached limiting the coverage.
- 4.2.2 **Automobile Liability.** Contractor shall maintain automobile liability insurance form CA 0001 (current edition) for the term of this Agreement covering any loss or liability, including the cost of defense of any action, arising from the operation, maintenance or use of any vehicle (symbol 1), whether or not owned by the Contractor, on or off Agency premises. The policy shall provide a minimum limit of \$2,000,000 per each accident, with a self-insured retention or deductible of no more than \$100,000. This insurance shall provide contractual liability covering all motor vehicles and mobile equipment to the extent coverage may be excluded from general liability insurance.

- 4.2.3 General Liability/Umbrella Insurance.** The coverage amounts set forth above may be met by a combination of underlying and umbrella policies as long as in combination the limits equal or exceed those stated.
- 4.3 Professional Liability Insurance.** Intentionally Omitted.
- 4.4 Pollution Insurance.** Intentionally Omitted.
- 4.5 All Policies Requirements.**
- 4.5.1 Verification of coverage.** Prior to beginning any work under this Agreement, Contractor shall provide Agency with (1) a Certificate of Insurance that demonstrates compliance with all applicable insurance provisions contained herein and (2) policy endorsements to the policies referenced in Section 4.2 and in Section 4.4, if applicable, adding the Agency as an additional insured and declaring such insurance primary in regard to work performed pursuant to this Agreement.
- 4.5.2 Notice of Reduction in or Cancellation of Coverage.** Contractor shall provide at least thirty (30) days prior written notice to Agency of any reduction in scope or amount, cancellation, or modification adverse to Agency of the policies referenced in Section 4.
- 4.5.3 Higher Limits.** If Contractor maintains higher limits than the minimums specified herein, the Agency shall be entitled to coverage for the higher limits maintained by the Contractor.
- 4.5.4 Additional Certificates and Endorsements.** If Contractor performs Work for Agency members, SCPPA and/or SCPPA members pursuant to this Agreement, Contractor shall provide the certificates of insurance and policy endorsements, as referenced in Section 4.5.1, naming the specific Agency member, SCPPA and/or SCPPA member for which the Work is to be performed.
- 4.5.5 Waiver of Subrogation.** Contractor agrees to waive subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. In addition, the Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of Agency for all work performed by Contractor, its employees, agents and subcontractors.
- 4.6 Contractor's Obligation.** Contractor shall be solely responsible for ensuring that all equipment, vehicles and other items utilized in the performance of Work are operated, provided or otherwise utilized in a manner that ensures they are and remain covered by the policies referenced in Section 4 during this Agreement. Contractor shall also ensure that all workers involved in the provision of Work are properly classified as employees, agents or independent

contractors and are and remain covered by any and all workers' compensation insurance required by applicable law during this Agreement.

## **Section 5. INDEMNIFICATION AND CONTRACTOR'S RESPONSIBILITIES.**

- 5.1 Effect of Insurance.** Agency's acceptance of insurance certificates and endorsements required under this Agreement does not relieve Contractor from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply to any damages or claims for damages whether or not such insurance policies shall have been determined to apply. By execution of this Agreement, Contractor acknowledges and agrees to the provisions of this section and that it is a material element of consideration.
- 5.2 Scope.** Contractor shall indemnify, defend with counsel reasonably acceptable to the Agency, and hold harmless the Agency, and its officials, commissioners, officers, employees, agents and volunteers from and against all losses, liabilities, claims, demands, suits, actions, damages, expenses, penalties, fines, costs (including without limitation costs and fees of litigation), judgments and causes of action of every nature arising out of or in connection with any acts or omissions by Contractor, its officers, officials, agents, and employees, except as caused by the sole or gross negligence of Agency. Notwithstanding, should this Agreement be construed as a construction agreement under Civil Code section 2783, then the exception referenced above shall also be for the active negligence of Agency.
- 5.3 Transfer of Title.** Intentionally Omitted.

## **Section 6. STATUS OF CONTRACTOR.**

- 6.1 Independent Contractor.** Contractor is an independent contractor and not an employee of Agency. Agency shall have the right to control Contractor only insofar as the results of Contractor's Work and assignment of personnel pursuant to Section 1; otherwise, Agency shall not have the right to control the means by which Contractor accomplishes Work rendered pursuant to this Agreement. Notwithstanding any other Agency, state, or federal policy, rule, regulation, law, or ordinance to the contrary, Contractor and any of its employees, agents, and subcontractors providing services under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any and all claims to, any compensation, benefit, or any incident of employment by Agency, including but not limited to eligibility to enroll in the California Public Employees Retirement System (PERS) as an employee of Agency and entitlement to any contribution to be paid by Agency for employer contributions and/or employee contributions for PERS benefits.

Contractor shall indemnify, defend, and hold harmless Agency for the payment of any employee and/or employer contributions for PERS benefits on behalf of Contractor or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of Agency. Contractor and Agency acknowledge

and agree that compensation paid by Agency to Contractor under this Agreement is based upon Contractor's estimated costs of providing the Work, including salaries and benefits of employees, agents and subcontractors of Contractor.

Contractor shall indemnify, defend, and hold harmless Agency from any lawsuit, administrative action, or other claim for penalties, losses, costs, damages, expense and liability of every kind, nature and description that arise out of, pertain to, or relate to such claims, whether directly or indirectly, due to Contractor's failure to secure workers' compensation insurance for its employees, agents, or subcontractors.

Contractor agrees that it is responsible for the provision of group healthcare benefits to its fulltime employees under 26 U.S.C. § 4980H of the Affordable Care Act. To the extent permitted by law, Contractor shall indemnify, defend and hold harmless Agency from any penalty issued to Agency under the Affordable Care Act resulting from the performance of the Services by any employee, agent, or subcontractor of Contractor.

- 6.2 Contractor Not Agent.** Except as Agency may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of Agency in any capacity whatsoever as an agent. Contractor shall have no authority, express or implied, pursuant to this Agreement to bind Agency to any obligation whatsoever.
- 6.3 Assignment and Subcontracting.** This Agreement contemplates personal performance by Contractor and is based upon a determination of Contractor's unique professional competence, experience, and specialized professional knowledge. A substantial inducement to Agency for entering into this Agreement was and is the personal reputation and competence of Contractor. Contractor may not assign this Agreement or any interest therein without the prior written approval of the Agency. Contractor shall not subcontract any portion of the performance contemplated and provided for herein, other than to the subcontractors identified in Exhibit A, without prior written approval of the Agency. Where written approval is granted by the Agency, Contractor shall supervise all work subcontracted by Contractor in performing the Work and shall be responsible for all work performed by a subcontractor as if Contractor itself had performed such work. The subcontracting of any work to subcontractors shall not relieve Contractor from any of its obligations under this Agreement with respect to the Work and Contractor is obligated to ensure that any and all subcontractors performing any Work shall be fully insured in all respects and to the same extent as set forth under Section 4, to Agency's satisfaction.
- 6.4 Certification as to California Energy Commission.** Not applicable. This Agreement is not for use at NCPA's Lodi Energy Center facility.
- 6.5 Certification as to California Energy Commission Regarding Hazardous Materials Transport Vendors.** Not applicable. This Agreement is not for use at NCPA's Lodi Energy Center facility.

- 6.6 **Maintenance Labor Agreement.** Not applicable. This Agreement is not for use at NCPA's Lodi Energy Center facility.

**Section 7. LEGAL REQUIREMENTS.**

- 7.1 **Governing Law.** The laws of the State of California shall govern this Agreement.
- 7.2 **Compliance with Applicable Laws.** Contractor and its subcontractors and agents, if any, shall comply with all laws applicable to the performance of the work hereunder.
- 7.3 **Licenses and Permits.** Contractor represents and warrants to Agency that Contractor and its employees, agents, and subcontractors (if any) have and will maintain at their sole expense during the term of this Agreement all licenses, permits, qualifications, and approvals of whatever nature that are legally required to practice their respective professions.
- 7.4 **Monitoring by DIR.** The Work is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
- 7.5 **Registration with DIR.** During the term of this Agreement, Contractor warrants that it is registered with the Department of Industrial Relations and qualified to perform Work consistent with Labor Code section 1725.5.
- 7.6 **Prevailing Wage Rates.** In accordance with California Labor Code Section 1771, not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the Work is to be performed, and not less than the general prevailing rate of per diem wages for holiday and overtime work as provided in the California Labor Code must be paid to all workers engaged in performing the Work. In accordance with California Labor Code Section 1770 and following, the Director of Industrial Relations has determined the general prevailing wage per diem rates for the locality in which the Work is to be performed; the Agency has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in the locality in which the Work is to be performed for each craft, classification or type of worker needed to perform the project; and copies of the prevailing rate of per diem wages are on file at the Agency and will be made available on request. Throughout the performance of the Work, Contractor must comply with all applicable laws and regulations that apply to wages earned in performance of the Work. Contractor assumes all responsibility for such payments and shall defend, indemnify and hold the Agency harmless from any and all claims made by the State of California, the Department of Industrial Relations, any subcontractor, any worker or any other third party with regard thereto.

Additionally, in accordance with the California Administrative Code, Title 8, Group 3, Article 2, Section 16000, Publication of Prevailing Wage Rates by Awarding



Bodies, copies of the applicable determination of the Director can be found on the web at: <http://www.dir.ca.gov/DLSR/PWD/> and may be reviewed at any time.

Contractor shall provide a certified copy of its payroll, on forms to be determined by the Agency and consistent with the Labor Code, within ten (10) days of the Contractor's receipt of Agency's written request therefor. Contractor's failure to timely comply with this provision may subject the Contractor to penalties pursuant to state law.

Contractor shall comply with applicable law, including Labor Code Sections 1774 and 1775. In accordance with Section 1775, Contractor shall forfeit as a penalty to Agency \$200.00 for each calendar day or portion thereof, for each worker paid less than the prevailing rates as determined by the Director of Industrial Relations for such work or craft in which such worker is employed for any Work done under the Agreement by Contractor or by any subcontractor under Contractor in violation of the provisions of the Labor Code and in particular, Labor Code Sections 1770 *et seq.* In addition to the penalty and pursuant to Section 1775, the difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the Contractor.

## **Section 8. TERMINATION AND MODIFICATION.**

- 8.1 Termination.** Agency may cancel this Agreement at any time and without cause upon ten (10) days prior written notice to Contractor.

In the event of termination, Contractor shall be entitled to compensation for Work satisfactorily completed as of the effective date of termination; Agency, however, may condition payment of such compensation upon Contractor delivering to Agency any or all records or documents (as referenced in Section 9.1 hereof).

- 8.2 Amendments.** The Parties may amend this Agreement only by a writing signed by both of the Parties.

- 8.3 Survival.** All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between Agency and Contractor shall survive the termination of this Agreement.

- 8.4 Options upon Breach by Contractor.** If Contractor materially breaches any of the terms of this Agreement, including but not limited to those set forth in Section 4, Agency's remedies shall include, but not be limited to, the following:

**8.4.1** Immediately terminate the Agreement;

**8.4.2** Retain the plans, specifications, drawings, reports, design documents, and any other work product prepared by Contractor pursuant to this Agreement;

- 8.4.3** Retain a different Contractor to complete the Work not finished by Contractor; and/or
- 8.4.4** Charge Contractor the difference between the costs to complete the Work that is unfinished at the time of breach and the amount that Agency would have paid Contractor pursuant hereto if Contractor had completed the Work.

**Section 9. KEEPING AND STATUS OF RECORDS.**

- 9.1 Records Created as Part of Contractor's Performance.** All reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, records, files, or any other documents or materials, in electronic or any other form, that Contractor prepares or obtains pursuant to this Agreement and that relate to the matters covered hereunder shall be the property of the Agency. Contractor hereby agrees to deliver those documents to the Agency upon termination of the Agreement. Agency and Contractor agree that, unless approved by Agency in writing, Contractor shall not release to any non-parties to this Agreement any data, plans, specifications, reports and other documents.
- 9.2 Contractor's Books and Records.** Contractor shall maintain any and all records or other documents evidencing or relating to charges for Work or expenditures and disbursements charged to the Agency under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to the Contractor under this Agreement.
- 9.3 Inspection and Audit of Records.** Any records or documents that this Agreement requires Contractor to maintain shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon oral or written request of the Agency. Under California Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds ten thousand dollars (\$10,000.00), the Agreement shall be subject to the examination and audit of the State Auditor, at the request of Agency or as part of any audit of the Agency, for a period of three (3) years after final payment under this Agreement.
- 9.4 Confidential Information and Disclosure.**
- 9.4.1 Confidential Information.** The term "Confidential Information", as used herein, shall mean any and all confidential, proprietary, or trade secret information, whether written, recorded, electronic, oral or otherwise, where the Confidential Information is made available in a tangible medium of expression and marked in a prominent location as confidential, proprietary and/or trade secret information. Confidential Information shall not include information that: (a) was already known to the Receiving Party or is otherwise a matter of public knowledge, (b) was disclosed to

Receiving Party by a third party without violating any confidentiality agreement, (c) was independently developed by Receiving Party without reverse engineering, as evidenced by written records thereof, or (d) was not marked as Confidential Information in accordance with this section.

**9.4.2 Non-Disclosure of Confidential Information.** During the term of this Agreement, either party may disclose (the “Disclosing Party”) Confidential Information to the other party (the “Receiving Party”). The Receiving Party: (a) shall hold the Disclosing Party's Confidential Information in confidence; and (b) shall take all reasonable steps to prevent any unauthorized possession, use, copying, transfer or disclosure of such Confidential Information.

**9.4.3 Permitted Disclosure.** Notwithstanding the foregoing, the following disclosures of Confidential Information are allowed. Receiving Party shall endeavor to provide prior written notice to Disclosing Party of any permitted disclosure made pursuant to Section 9.4.3.2 or 9.4.3.3. Disclosing Party may seek a protective order, including without limitation, a temporary restraining order to prevent or contest such permitted disclosure; provided, however, that Disclosing Party shall seek such remedies at its sole expense. Neither party shall have any liability for such permitted disclosures:

**9.4.3.1** Disclosure to employees, agents, contractors, subcontractors or other representatives of Receiving Party that have a need to know in connection with this Agreement.

**9.4.3.2** Disclosure in response to a valid order of a court, government or regulatory agency or as may otherwise be required by law; and

**9.4.3.3** Disclosure by Agency in response to a request pursuant to the California Public Records Act.

**9.4.4 Handling of Confidential Information.** Upon conclusion or termination of the Agreement, Receiving Party shall return to Disclosing Party or destroy Confidential Information (including all copies thereof), if requested by Disclosing Party in writing. Notwithstanding the foregoing, the Receiving Party may retain copies of such Confidential Information, subject to the confidentiality provisions of this Agreement: (a) for archival purposes in its computer system; (b) in its legal department files; and (c) in files of Receiving Party's representatives where such copies are necessary to comply with applicable law. Party shall not disclose the Disclosing Party's Information to any person other than those of the Receiving Party's employees, agents, consultants, contractors and subcontractors who have a need to know in connection with this Agreement.

## **Section 10. PROJECT SITE.**

- 10.1 Operations at the Project Site.** Each Project site may include the power plant areas, all buildings, offices, and other locations where Work is to be performed, including any access roads. Contractor shall perform the Work in such a manner as to cause a minimum of interference with the operations of the Agency; if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4; and other contractors at the Project site and to protect all persons and property thereon from damage or injury. Upon completion of the Work at a Project site, Contractor shall leave such Project site clean and free of all tools, equipment, waste materials and rubbish, stemming from or relating to Contractor's Work.
- 10.2 Contractor's Equipment, Tools, Supplies and Materials.** Contractor shall be solely responsible for the transportation, loading and unloading, and storage of any equipment, tools, supplies or materials required for performing the Work, whether owned, leased or rented. Neither Agency nor, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, will be responsible for any such equipment, supplies or materials which may be lost, stolen or damaged or for any additional rental charges for such. Equipment, tools, supplies and materials left or stored at a Project site, with or without permission, is at Contractor's sole risk. Anything left on the Project site an unreasonable length of time after the Work is completed shall be presumed to have been abandoned by the Contractor. Any transportation furnished by Agency or, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, shall be solely as an accommodation and neither Agency nor, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, shall have liability therefor. Contractor shall assume the risk and is solely responsible for its owned, non-owned and hired automobiles, trucks or other motorized vehicles as well as any equipment, tools, supplies, materials or other property which is utilized by Contractor on the Project site. All materials and supplies used by Contractor in the Work shall be new and in good condition.
- 10.3 Use of Agency Equipment.** Contractor shall assume the risk and is solely responsible for its use of any equipment owned and property provided by Agency and, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4, for the performance of Work.

## **Section 11. WARRANTY.**

- 11.1 Nature of Work.** In addition to any and all warranties provided or implied by law or public policy, Contractor warrants that all Work shall be free from defects in design and workmanship, and that Contractor shall perform all Work in accordance with applicable federal, state, and local laws, rules and regulations including engineering, construction and other codes and standards and prudent electrical utility standards, and in accordance with the terms of this Agreement.
- 11.2 Deficiencies in Work.** In addition to all other rights and remedies which Agency may have, Agency shall have the right to require, and Contractor shall be

obligated at its own expense to perform, all further Work which may be required to correct any deficiencies which result from Contractor's failure to perform any Work in accordance with the standards required by this Agreement. If during the term of this Agreement or the one (1) year period following completion of the Work, any equipment, supplies or other materials or Work used or provided by Contractor under this Agreement fails due to defects in material and/or workmanship or other breach of this Agreement, Contractor shall, upon any reasonable written notice from Agency, replace or repair the same to Agency's satisfaction.

- 11.3 Assignment of Warranties.** Contractor hereby assigns to Agency all additional warranties, extended warranties, or benefits like warranties, such as insurance, provided by or reasonably obtainable from suppliers of equipment and material used in the Work.

**Section 12. HEALTH AND SAFETY PROGRAMS.** The Contractor shall establish, maintain, and enforce safe work practices, and implement an accident/incident prevention program intended to ensure safe and healthful operations under their direction. The program shall include all requisite components of such a program under Federal, State and local regulations and shall comply with all site programs established by Agency and, if applicable, the entity for which Contractor is performing the Work, as referenced in Section 1.4.

- 12.1** Contractor is responsible for acquiring job hazard assessments as necessary to safely perform the Work and provide a copy to Agency upon request.
- 12.2** Contractor is responsible for providing all employee health and safety training and personal protective equipment in accordance with potential hazards that may be encountered in performance of the Work and provide copies of the certified training records upon request by Agency. Contractor shall be responsible for proper maintenance and/or disposal of their personal protective equipment and material handling equipment.
- 12.3** Contractor is responsible for ensuring that its lower-tier subcontractors are aware of and will comply with the requirements set forth herein.
- 12.4** Agency, or its representatives, may periodically monitor the safety performance of the Contractor performing the Work. Contractors and its subcontractors shall be required to comply with the safety and health obligations as established in the Agreement. Non-compliance with safety, health, or fire requirements may result in cessation of work activities, until items in non-compliance are corrected. It is also expressly acknowledged, understood and agreed that no payment shall be due from Agency to Contractor under this Agreement at any time when, or for any Work performed when, Contractor is not in full compliance with this Section 12.
- 12.5** Contractor shall immediately report any injuries to the Agency site safety representative. Additionally, the Contractor shall investigate and submit to the

Agency site safety representative copies of all written accident reports, and coordinate with Agency if further investigation is requested.

- 12.6 Contractor shall take all reasonable steps and precautions to protect the health of its employees and other site personnel with regard to the Work. Contractor shall conduct occupational health monitoring and/or sampling to determine levels of exposure of its employees to hazardous or toxic substances or environmental conditions. Copies of any sampling results will be forwarded to the Agency site safety representative upon request.
- 12.7 Contractor shall develop a plan to properly handle and dispose of any hazardous wastes, if any, Contractor generates in performing the Work.
- 12.8 Contractor shall advise its employees and subcontractors that any employee who jeopardizes his/her safety and health, or the safety and health of others, may be subject to actions including removal from Work.
- 12.9 Contractor shall, at the sole option of the Agency, develop and provide to the Agency a Hazardous Material Spill Response Plan that includes provisions for spill containment and clean-up, emergency contact information including regulatory agencies and spill sampling and analysis procedures. Hazardous Materials shall include diesel fuel used for trucks owned or leased by the Contractor.
- 12.10 If Contractor is providing Work to an Agency Member, SCPPA or SCPPA member (collectively "Member" solely for the purpose of this section) pursuant to Section 1.4 hereof, then that Member shall have the same rights as the Agency under Sections 12.1, 12.2, 12.4, 12.5, and 12.6 hereof.

### **Section 13. MISCELLANEOUS PROVISIONS.**

- 13.1 **Attorneys' Fees.** If a party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provision of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees in addition to any other relief to which that party may be entitled. The court may set such fees in the same action or in a separate action brought for that purpose.
- 13.2 **Venue.** In the event that either party brings any action against the other under this Agreement, the Parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of Placer or in the United States District Court for the Eastern District of California.
- 13.3 **Severability.** If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.

**13.4 No Implied Waiver of Breach.** The waiver of any breach of a specific provision of this Agreement does not constitute a waiver of any other breach of that term or any other term of this Agreement.

**13.5 Successors and Assigns.** The provisions of this Agreement shall inure to the benefit of and shall apply to and bind the successors and assigns of the Parties.

**13.6 Conflict of Interest.** Contractor may serve other clients, but none whose activities within the corporate limits of Agency or whose business, regardless of location, would place Contractor in a "conflict of interest," as that term is defined in the Political Reform Act, codified at California Government Code Section 81000 *et seq.*

Contractor shall not employ any Agency official in the work performed pursuant to this Agreement. No officer or employee of Agency shall have any financial interest in this Agreement that would violate California Government Code Sections 1090 *et seq.*

**13.7 Contract Administrator.** This Agreement shall be administered by General Services, Assistant General Manager, or his/her designee, who shall act as the Agency's representative. All correspondence shall be directed to or through the representative.

**13.8 Notices.** Any written notice to Contractor shall be sent to:

Josh Hudson  
President  
Hudson Mechanical, Inc.  
P.O. Box 1337  
Anderson, CA 96007

Any written notice to Agency shall be sent to:

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

With a copy to:

Jane E. Luckhardt  
General Counsel  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

- 13.9 Professional Seal.** Where applicable in the determination of the Agency, the first page of a technical report, first page of design specifications, and each page of construction drawings shall be stamped/sealed and signed by the licensed professional responsible for the report/design preparation.
- 13.10 Integration; Incorporation.** This Agreement, including all the exhibits attached hereto, represents the entire and integrated agreement between Agency and Contractor and supersedes all prior negotiations, representations, or agreements, either written or oral. All exhibits attached hereto are incorporated by reference herein.
- 13.11 Alternative Dispute Resolution.** If any dispute arises between the Parties that cannot be settled after engaging in good faith negotiations, Agency and Contractor agree to resolve the dispute in accordance with the following:
- 13.11.1** Each party shall designate a senior management or executive level representative to negotiate any dispute;
  - 13.11.2** The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.
  - 13.11.3** If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiation between legal counsel. If the above process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.
  - 13.11.4** The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.
  - 13.11.5** The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.
  - 13.11.6** The alternative dispute resolution process is a material condition to this Agreement and must be exhausted as an administrative remedy prior to either Party initiating legal action. This alternative dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 *et seq.*
- 13.12 Controlling Provisions.** In the case of any conflict between the terms of this Agreement and the Exhibits hereto, a Purchase Order, or Contractor's Proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and a Purchase Order or the Contractor's Proposal, the Exhibits shall control. In the case of any conflict between the terms of a Purchase Order and the Contractor's Proposal, the Purchase Order shall control.



**13.13 Counterparts.** This Agreement may be executed in multiple counterparts, each of which shall be an original and all of which together shall constitute one agreement.

**13.14 Construction of Agreement.** Each party hereto has had an equivalent opportunity to participate in the drafting of the Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting party shall not apply hereto.

**13.15 No Third Party Beneficiaries.** This Agreement is made solely for the benefit of the parties hereto, with no intent to benefit any non-signator third parties. However, should Contractor provide Work to an Agency member, SCPPA or SCPPA member (collectively for the purpose of this section only "Member") pursuant to Section 1.4, the parties recognize that such Member may be a third party beneficiary solely as to the Purchase Order and Requested Work relating to such Member.

The Parties have executed this Agreement as of the date signed by the Agency.

NORTHERN CALIFORNIA POWER AGENCY

HUDSON MECHANICAL, INC.

Date\_\_\_\_\_

Date\_\_\_\_\_

\_\_\_\_\_  
**RANDY S. HOWARD**  
General Manager

\_\_\_\_\_  
**JOSH HUDSON**  
President

Attest:

\_\_\_\_\_  
Assistant Secretary of the Commission

Approved as to Form:

\_\_\_\_\_  
Jane E. Luckhardt, General Counsel

## EXHIBIT A

### SCOPE OF WORK

Hudson Mechanical, Inc. ("Contractor") shall provide general maintenance services for the preservation, protection and keeping of facilities in a safe and continually usable condition, as requested by Northern California Power Agency ("Agency") at any facilities owned and/or operated by Agency (**with the exception of NCPA's Lodi Energy Center**), its Members, Southern California Public Power Authority ("SCPPA") or SCPPA members.

Services to include, but not be limited to the following:

- Welding
- Commercial piping
- Labor and materials for miscellaneous maintenance

No project under this Agreement shall include Work that would qualify as a Public Works Project under the California Public Contract Code.

## EXHIBIT B

### COMPENSATION SCHEDULE AND HOURLY FEES

Compensation for all work, including hourly fees and expenses, shall not exceed the amount set forth in Section 2 hereof. The hourly rates and or compensation break down and an estimated amount of expenses is as follows:

Hudson Mechanical Inc. Schedule of Rates as of 1/01/2024



#### **HUDSON MECHANICAL SCHEDULE OF RATES as of 1/01/2024**

Work Performed on a Time and Material Basis Will Be Priced As Follows:

#### **Schedule of Hourly Rates for Labor:**

Classification	Straight Time Hourly Rate	Overtime/Saturday	Sunday & Holiday
Plumber/Steamfitter	245	300	360
Laborer	150	185	220
Engineer	120	150	180
Equipment Operator	175	215	255

#### **Labor Rates include per-diem.**

Straight time, overtime & Sunday/holiday rates are defined by the prevailing wage agreement for the respective trades.

Labor Rates do not include any consumables, materials, or equipment.

Cost/Plus Fee for Any Additional Materials: 18%

Cost/Plus Fee for Subcontractors and rental equipment: 18%

**\*\*Percentage Fee to Be Applied to Actual Invoice Cost for Material, Equipment, or Subcontractors.**

**Copies of All Invoices Will Accompany Invoicing.**

## 2024 HMI Equipment Rates

HMI Owned Equipment	\$/hour
Work Truck and Tools	26.00
Single Axle Trailer	10.00
Two Axle Trailer	15.00
2" Macleroy Fusion Mach	5.00
4" Macleroy Fusion Mach	15.00
Water Trailer	12.50
Kubota KX 080 Excavator	70.00
Extended Reach 12K Forklift	70.00
Semi Truck with Trailer	75.00
3D Scanning Machine	20.00
Scaffolding (price per piece per day)	0.20
Backhoe-Case 580	70.00
50K Excavator	97.00

<b>Equipment Attachments</b>	
Auger	5.00
<b>Air Tools:</b>	
Towable Air Compressor	18.00
<b>Miscellaneous:</b>	
Concrete Saw - Hand Held	10.00
Concrete Vibrator	10.00
Vibra Plate	12.00
Jack Hammer 90lb - Electric	10.00
Electric Generator	5.00
Hot Tap Machine	50.00
Power Pipe Threader	10.00
Office Trailer (price per day)	40.00
<b>Welding Equipment:</b>	
Welding Machine	8.00
Plasma Arc (Portable)	20.00
Oxy-Acetylene Unit W/Oxy, Acet, & Rod	5.00
Pipe Beveler	5.00

<b>HMI Owned Equipment</b>	<b>\$/hour</b>
<b>Brush Control:</b>	
Chain Saw	10.00
Tree Saw	10.00
Weed Eater	5.00
Hedge Trimmer	5.00
Leaf Blower	5.00
<b>Traffic Control:</b>	
Traffic Control Equip. Package	20.00
Warning Signs	
Radios	
Barricades	
Safety Warning Lights	
Traffic Cones	
Flags	
Stop/Slow signs	
<b>Safety Equipment:</b>	
Safety Package	100.00
Supplied Air	
Supplied Air Respirator	
Filter-Type Respirator	
Gas Detector GX-82	
Fall Protection Harness	
Retractable Lanyard	
16" Blower Fan	
12" Blower Fan	
Lay-Flat Tubing	
Face Shield	
Work Gloves	

Pricing for services to be performed at NCPA Member or SCPPA locations will be quoted at the time services are requested.

Upon 30 days' advance notice and no more than once each calendar year, Hudson Mechanical, Inc. may increase rates for new Purchase Orders. If NCPA does not accept the increased rates, NCPA may terminate this Agreement.

NOTE: As a public agency, NCPA shall not reimburse Contractor for travel, food and related costs in excess of those permitted by the Internal Revenue Service.



## **Hudson Mechanical, Inc. Multi-Task General Services Agreement**

Facilities Committee  
June 5, 2024

## Background

- This is a current NCPA vendor.
- The current agreement with Hudson Mechanical is expiring.
- It is recommended to place this item on the consent calendar.
- For use by all facilities owned and/or operated by NCPA (with the exception of LEC), its Members, SCPPA, and SCPPA Members.
- Agreements with other vendors for similar work:
  - Northern Industrial Construction
  - Epidendio Construction, Inc.

## General Scope of Work

- Term of agreement = 5 years
- Cost = Not to Exceed \$1,000,000
- Scope of Work
  - Services to include, but not limited to the following:
    - Welding for miscellaneous maintenance
    - Labor and Material for Miscellaneous maintenance
- No project under this Agreement shall include Work that would qualify as a Public Works Project under the California Public Contract Code.

## **Environmental Analysis**

- As an enabling agreement, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a “project” for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.



## Proposal

- Staff is seeking a recommendation from the Facilities Committee for Commission approval of the Five Year Multi-Task General Services Agreement between NCPA and Hudson Mechanical, Inc., in an amount not to exceed \$1,000,000, for use by all facilities owned and/or operated by NCPA (with the exception of LEC), its Members, SCPPA, and SCPPA Members.



# Commission Staff Report – *DRAFT*

**COMMISSION MEETING DATE:** June 27, 2024

**SUBJECT:** Jill Jolene Meier dba Van Meier Services LLC – Second Amendment to Five Year General Services Agreement for Janitorial Cleaning Services; Applicable to the following: NCPA Geothermal facility.

**AGENDA CATEGORY:** Consent

<b>FROM:</b>	Michael DeBortoli	<b>METHOD OF SELECTION:</b>
	Assistant General Manager	N/A
Division:	Generation Services	<i>If other, please describe:</i>
Department:	Geothermal	

<b>IMPACTED MEMBERS:</b>		
All Members	<input type="checkbox"/>	City of Lodi <input checked="" type="checkbox"/>
Alameda Municipal Power	<input checked="" type="checkbox"/>	City of Lompoc <input checked="" type="checkbox"/>
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	City of Palo Alto <input type="checkbox"/>
City of Biggs	<input checked="" type="checkbox"/>	City of Redding <input type="checkbox"/>
City of Gridley	<input checked="" type="checkbox"/>	City of Roseville <input checked="" type="checkbox"/>
City of Healdsburg	<input checked="" type="checkbox"/>	City of Santa Clara <input checked="" type="checkbox"/>
		City of Shasta Lake <input type="checkbox"/>
		City of Ukiah <input checked="" type="checkbox"/>
		Plumas-Sierra REC <input checked="" type="checkbox"/>
		Port of Oakland <input type="checkbox"/>
		Truckee Donner PUD <input type="checkbox"/>
		Other <input checked="" type="checkbox"/>
	<i>If other, please specify</i>	Turlock

## **RECOMMENDATION:**

Approve Resolution 24-XX authorizing the General Manager or his designee to enter into a Second Amendment to the General Services Agreement with Jill Jolene Meier dba Van Meier Services LLC for janitorial cleaning services, with any non-substantial changes recommended and approved by the NCPA General Counsel, increasing the not to exceed amount from \$235,000 to \$335,000, and amending Exhibit B – Compensation Schedule and Hourly Fees, with no change to the contract term, for continued use at the NCPA Geothermal facility.

## **BACKGROUND:**

Janitorial cleaning services are required from time to time for the operation and maintenance at the Geothermal facilities. NCPA entered into a five-year General Services Agreement with Jill Jolene Meier dba Van Meier Services LLC effective March 4, 2020, to provide such services, for an amount not to exceed \$235,000, for use at the NCPA Geothermal facility.

This agreement has been used by extensively and is running low on funds. NCPA now desires to enter into a Second Amendment to the current General Services Agreement increasing the not to exceed amount from \$235,000 to \$335,000 to ensure there are sufficient funds available for the remainder of the contract term. Exhibit B – Compensation Schedule and Hourly Fees is also being updated to allow for the vendor to provide additional services beyond the quoted 5-year services which were bid out when the contract was originally executed. This agreement will continue to be available for use at NCPA's Geothermal facility.

## **FISCAL IMPACT:**

Upon execution, the total not to exceed amount of the agreement will increase from \$235,000 to \$335,000 over the remainder of the contract term. Purchase orders referencing the terms and conditions of the agreement will be issued following NCPA procurement policies and procedures.

## **SELECTION PROCESS:**

In accordance with NCPA's procurement policies and procedures, a Request for Proposal (RPF) was sent out November 2019, with two vendors submitting responses. NCPA evaluated the bids and determined Jill Jolene Meier dba Van Meier Services LLC represented the best value to the agency. NCPA entered into this General Services Agreement so that Jill Jolene Meier dba Van Meier Services LLC could provide these services at NCPA's Geothermal facility.

## **ENVIRONMENTAL ANALYSIS:**

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 of the California Environmental Quality Act. No environmental review is necessary.

## **COMMITTEE REVIEW:**

Pending Committee review and approval.

**AFTER FACILITIES APPROVAL:** On June 5, 2024 the Facilities Committee reviewed and endorsed the recommendation above for Commission approval.

Respectfully submitted,

RANDY S. HOWARD  
General Manager

Attachments (3):

- Resolution 24-XX
- General Services Agreement with Jill Jolene Meier dba Van Meier Services LLC
- Second Amendment to General Services Agreement with Jill Jolene Meier dba Van Meier Services LLC

## RESOLUTION 24-XX

### RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY APPROVING A SECOND AMENDMENT TO THE GENERAL SERVICES AGREEMENT WITH JILL JOLENE MEIER DBA VAN MEIER SERVICES LLC

(reference Staff Report #XXX:24)

WHEREAS, janitorial cleaning services are required from time to time for the operation and maintenance at the NCPA Geothermal facility; and

WHEREAS, Northern California Power Agency (NCPA) and Jill Jolene Meier dba Van Meier Services LLC entered into a General Services Agreement effective March 4, 2020, for Jill Jolene Meier dba Van Meier Services LLC to provide janitorial cleaning services, for use at the Geothermal facility; and

WHEREAS, this agreement has been used extensively by the NCPA Geothermal facility to provide janitorial cleaning services, and is running low on funds; and

WHEREAS, NCPA now desires to enter into a Second Amendment to the current General Services Agreement increasing the not to exceed amount from \$235,000 to \$335,000 to ensure there are sufficient funds available for the remainder of the contract term. Exhibit B – Compensation Schedule and Hourly Fees is also being updated to allow for the vendor to provide additional services beyond the quoted 5-year services which were bid out when the contract was originally executed; and

WHEREAS, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a “project” for purposes of Section 21065 of the California Environmental Quality Act. No environmental review is necessary; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency authorizes the General Manager or his designee to enter into Second Amendment to the General Services Agreement, with any non-substantial changes recommended and approved by the NCPA General Counsel, increasing the not to exceed amount from \$235,000 to \$335,000 and amending Exhibit B – Compensation Schedule and Hourly Fees, with no change to the contract term, for continued use at the Geothermal Facility.

PASSED, ADOPTED and APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2024 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

\_\_\_\_\_  
JERRY SERVENTI  
CHAIR

ATTEST:

\_\_\_\_\_  
CARRIE POLLO  
ASSISTANT SECRETARY



**FIRST AMENDMENT TO GENERAL SERVICES AGREEMENT BETWEEN  
THE NORTHERN CALIFORNIA POWER AGENCY AND VAN MEIER JANITORIAL SERVICES  
CHANGING NAME TO JILL JOLENE MEIER DBA VAN MEIER SERVICES LLC**

This First Amendment ("Amendment") to General Services Agreement is entered into by and between the Northern California Power Agency ("Agency") and Jill Jolene Meier dba Van Meier Services LLC ("Contractor") (collectively referred to as "the Parties") as of June 1, 2023.

WHEREAS, the Agency and Van Meier Janitorial, VanMeier Janitorial, Jill Meier dba Van Meier Janitorial, Jill Meier dba VMJ Janitorial (collectively "Van Meier Janitorial Service") entered into a General Services Agreement dated effective March 4, 2020, (the "Agreement") for Contractor to provide janitorial cleaning services at NCPA's Geothermal Facility Plant 1, Plant 2 and Steamfield; and

WHEREAS, effective April 1, 2023, Van Meier Janitorial Service has changed its name to Jill Jolene Meier dba Van Meier Services LLC, and the Parties now desire to amend the Agreement to reflect this change; and

WHEREAS, the Parties now desire to amend Section 13.8 entitled "Notices" of the Agreement to reflect change of the Contractor's name; and

WHEREAS, the Parties agree to assignment of the Agreement to Jill Jolene Meier dba Van Meier Services LLC; and

WHEREAS, the Parties have agreed to modify the Agreement as set forth above; and

WHEREAS, in accordance with Section 8.2 all changes to the Agreement must be in writing and signed by all the Parties; and

NOW, THEREFORE, the Parties agree as follows:

1. **As of the Amendment Effective Date**, the preamble to the Agreement is replaced in its entirety as follow:

"This General Services Agreement ("Agreement") is made by and between the Northern California Power Agency, a joint powers agency, with its main offices located at 651 Commerce Drive, Roseville, CA, 95678-6420 ("Agency") and Jill Jolene Meier dba Van Meier Services LLC, with its office located at 1199 Mockingbird Lane, Lakeport, CA 95453 ("Contractor") as of March 4, 2020 ("Effective Date") in Roseville, California."

2. Section 13.8 Notices is replaced in its entirety as follows:

**9.14 Notices.** Any written notice to Supplier shall be sent to:

Jill Jolene Meier  
Owner  
Van Meier Services LLC  
1199 Mockingbird Lane  
Lakeport, CA 95453

Any written notice to Agency shall be sent to:

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

With a copy to:

Jane E. Luckhardt  
General Counsel  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

3. Agency hereby approves the name change of the Agreement from Van Meier Janitorial, VanMeier Janitorial, Jill Meier dba Van Meier Janitorial, Jill Meier dba VMJ Janitorial (collectively Van Meier Janitorial Service) to Jill Jolene Meier dba Van Meier Services LLC, Contractor.
4. This Amendment in no way alters the terms and conditions of the Agreement except as specifically set forth herein.

Date: 6/1/23

Date: 5-19-2023

NORTHERN CALIFORNIA POWER AGENCY



**RANDY S. HOWARD, General Manager**

VAN MEIER SERVICES LLC

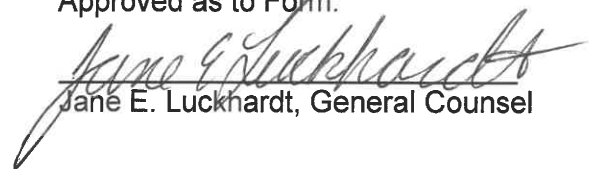
  
**JILL JOLENE MEIER, Owner**

Attest:



Assistant Secretary of the Commission

Approved as to Form:

  
Jane E. Luckhardt, General Counsel



**GENERAL SERVICES AGREEMENT BETWEEN  
THE NORTHERN CALIFORNIA POWER AGENCY AND  
VAN MEIER JANITORIAL SERVICE**

[Single Task]

This General Services Agreement ("Agreement") is made by and between the Northern California Power Agency, a joint powers agency with its main office located at 651 Commerce Drive, Roseville, CA 95678-6420 ("Agency") and Van Meier Janitorial Service, a sole proprietorship, also known as Van Meier Janitorial, VanMeier Janitorial, Jill Meier dba Van Meier Janitorial, Jill Meier dba VMJ Janitorial (collectively "Van Meier Janitorial Service"), with its office located at 4155 Oak Street, Kelseyville, CA 95451 ("Contractor") (together sometimes referred to as the "Parties") as of March 4, 2020 ("Effective Date") in Roseville, California.

**Section 1. SCOPE OF WORK.** Subject to the terms and conditions set forth in this Agreement, Contractor shall provide to Agency the services and/or goods described in the Scope of Work attached hereto as Exhibit A and incorporated herein ("Work"), at the time and place and in the manner specified therein.

- 1.1 Term of Agreement.** The term of this Agreement shall begin on the Effective Date and shall in five (5) years or when Contractor completes the Work, whichever is shorter.
- 1.2 Standard of Performance.** Contractor shall perform the Work in the manner and according to the standards observed by a competent practitioner of the profession in which Contractor is engaged and for which Contractor is providing the Work. Contractor represents that it is licensed, qualified and experienced to provide the Work set forth herein.
- 1.3 Assignment of Personnel.** Contractor shall assign only competent personnel to perform the Work. In the event that Agency, in its sole discretion, at any time during the term of this Agreement, requests the reassignment of any such personnel, Contractor shall, immediately upon receiving written notice from Agency of such request, reassign such personnel.
- 1.4 Request for Work to be Performed.** At such time that Agency determines to have Contractor perform Work under this Agreement, Agency shall issue a Purchase Order. The Purchase Order shall identify the specific Work to be performed ("Requested Work"), may include a not-to-exceed cap on monetary cap on Requested Work and all related expenditures authorized by that Purchase Order, and shall include a time by which the Requested Work shall be completed.

**Section 2. COMPENSATION.** Agency hereby agrees to pay Contractor an amount **NOT TO EXCEED TWO HUNDRED THIRTY FIVE THOUSAND** dollars (\$235,000) for the Work, which shall include all fees, costs, expenses and other reimbursables, as set forth in Contractor's fee schedule, attached hereto and incorporated herein as Exhibit B. This dollar



amount is not a guarantee that Agency will pay that full amount to the Contractor, but is merely a limit of potential Agency expenditures under this Agreement.

**2.1 Invoices.** Contractor shall submit invoices, not more often than once a month during the term of this Agreement, based on the cost for services performed and reimbursable costs incurred prior to the invoice date. Invoices shall contain the following information:

- The beginning and ending dates of the billing period;
- Work performed;
- The Purchase Order number authorizing the Work;
- At Agency's option, for each work item in each task, a copy of the applicable time entries or time sheets shall be submitted showing the name of the person doing the work, the hours spent by each person, a brief description of the work, and each reimbursable expense, with supporting documentation to Agency's reasonable satisfaction; and
- At Agency's option, the total number of hours of work performed under the Agreement by Contractor and each employee, agent, and subcontractor of Contractor performing work hereunder.

Invoices shall be sent to:

Northern California Power Agency  
651 Commerce Drive  
Roseville, California 95678  
Attn: Accounts Payable  
[AcctsPayable@ncpa.com](mailto:AcctsPayable@ncpa.com)

**2.2 Monthly Payment.** Agency shall make monthly payments, based on invoices received, for Work satisfactorily performed, and for authorized reimbursable costs incurred. Agency shall have thirty (30) days from the receipt of an invoice that complies with all of the requirements above to pay Contractor.

**2.3 Payment of Taxes.** Contractor is solely responsible for the payment of all federal, state and local taxes, including employment taxes, incurred under this Agreement.

**2.4 Authorization to Perform Work.** The Contractor is not authorized to perform any Work or incur any costs whatsoever under the terms of this Agreement until receipt of written authorization from the Contract Administrator.

**2.5 Timing for Submittal of Final Invoice.** Contractor shall have ninety (90) days after completion of its Work to submit its final invoice. In the event Contractor fails to submit an invoice to Agency for any amounts due within the ninety (90) day period, Contractor is deemed to have waived its right to collect its final payment from Agency.

**Section 3. FACILITIES AND EQUIPMENT.** Except as set forth herein, Contractor shall, at its sole cost and expense, provide all facilities and equipment that may be necessary to perform the Work.

**Section 4. INSURANCE REQUIREMENTS.** Before beginning any Work under this Agreement, Contractor, at its own cost and expense, shall procure the types and amounts of insurance listed below and shall maintain the types and amounts of insurance listed below for the period covered by this Agreement.

**4.1 Workers' Compensation.** If Contractor employs any person, Contractor shall maintain Statutory Workers' Compensation Insurance and Employer's Liability Insurance for any and all persons employed directly or indirectly by Contractor with limits of not less than one million dollars (\$1,000,000.00) per accident.

**4.2 Commercial General and Automobile Liability Insurance.**

**4.2.1 Commercial General Insurance.** Contractor shall maintain commercial general liability insurance for the term of this Agreement, including products liability, covering any loss or liability, including the cost of defense of any action, for bodily injury, death, personal injury and broad form property damage which may arise out of the operations of Contractor. The policy shall provide a minimum limit of \$2,000,000 per occurrence/\$2,000,000 aggregate. Commercial general coverage shall be at least as broad as ISO Commercial General Liability form CG 0001 (current edition) on "an occurrence" basis covering comprehensive General Liability, with a self-insured retention or deductible of no more than \$100,000. No endorsement shall be attached limiting the coverage.

**4.2.2 Automobile Liability.** Contractor shall maintain automobile liability insurance form CA 0001 (current edition) for the term of this Agreement covering any loss or liability, including the cost of defense of any action, arising from the operation, maintenance or use of any vehicle (symbol 1), whether or not owned by the Contractor, on or off Agency premises. The policy shall provide a minimum limit of \$1,500,000 per each accident, with a self-insured retention or deductible of no more than \$100,000. This insurance shall provide contractual liability covering all motor vehicles and mobile equipment to the extent coverage may be excluded from general liability insurance.

**4.2.3 General Liability/Umbrella Insurance.** The coverage amounts set forth above may be met by a combination of underlying and umbrella policies as long as in combination the limits equal or exceed those stated.

**4.3 Professional Liability Insurance.** Not Applicable

**4.5 All Policies Requirements.**

- 4.5.1 Verification of coverage.** Prior to beginning any work under this Agreement, Contractor shall provide Agency with (1) a Certificate of Insurance that demonstrates compliance with all applicable insurance provisions contained herein and (2) policy endorsements to the policies referenced in Section 4.2 and in Section 4.4, if applicable, adding the Agency as an additional insured and declaring such insurance primary in regard to work performed pursuant to this Agreement.
- 4.5.2 Notice of Reduction in or Cancellation of Coverage.** Contractor shall provide at least thirty (30) days prior written notice to Agency of any reduction in scope or amount, cancellation, or modification adverse to Agency of the policies referenced in Section 4.
- 4.5.3 Higher Limits.** If Contractor maintains higher limits than the minimums specified herein, the Agency shall be entitled to coverage for the higher limits maintained by the Contractor.
- 4.5.4 Waiver of Subrogation.** Contractor agrees to waive subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. In addition, the Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of Agency for all work performed by Contractor, its employees, agents and subcontractors.
- 4.6 Contractor's Obligation.** Contractor shall be solely responsible for ensuring that all equipment, vehicles and other items utilized in the performance of Work are operated, provided or otherwise utilized in a manner that ensures they are and remain covered by the policies referenced in Section 4 during this Agreement. Contractor shall also ensure that all workers involved in the provision of Work are properly classified as employees, agents or independent contractors and are and remain covered by any and all workers' compensation insurance required by applicable law during this Agreement.

## **Section 5. INDEMNIFICATION AND CONTRACTOR'S RESPONSIBILITIES.**

- 5.1 Effect of Insurance.** Agency's acceptance of insurance certificates and endorsements required under this Agreement does not relieve Contractor from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply to any damages or claims for damages whether or not such insurance policies shall have been determined to apply. By execution of this Agreement, Contractor acknowledges and agrees to the provisions of this section and that it is a material element of consideration.
- 5.2 Scope.** Contractor shall indemnify, defend with counsel reasonably acceptable to the Agency, and hold harmless the Agency, and its officials, commissioners, officers, employees, agents and volunteers from and against all losses, liabilities, claims, demands, suits, actions, damages, expenses, penalties, fines, costs (including without limitation costs and fees of litigation), judgments and causes of

action of every nature arising out of or in connection with any acts or omissions by Contractor, its officers, officials, agents, and employees, except as caused by the sole or gross negligence of Agency. Notwithstanding, should this Agreement be construed as a construction agreement under Civil Code section 2783, then the exception referenced above shall also be for the active negligence of Agency.

## **Section 6. STATUS OF CONTRACTOR.**

- 6.1 Independent Contractor.** Contractor is an independent contractor and not an employee of Agency. Agency shall have the right to control Contractor only insofar as the results of Contractor's Work and assignment of personnel pursuant to Section 1; otherwise, Agency shall not have the right to control the means by which Contractor accomplishes Work rendered pursuant to this Agreement. Notwithstanding any other Agency, state, or federal policy, rule, regulation, law, or ordinance to the contrary, Contractor and any of its employees, agents, and subcontractors providing services under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any and all claims to, any compensation, benefit, or any incident of employment by Agency, including but not limited to eligibility to enroll in the California Public Employees Retirement System (PERS) as an employee of Agency and entitlement to any contribution to be paid by Agency for employer contributions and/or employee contributions for PERS benefits.

Contractor shall indemnify, defend, and hold harmless Agency for the payment of any employee and/or employer contributions for PERS benefits on behalf of Contractor or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of Agency. Contractor and Agency acknowledge and agree that compensation paid by Agency to Contractor under this Agreement is based upon Contractor's estimated costs of providing the Work, including salaries and benefits of employees, agents and subcontractors of Contractor.

Contractor shall indemnify, defend, and hold harmless Agency from any lawsuit, administrative action, or other claim for penalties, losses, costs, damages, expense and liability of every kind, nature and description that arise out of, pertain to, or relate to such claims, whether directly or indirectly, due to Contractor's failure to secure workers' compensation insurance for its employees, agents, or subcontractors.

Contractor agrees that it is responsible for the provision of group healthcare benefits to its fulltime employees under 26 U.S.C. § 4980H of the Affordable Care Act. To the extent permitted by law, Contractor shall indemnify, defend and hold harmless Agency from any penalty issued to Agency under the Affordable Care Act resulting from the performance of the Services by any employee, agent, or subcontractor of Contractor.

- 6.2 Contractor Not Agent.** Except as Agency may specify in writing, Contractor shall have no authority, express or implied, to act on behalf of Agency in any

capacity whatsoever as an agent. Contractor shall have no authority, express or implied, pursuant to this Agreement to bind Agency to any obligation whatsoever.

- 6.3 Assignment and Subcontracting.** This Agreement contemplates personal performance by Contractor and is based upon a determination of Contractor's unique professional competence, experience, and specialized professional knowledge. A substantial inducement to Agency for entering into this Agreement was and is the personal reputation and competence of Contractor. Contractor may not assign this Agreement or any interest therein without the prior written approval of the Agency. Contractor shall not subcontract any portion of the performance contemplated and provided for herein, other than to the subcontractors identified in Exhibit A, without prior written approval of the Agency. Where written approval is granted by the Agency, Contractor shall supervise all work subcontracted by Contractor in performing the Work and shall be responsible for all work performed by a subcontractor as if Contractor itself had performed such work. The subcontracting of any work to subcontractors shall not relieve Contractor from any of its obligations under this Agreement with respect to the Work and Contractor is obligated to ensure that any and all subcontractors performing any Work shall be fully insured in all respects and to the same extent as set forth under Section 4, to Agency's satisfaction.

## **Section 7. LEGAL REQUIREMENTS.**

- 7.1 Governing Law.** The laws of the State of California shall govern this Agreement.
- 7.2 Compliance with Applicable Laws.** Contractor and its subcontractors and agents, if any, shall comply with all laws applicable to the performance of the work hereunder.
- 7.3 Licenses and Permits.** Contractor represents and warrants to Agency that Contractor and its employees, agents, and subcontractors (if any) have and will maintain at their sole expense during the term of this Agreement all licenses, permits, qualifications, and approvals of whatever nature that are legally required to practice their respective professions.
- 7.4 Monitoring by DIR.** The Work is subject to compliance monitoring and enforcement by the Department of Industrial Relations, Division of Labor Standards Enforcement (Labor Commissioner's Office).
- 7.5 Registration with Labor Commissioner's Office.** Continuing through the term of this Agreement, Contractor warrants that it is registered with the Labor Commissioner's Office and is qualified to perform Work consistent with Labor Code Sections 1420-1434.

## **Section 8. TERMINATION AND MODIFICATION.**

- 8.1 Termination.** Agency may cancel this Agreement at any time and without cause upon ten (10) days prior written notice to Contractor.



In the event of termination, Contractor shall be entitled to compensation for Work satisfactorily completed as of the effective date of termination; Agency, however, may condition payment of such compensation upon Contractor delivering to Agency any or all records or documents (as referenced in Section 9.1 hereof).

- 8.2 Amendments and Change Orders.** The Parties may amend this Agreement only by a writing signed by all the Parties. The Parties may agree to a change order, modifying the duration of the Agreement or the not-to-exceed compensation referenced in Section 2 hereof, by a writing signed by the Contractor and the Contract Administrator.
- 8.3 Survival.** All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between Agency and Contractor shall survive the termination of this Agreement.
- 8.4 Options upon Breach by Contractor.** If Contractor materially breaches any of the terms of this Agreement, including but not limited to those set forth in Section 4, Agency's remedies shall include, but not be limited to, the following:
- 8.4.1** Immediately terminate the Agreement;
  - 8.4.2** Retain the plans, specifications, drawings, reports, design documents, and any other work product prepared by Contractor pursuant to this Agreement;
  - 8.4.3** Retain a different Contractor to complete the Work not finished by Contractor; and/or
  - 8.4.4** Charge Contractor the difference between the costs to complete the Work that is unfinished at the time of breach and the amount that Agency would have paid Contractor pursuant hereto if Contractor had completed the Work.

## **Section 9. KEEPING AND STATUS OF RECORDS.**

- 9.1 Records Created as Part of Contractor's Performance.** All reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, records, files, or any other documents or materials, in electronic or any other form, that Contractor prepares or obtains pursuant to this Agreement and that relate to the matters covered hereunder shall be the property of the Agency. Contractor hereby agrees to deliver those documents to the Agency upon termination of the Agreement. Agency and Contractor agree that, unless approved by Agency in writing, Contractor shall not release to any non-parties to this Agreement any data, plans, specifications, reports and other documents.
- 9.2 Contractor's Books and Records.** Contractor shall maintain any and all records or other documents evidencing or relating to charges for Work or

expenditures and disbursements charged to the Agency under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to the Contractor under this Agreement.

**9.3 Inspection and Audit of Records.** Any records or documents that this Agreement requires Contractor to maintain shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon oral or written request of the Agency. Under California Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds ten thousand dollars (\$10,000.00), the Agreement shall be subject to the examination and audit of the State Auditor, at the request of Agency or as part of any audit of the Agency, for a period of three (3) years after final payment under this Agreement.

**9.4 Confidential Information and Disclosure.**

**9.4.1 Confidential Information.** The term "Confidential Information", as used herein, shall mean any and all confidential, proprietary, or trade secret information, whether written, recorded, electronic, oral or otherwise, where the Confidential Information is made available in a tangible medium of expression and marked in a prominent location as confidential, proprietary and/or trade secret information. Confidential Information shall not include information that: (a) was already known to the Receiving Party or is otherwise a matter of public knowledge, (b) was disclosed to Receiving Party by a third party without violating any confidentiality agreement, (c) was independently developed by Receiving Party without reverse engineering, as evidenced by written records thereof, or (d) was not marked as Confidential Information in accordance with this section.

**9.4.2 Non-Disclosure of Confidential Information.** During the term of this Agreement, either party may disclose (the "Disclosing Party") Confidential Information to the other party (the "Receiving Party"). The Receiving Party: (a) shall hold the Disclosing Party's Confidential Information in confidence; and (b) shall take all reasonable steps to prevent any unauthorized possession, use, copying, transfer or disclosure of such Confidential Information.

**9.4.3 Permitted Disclosure.** Notwithstanding the foregoing, the following disclosures of Confidential Information are allowed. Receiving Party shall endeavor to provide prior written notice to Disclosing Party of any permitted disclosure made pursuant to Section 9.4.3.2 or 9.4.3.3. Disclosing Party may seek a protective order, including without limitation, a temporary restraining order to prevent or contest such permitted disclosure; provided, however, that Disclosing Party shall seek such remedies at its sole expense. Neither party shall have any liability for such permitted disclosures:

**9.4.3.1** Disclosure to employees, agents, contractors, subcontractors or other representatives of Receiving Party that have a need to know in connection with this Agreement.

**9.4.3.2** Disclosure in response to a valid order of a court, government or regulatory agency or as may otherwise be required by law; and

**9.4.3.3** Disclosure by Agency in response to a request pursuant to the California Public Records Act.

**9.4.4 Handling of Confidential Information.** Upon conclusion or termination of the Agreement, Receiving Party shall return to Disclosing Party or destroy Confidential Information (including all copies thereof), if requested by Disclosing Party in writing. Notwithstanding the foregoing, the Receiving Party may retain copies of such Confidential Information, subject to the confidentiality provisions of this Agreement: (a) for archival purposes in its computer system; (b) in its legal department files; and (c) in files of Receiving Party's representatives where such copies are necessary to comply with applicable law. Party shall not disclose the Disclosing Party's Information to any person other than those of the Receiving Party's employees, agents, Contractors, contractors and subcontractors who have a need to know in connection with this Agreement.

## **Section 10. PROJECT SITE.**

**10.1 Operations at the Project Site.** Each Project site may include the power plant areas, all buildings, offices, and other locations where Work is to be performed, including any access roads. Contractor shall perform the Work in such a manner as to cause a minimum of interference with Agency's operations and the operations of other contractors at the Project site and to protect all persons and property thereon from damage or injury. Upon completion of the Work at a Project site, Contractor shall leave such Project site clean and free of all tools, equipment, waste materials and rubbish, stemming from or relating to Contractor's Work.

**10.2 Contractor's Equipment, Tools, Supplies and Materials.** Contractor shall be solely responsible for the transportation, loading and unloading, and storage of any equipment, tools, supplies or materials required for performing the Work, whether owned, leased or rented. Agency will not be responsible for any such equipment, supplies or materials which may be lost, stolen or damaged or for any additional rental charges for such. Equipment, tools, supplies and materials left or stored at a Project site, with or without permission, is at Contractor's sole risk. Agency may assume that anything left on the Project site an unreasonable length of time after the Work is completed has been abandoned. Any transportation furnished by Agency shall be solely as an accommodation and Agency shall have no liability therefor. Contractor shall assume the risk and is solely responsible for its owned, non-owned and hired automobiles, trucks or other motorized vehicles as well as any equipment, tools, supplies, materials or other



property which is utilized by Contractor on the Project site. All materials and supplies used by Contractor in the Work shall be new and in good condition.

- 10.3 Use of Agency Equipment.** Contractor shall assume the risk and is solely responsible for its use of any Agency owned equipment and property provided by Agency for the performance of Work.

**Section 11. WARRANTY.** Not Applicable.

**Section 12. HEALTH AND SAFETY PROGRAMS.** The Contractor shall establish, maintain, and enforce safe work practices, and implement an accident/incident prevention program intended to ensure safe and healthful operations under their direction. The program shall include all requisite components of such a program under Federal, State and local regulations and shall comply with all Agency site programs.

- 12.1** Contractor is responsible for acquiring job hazard assessments as necessary to safely perform the Work and provide a copy to Agency upon request.
- 12.2** Contractor is responsible for providing all employee health and safety training and personal protective equipment in accordance with potential hazards that may be encountered in performance of the Work and provide copies of the certified training records upon request by Agency. Contractor shall be responsible for proper maintenance and/or disposal of their personal protective equipment and material handling equipment.
- 12.3** Contractor is responsible for ensuring that its lower-tier subcontractors are aware of and will comply with the requirements set forth herein.
- 12.4** Agency, or its representatives, may periodically monitor the safety performance of the Contractor performing the Work. Contractors and its subcontractors shall be required to comply with the safety and health obligations as established in the Agreement. Non-compliance with safety, health, or fire requirements may result in cessation of work activities, until items in non-compliance are corrected. It is also expressly acknowledged, understood and agreed that no payment shall be due from Agency to Contractor under this Agreement at any time when, or for any Work performed when, Contractor is not in full compliance with this Section 12.
- 12.5** Contractor shall immediately report any injuries to the Agency site safety representative. Additionally, the Contractor shall investigate and submit to the Agency site safety representative copies of all written accident reports, and coordinate with Agency if further investigation is requested.
- 12.6** Contractor shall take all reasonable steps and precautions to protect the health of its employees and other site personnel with regard to the Work. Contractor shall conduct occupational health monitoring and/or sampling to determine levels of exposure of its employees to hazardous or toxic substances or environmental conditions. Copies of any sampling results will be forwarded to the Agency site safety representative upon request.

- 12.7 Contractor shall develop a plan to properly handle and dispose of any hazardous wastes, if any, Contractor generates in performing the Work.
- 12.8 Contractor shall advise its employees and subcontractors that any employee who jeopardizes his/her safety and health, or the safety and health of others, may be subject to actions including removal from Work.
- 12.9 Contractor shall, at the sole option of the Agency, develop and provide to the Agency a Hazardous Material Spill Response Plan that includes provisions for spill containment and clean-up, emergency contact information including regulatory agencies and spill sampling and analysis procedures. Hazardous Materials to include diesel fuel used for trucks owned or leased by the Contractor.

### **Section 13. MISCELLANEOUS PROVISIONS.**

- 13.1 **Attorneys' Fees.** If a party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provision of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees in addition to any other relief to which that party may be entitled. The court may set such fees in the same action or in a separate action brought for that purpose.
- 13.2 **Venue.** In the event that either party brings any action against the other under this Agreement, the Parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of Placer or in the United States District Court for the Eastern District of California.
- 13.3 **Severability.** If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.
- 13.4 **No Implied Waiver of Breach.** The waiver of any breach of a specific provision of this Agreement does not constitute a waiver of any other breach of that term or any other term of this Agreement.
- 13.5 **Successors and Assigns.** The provisions of this Agreement shall inure to the benefit of and shall apply to and bind the successors and assigns of the Parties.
- 13.6 **Conflict of Interest.** Contractor may serve other clients, but none whose activities within the corporate limits of Agency or whose business, regardless of location, would place Contractor in a "conflict of interest," as that term is defined in the Political Reform Act, codified at California Government Code Section 81000 *et seq.*

Contractor shall not employ any Agency official in the work performed pursuant to this Agreement. No officer or employee of Agency shall have any financial

interest in this Agreement that would violate California Government Code Sections 1090 *et seq.*

**13.7 Contract Administrator.** This Agreement shall be administered by Joel Ledesma, Assistant General Counsel, or his/her designee, who shall act as the Agency's representative. All correspondence shall be directed to or through the representative.

**13.8 Notices.** Any written notice to Contractor shall be sent to:

Jill Meier  
Owner  
4155 Oak Street  
Kelseyville, CA 95451

Any written notice to Agency shall be sent to:

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

With a copy to:

Jane E. Luckhardt  
General Counsel  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

**13.9 Professional Seal.** Not Applicable

**13.10 Integration; Incorporation.** This Agreement, including all the exhibits attached hereto, represents the entire and integrated agreement between Agency and Contractor and supersedes all prior negotiations, representations, or agreements, either written or oral. All exhibits attached hereto are incorporated by reference herein.

**13.11 Alternative Dispute Resolution.** If any dispute arises between the Parties that cannot be settled after engaging in good faith negotiations, Agency and Contractor agree to resolve the dispute in accordance with the following:

**13.11.1** Each party shall designate a senior management or executive level representative to negotiate any dispute;

**13.11.2** The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.

- 13.11.3** If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiation between legal counsel. If the above process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.
- 13.11.4** The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.
- 13.11.5** The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.
- 13.11.6** The alternative dispute resolution process is a material condition to this Agreement and must be exhausted as an administrative remedy prior to either Party initiating legal action. This alternative dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 *et seq.*
- 13.12 Controlling Provisions.** In the case of any conflict between the terms of this Agreement and the Exhibits hereto, and Contractor's Proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and the Contractor's Proposal, the Exhibits shall control.
- 13.13 Counterparts.** This Agreement may be executed in multiple counterparts, each of which shall be an original and all of which together shall constitute one agreement.
- 13.14 Construction of Agreement.** Each party hereto has had an equivalent opportunity to participate in the drafting of the Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting party shall not apply hereto.
- 13.15 No Third Party Beneficiaries.** This Agreement is made solely for the benefit of the parties hereto, with no intent to benefit any non-signator third parties.

**SIGNATURES ON NEXT PAGE**

The Parties have executed this Agreement as of the date signed by the Agency.

NORTHERN CALIFORNIA POWER AGENCY

Date 3/4/20

  
RANDY S. Howard, General Manager

VAN MEIER JANITORIAL SERVICE

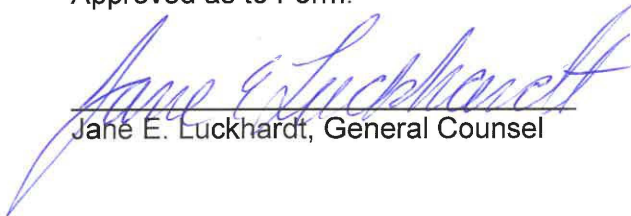
Date 1-23-2020

  
JILL MEIER, Owner

Attest:

  
Assistant Secretary of the Commission

Approved as to Form:

  
Jane E. Luckhardt, General Counsel

## **EXHIBIT A**

### **SCOPE OF WORK**

As requested by the Agency, Contractor shall provide Janitorial Cleaning Services at NCPA's Geothermal Facility Plant 1, Plant 2 and Steamfield.

**Work Schedule:** Monday, Wednesday, Friday (additional unscheduled work)

#### **Work Scope and Schedules:**

##### **ADMINISTRATION BUILDING**

**Daily:** (Monday, Wednesday & Friday)

- Empty all trash & recycle containers.
- Clean both restrooms (clean toilets, sinks and Windex mirrors).
- Clean kitchen (including microwave, range top and sink).
- Check and stock water bottles.
- Stock all paper products (TP, paper towels, toilet seat covers and cups).

**Weekly:**

- Sweep & mop kitchen and restroom floors.
- Vacuum all carpets, including unlocked offices and conference room.

**Annually:**

- Clean windows inside and out.

**Bi-Annual:**

- Professionally steam clean carpets using truck mount cleaner.
- Rotary machine clean & wax kitchen and restrooms.

##### **CHEM LAB**

**Weekly** (Monday, Wednesday & Friday)

- Empty all trash & recycle containers.

**Monthly:**

- Sweep and mop floors.

**Annually:**

- Rotary machine clean & wax floors

##### **GUARD SHACK**

**Daily:** (Monday, Wednesday & Friday)

- Empty trash containers
- Stock all paper products (TP and paper towels)

##### **PLANT 1 CONTROL ROOM**

**Daily:** (Monday, Wednesday & Friday)

- Empty all trash & recycle containers.
- Clean restroom (clean toilet, sink and Windex mirror).
- Clean kitchen (including microwave, range top and sink).
- Check and stock water bottles.
- Stock all paper products (TP, paper towels, toilet seat covers and cups).

**Weekly:**

- Sweep & mop kitchen and restrooms, locker area & x1 office.

**Bi-Annually:**

- Clean windows, inside only.

**Annually:**

- Professionally steam clean carpets using truck mount cleaner.

**MEZZANINE**

**Daily:** (Monday, Wednesday & Friday)

- Empty all trash & recycle containers.
- Clean restroom (clean toilet, sink and Windex mirror).
- Clean Kitchen (including x1 microwave).
- Check and stock water bottles.
- Stock all paper products (TP, paper towels, toilet seat covers, cups and shower towels).

**Weekly:**

- Sweep & mop kitchen, restroom

**Bi-Monthly:**

- Clean shower.

**Bi-Annually:**

- Rotary machine clean & wax restroom.

**Annually:**

- Rotary machine clean & wax kitchen.

**PLANT TWO CONTROL ROOM**

**Daily:** (Monday, Wednesday & Friday)

- Empty all trash & recycle containers.
- Clean restroom (clean toilet, sink and Windex mirror).
- Clean kitchen (including microwave, range top and sink).
- Check and stock water bottles.
- Stock all paper products (TP, paper towels, toilet seat covers and cups).

**Weekly:**

- Sweep & mop kitchen, restrooms, operations room, electricians room, break room, hallways & 1xoffice

**Annually:**

- Clean windows, inside only.

**Bi-Annually:**

- Rotary machine clean & wax kitchen, restrooms, operations room, electrician's room, break room, hallways & x1office

### **FIRST FLOOR RESTROOMS**

**Daily:** (Monday, Wednesday & Friday)

- Empty all trash & recycle containers.
- Clean x2 men's rooms & x1 women's room (clean toilets, sinks and Windex mirrors).
- Stock all paper products (TP, paper towels, toilet seat covers & shower towels).

**Weekly:**

- Sweep & mop x3 restrooms & hallway.

**Bi-Monthly:**

- Clean shower in men's room.

**Bi-Annually:**

- Rotary machine clean restroom floors.

### **STEAMFIELD ADMINISTRATION BUILDING**

**Quarterly:**

- Empty all trash and recycle containers.
- Clean both men's and women's restrooms (clean toilets, sinks and Windex mirrors).
- Clean kitchen (including microwave, range top and sink).
- Check and stock water bottles.
- Stock all paper products (TP, paper towels, toilet seat covers and cups).
- Sweep and mop kitchen, restrooms, hallways & x1office.
- Vacuum carpets in all carpeted offices, conference room & computer room.
- Clean men's shower.

**Annually:**

- Clean windows inside and out.
- Professionally steam clean carpets using truck mount cleaner.
- Rotary machine clean & wax kitchen, restrooms, hallways and x1 office

### **AUTO SHOP**

**Annually:**

- Rotary machine clean & wax floor.

### **MACHINE SHOP / WAREHOUSE**

**Daily:**



- Empty all trash and recycle containers (Exception of 55 gallon trash containers).
- Clean both men's bathrooms (clean toilets, sinks and Windex mirrors).
- Clean break area (including x2microwaves)
- Check and stock water bottles.
- Stock all paper products (TP, paper towels, toilet seat covers and cups).
- Breakdown & recycle cardboard

**Weekly:**

- Sweep & mop break area restrooms, electrician's room (tile only), warehouse office & breakroom office.
- Clean and stock electricians sink area.
- Clean and stock machine shop sink area.

**Monthly:**

- Clean both men's showers.

**Quarterly:**

- Rotary machine clean and wax machine shop break room.

**Bi-Annual:**

- Rotary machine clean tile floors in both men's restrooms and electrician's floor.

**Annually:**

- Rotary machine clean & wax warehouse office.

## **EXHIBIT B**

### **COMPENSATION SCHEDULE AND HOURLY FEES**

Compensation for all tasks, including hourly fees and expenses, shall not exceed the amount set forth in Section 2 of the Agreement. The hourly rates and or compensation break down and an estimated amount of expenses is as follows:

The following yearly rates and/or compensation for services are valid at the NCPA Geothermal facilities:

Geothermal Janitorial Services Yearly Breakdown:

Year 1: \$43,200

Year 2: \$44,400

Year 3: \$45,600

Year 4: \$46,800

Year 5: \$48,000

NOTE: As a public agency, NCPA shall not reimburse Contractor for travel, food and related costs in excess of those permitted by the Internal Revenue Service



**SECOND AMENDMENT TO GENERAL SERVICES AGREEMENT BETWEEN  
THE NORTHERN CALIFORNIA POWER AGENCY AND JILL JOLENE MEIER DBA  
VAN MEIER SERVICES LLC**

This Second Amendment ("Amendment") to General Services Agreement is entered into by and between the Northern California Power Agency ("Agency") and Jill Jolene Meier dba Van Meier Services LLC ("Contractor") (collectively referred to as "the Parties") as of \_\_\_\_\_, 2024.

WHEREAS, the Parties entered into a General Services Agreement dated effective March 4, 2020, (the "Agreement") for Van Meier Janitorial Service to provide janitorial cleaning services at NCPA's Geothermal Plant 1, Plant 2, and Steamfield facilities; and

WHEREAS, the Parties entered into a First Amendment to the General Services Agreement on June 1, 2023, to reflect change of the Contractor's name to Jill Jolene Meier dba Van Meier Services LLC; and

WHEREAS, the Agency now desires to amend the Agreement to increase the total compensation authorized by the Agreement from a NOT TO EXCEED amount of \$235,000 to a NOT TO EXCEED amount of \$335,000; and

WHEREAS, the Parties now desire to amend the Compensation Schedule and Hourly Fees set forth in Exhibit B to the Agreement; and

WHEREAS, the Parties have agreed to modify the Agreement as set forth above; and

WHEREAS, in accordance with Section 8.2 all changes to the Agreement must be in writing and signed by all the Parties; and

NOW, THEREFORE, the Parties agree as follows:

1. **Section 2—Compensation** of the Agreement is amended and restated to read as follows:

Agency hereby agrees to pay Contractor an amount **NOT TO EXCEED THREE HUNDRED THIRTY-FIVE HOUSSAND** dollars (\$335,000) for the Work, which shall include all fees, costs, expenses and other reimbursables, as set forth in Contractor's fee schedule, attached hereto and incorporated herein as Exhibit B. This dollar amount is not a guarantee that Agency will pay that full amount to the Contractor, but is merely a limit of potential Agency expenditures under this Agreement.

The remainder of Section 2 of the Agreement is unchanged.

2. **Exhibit B - COMPENSATION SCHEDULE** is amended and restated to read in full as set forth in the attached Exhibit B.

3. This Amendment in no way alters the terms and conditions of the Agreement except as specifically set forth herein.

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

NORTHERN CALIFORNIA POWER AGENCY

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

VAN MEIER SERVICES LLC

\_\_\_\_\_  
**RANDY S. HOWARD, General Manager**

\_\_\_\_\_  
**JILL JOLENE MEIER, Owner**

Attest:

\_\_\_\_\_  
Assistant Secretary of the Commission

Approved as to Form:

\_\_\_\_\_  
Jane E. Luckhardt, General Counsel

## **EXHIBIT B**

### **COMPENSATION SCHEDULE AND HOURLY FEES**

Compensation for all tasks, including hourly fees and expenses, shall not exceed the amount set forth in Section 2 of the Agreement. The hourly rates and or compensation break down and an estimated amount of expenses is as follows:

The following yearly rates and/or compensation for services are valid at the NCPA Geothermal facilities:

#### **Geothermal Janitorial Services Yearly Breakdown:**

Year 1: \$43,200

Year 2: \$44,400

Year 3: \$45,600

Year 4: \$46,800

Year 5: \$48,000

Total: \$228,000

Pricing for services to be performed at the NCPA Geothermal plant facility beyond the stated annual 5-year services listed above, will be quoted at the time services are requested by the Agency.

NOTE: As a public agency, NCPA shall not reimburse Contractor for travel, food and related costs in excess of those permitted by the Internal Revenue Service



## **Jill Jolene Meier dba Van Meier Services LLC Second Amendment to General Services Agreement**

Facilities Committee  
June 5, 2024

## Background

- NCPA entered into a Five Year General Services Agreement with Van Meier Janitorial Service, effective March 4, 2020, to provide janitorial cleaning services for the NCPA Geothermal facility.
- This agreement was set up with a not-to-exceed amount of \$235,000
- The Geothermal Facility uses them for janitorial cleaning services, and the agreement is now running low on funds.
- The First Amendment to the General Services Agreement to reflect change of the Contractor's name to Jill Jolene Meier dba Van Meier Services LLC.

## Background

- The Second Amendment will increase the NTE from \$235,000 to \$335,000 for the remainder of the agreement term.
- Exhibit B – Compensation Schedule and Hourly Fees is also being updated to allow for the vendor to provide additional services beyond the quoted 5-year services which were bid out when the contract was originally executed.



## **General Scope of Work**

- Cost = Not to Exceed \$335,000
- Scope of Work
  - Janitorial Cleaning Services
  - Any pricing for services to be performed beyond the quoted 5-Year services, will be quoted as the services are requested

## **Environmental Analysis**

- As an enabling agreement, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a “project” for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

## Proposal

- Staff is seeking a recommendation from the Facilities Committee for Commission approval of the Second Amendment to the Five-Year General Services Agreement between NCPA and Jill Jolene Meier dba Van Meier Services LLC for janitorial cleaning services, with any non-substantial changes recommended and approved by the NCPA General Counsel, increasing the not to exceed amount from \$235,000 to \$335,000 and amending Exhibit B – Compensation Schedule and Hourly Fees, with no change to the contract term, for continued use at the Geothermal Facility.



# Commission Staff Report – *DRAFT*

**COMMISSION MEETING DATE:** June 27, 2024

**SUBJECT:** 2024 Steam Field Operation and Generation Forecast Report; Applicable to the following: NCPA Geothermal Facility

**AGENDA CATEGORY:** Consent

<b>FROM:</b>	Michael DeBortoli	<b>METHOD OF SELECTION:</b>
	Assistant General Manager	N/A
<b>Division:</b>	Generation Services	<i>If other, please describe:</i>
<b>Department:</b>	Geothermal	

<b>IMPACTED MEMBERS:</b>		
All Members	<input type="checkbox"/>	City of Lodi <input checked="" type="checkbox"/>
Alameda Municipal Power	<input checked="" type="checkbox"/>	City of Shasta Lake <input type="checkbox"/>
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	City of Ukiah <input checked="" type="checkbox"/>
City of Biggs	<input checked="" type="checkbox"/>	City of Lompoc <input checked="" type="checkbox"/>
City of Gridley	<input checked="" type="checkbox"/>	City of Palo Alto <input type="checkbox"/>
City of Healdsburg	<input checked="" type="checkbox"/>	City of Redding <input type="checkbox"/>
		City of Santa Clara <input checked="" type="checkbox"/>
		Plumas-Sierra REC <input checked="" type="checkbox"/>
		Port of Oakland <input type="checkbox"/>
		Truckee Donner PUD <input type="checkbox"/>
		Other <input checked="" type="checkbox"/>
		Turlock
		<i>If other, please specify</i>

## **RECOMMENDATION:**

Approve Resolution 24-XX authorizing the 2024 Steam Field Operations and Forecast Report dated June 2024 as the Geothermal Operating Protocol effective July 1, 2024. This Operating Protocol is to remain in effect until replaced by the Commission.

## **BACKGROUND:**

The Geothermal Project Operating Agreement requires the NCPA Commission to establish an Operating Plan and an annual operating level for the Geothermal Units. The purpose of the plan is to maximize the efficient use of the geothermal resource, protect the power plants and equipment, and meet all regulatory and permitting requirements.

The current 2023 Geothermal Operating Protocol was approved by the NCPA Commission on May 25, 2023. The Protocol used a two-zone strategy with wells on the west side of the NCPA lease producing to Plant #1, Units #1 and #2 while the wells on the east side of the NCPA lease produced to Plant #2, Unit #4. The 2023 Protocol also allowed for reduction of load under the following economic conditions:

- Curtailing generation is an option that may occur only when the Day Ahead Market Prices are a minimum of negative \$25 per MWhr and Net of the Renewable Energy Credit (REC) value; and
- The level of curtailment will be limited to 45 MW with discretion to adjust this level based on the steam field response; and
- Duration of the curtailment is to be a minimum of 4 hours; and
- Curtailments are limited to once per calendar day.

In 2024, the recommended Operating Protocol is to continue using the two-zone strategy, operate Plants #1 and #2 at baseload conditions with the goal of maximizing generation. Reductions in load may occur under the same condition as listed for the 2023 Operating Protocol.

This Protocol establishes a 2024 annual peak generation target of 102 gross MW.

## **FISCAL IMPACT:**

The approved FY 2025 Geothermal budget covers the proposed action.

## **ENVIRONMENTAL ANALYSIS:**

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore, not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

**COMMITTEE REVIEW:**

Pending Committee review and approval.

**AFTER FACILITIES APPROVAL:** On June 5, 2024, the Facilities Committee reviewed and endorsed the recommendation above for Commission approval.

Respectfully submitted,

RANDY S. HOWARD  
General Manager

Attachments (2):

- Resolution 24-XX
- 2024 Steam Field Operations and Forecast Report

## RESOLUTION 24-XX

### RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY APPROVING THE 2024 STEAM FIELD OPERATIONS AND GENERATION FORECAST REPORT AS THE 2024 GEOTHERMAL OPERATING PROTOCOL

(reference Staff Report #XXX:24)

WHEREAS, the Northern California Power Agency (NCPA) operates and maintains on behalf of the project owners a Geothermal Facility near Middletown, CA, consisting of two power plants with containment areas, and 79 steam production and injection wells connected by roads; and

WHEREAS, the 2024 Steam Field Operations Forecast Report is an in-depth study of The Geysers reservoir relative to the operation of NCPA's GEO facility and provides a generation forecast of the facility; and

WHEREAS, the report recommends an Operating Protocol using a two-zone strategy to operate NCPA Plants #1 and #2 under baseload conditions with the goal of maximizing generation while providing an option to curtail generation under the following economic conditions:

- Curtailing generation is an option that may occur only when the Day Ahead Market Prices are a minimum of negative \$25 per MWhr and Net of the Renewable Energy Credit (REC) value; and
- The level of curtailment will be limited to 45 MW with discretion to adjust this level based on the steam field response; and
- Duration of the curtailment is to be a minimum of 4 hours; and
- Curtailments are limited to once per calendar day; and

WHEREAS, the Operating Protocol establishes a 2024 annual peak generation target of 102 gross MW; and

WHEREAS, FY 2024 approved budget covers the proposed action; and

WHEREAS, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore, not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency adopts the Steam Field Operations and Forecast Report dated June 2024 as the Geothermal Operating Protocol effective July 1, 2024, to remain in effect until replaced by the Commission.

PASSED, ADOPTED and APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2024, by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

\_\_\_\_\_  
JERRY SERVENTI  
CHAIR

\_\_\_\_\_  
CARRIE POLLO  
ASSISTANT SECRETARY



# **Steam Field Operations** & Forecast Report – June 2024





**NCPA**  
**Generation Services – Geothermal Facilities**

***Steam Field Operations and Forecast Report***

**June 2024**

**Table of Contents**

<b><i>Introduction</i></b>	<b><i>1</i></b>
<b><i>2023 Generation Review</i></b>	<b><i>1</i></b>
<b><i>2023 Overview of Steam Production and Water Injection</i></b>	<b><i>2</i></b>
<b><i>2023 Reservoir Characteristics</i></b>	<b><i>3</i></b>
<b><i>Numerical Modeling</i></b>	<b><i>4</i></b>
<b><i>2024 Generation Forecast</i></b>	<b><i>5</i></b>
<b><i>2024 Geothermal Operating Protocol</i></b>	<b><i>6</i></b>
<b><i>SUMMARY</i></b>	<b><i>7</i></b>
Year 2023 Review	7
Numerical Modeling	7
Year 2024 Generation Forecast	7

**List of Figures**

<b><u>Figure 1 - Comparison of Forecast &amp; Actual Net Generation</u></b>	<b><u>9</u></b>
<b><u>Figure 2 - Historical Power Generation Levels</u></b>	<b><u>10</u></b>
<b><u>Figure 3 – Availability of Geothermal Units</u></b>	<b><u>11</u></b>
<b><u>Figure 4 – Historical NCPA Steam Production &amp; Water Injection</u></b>	<b><u>12</u></b>
<b><u>Figure 5 – Cumulative Steam Production &amp; Water Injection</u></b>	<b><u>13</u></b>
<b><u>Figure 6 – Relative Distribution of Injected Waters</u></b>	<b><u>14</u></b>
<b><u>Figure 7 – History of SEGEP Deliveries Total and NCPA</u></b>	<b><u>15</u></b>
<b><u>Figure 8 – Clear lake Water Level – USGS Rumsey Gauge</u></b>	<b><u>16</u></b>

---

<b>Figure 9 – Historical and Projected Steam Flowrates</b>	<b>17</b>
<b>Figure 10 – NCPA Steam Field Reservoir Pressure</b>	<b>18</b>
<b>Figure 11 – 2023 Seismic Events</b>	<b>19</b>
<b>Figure 12 – Historical Seismic Activity on NCPA Lease</b>	<b>20</b>
<b>Figure 13 – Historical Non-Condensable Gas Concentrations</b>	<b>21</b>
<b>Figure 14 – Non-Condensable Gas Concentrations in NCPA Steam</b>	<b>22</b>
<b>Figure 15 – Historical &amp; Projected Average Net Generation Level</b>	<b>23</b>
<b>Figure 16 – Historical and Projected Net Generation</b>	<b>24</b>

### **List of Tables**

<b>Table 1 – Geothermal Facilities Summary</b>	<b>25</b>
<b>Table 2 – Annual Report of NCPA Injection</b>	<b>26</b>
<b>Table 3 – 2023 Reservoir Pressure by Well</b>	<b>27</b>
<b>Table 4 – 2023 NCG Concentrations by Well</b>	<b>28</b>
<b>Table 5 – 2024 Generation – 25 Year forecast</b>	<b>29</b>
<b>Table 6 – 2024 Generation Capacity – 25 Year Forecast</b>	<b>30</b>
<b>Table 7 – 2024 Scheduled Outages – 25 Year Forecast</b>	<b>31</b>
<b>Table 8 – 2024 Generation – 5 Year Forecast</b>	<b>32</b>
<b>Table 9 – 2024 Generation Capacity – 5 Year Forecast</b>	<b>33</b>
<b>Table 10 – 2024 Forecast of Geothermal Production and Injection</b>	<b>34</b>

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**NCPA**  
**Generation Services Business Unit**  
***2024 Steam Field Operations and Generation Forecast Report***

June 2024

## **INTRODUCTION**

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The 2024 Steam Field Operations and Generation Forecast Report is a review of the 2023 steam field operations at NCPA's Geothermal Facility, and a forecast of the facility's projected electrical generation. The report includes an annual generation review, an overview of steam production and water injection, and discusses reservoir characteristics including flowrates, reservoir pressures, changes in non-condensable gas, and seismic activity. It also discusses numerical modeling results, provides a twenty-five-year generation forecast, and concludes with a review of the Operating Protocol for the facility.

## **2023 GENERATION REVIEW**

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In 2023, NCPA's Geothermal Facility generated 516.6 GWhrs of electrical power, falling short of the facility's goal of 664.8 GWhrs for the calendar year. This 22.3% generation shortfall was the result of equipment failures and subsequent major repairs and overhauls, resulting in significant periods of down time at Plants #1 and #2. Figure 1 shows a comparison between the forecast and actual net generation of the Geothermal Facility from 2010 through 2023.

Prior to the start of 2023, Plant #2, Unit #4 was in a planned overhaul that began on November 1, 2022. During the overhaul, it was discovered that the steam strainer baskets had broken apart, sending debris downstream into the turbine and causing extensive damage. The main steam stop and control valves, turbine diaphragms and turbine rotor all required extensive repairs. As result, Unit #4 did not return to service until February 1, 2023.

Unit #4 went off line again on May 8, 2023 following an inspection of its cooling tower. The inspection revealed a number of deficiencies in particular the cooling tower fan blades. The unit was shut down to implement temporary repairs that would allow it to safely run. Unit #4 returned to service on June 26, 2023 after forty-eight days to repair the fan blades.

Unit #4 went off line a third time on September 12, 2023 due to high vibration on the turbine rotor. The cause was a failure of the main lube oil pump which caused metal shavings from the pump to flow downstream damaging the turbine bearings, shaft, and seals. The turbine shaft, bearings and seals were repaired and a new lube oil filter system was installed to prevent similar failures in the future, but Unit #4 did not return to service until December 19, 2023. Overall, Unit #4 had an availability of 52% for the year.

Due to the steam strainer damage found in Unit #4 in November 2023, Units #1 and #2 were shut down for routine maintenance on March 1, 2023. Inspections of the steam strainers on both units found that the strainers were intact on Unit #2, but had failed on Unit #1. As with Unit #4, fragments of the strainer had gone downstream damaging the main steam stop and control valves, turbine diaphragms and rotor. Further inspection of the turbine rotor revealed significant erosion on the last two stages which would require re-blading the rotor. Unit #1 would remain off line for the rest of 2023 and not return to service until March 30, 2024. Unit #1's availability for the year was 16%.

Unit #2 had the highest availability in 2023 at 83%, but was also down for significant periods of time due to equipment failures. The unit was down from March 1, 2023 to March 28, 2023 for equipment repairs to the circulating pumps, Stretford gas abatement system, and cooling tower. Unit #2 was again down for approximately two weeks in June 2023 for further repairs to the circulating pumps. It was taken off line a third time on December 10, 2023 and kept off line following an inspection that revealed severe wear on the last two stages of the turbine rotor that would require re-blading the rotor. The unit is still off line as of the time of this report.

Due to the significant times Units #1, #2, and #4 were off line, the average generation capacity level for the Geothermal Facility in 2023 was 70.5 MW gross or 59 MW net. Figure 2 shows the historical net generation levels while Figure 3 shows the availability of each unit and the overall facility. Table 1 in the appendix shows key performance metrics for the Geothermal Facility.

## **2023 OVERVIEW OF STEAM PRODUCTION AND WATER INJECTION**

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NCPA continued to operate as a base loaded facility in 2023 generating at a maximum level based on the availability of its units. Steam production for the year was 11.9 Glbs, while water injection was 9.0 Glbs, for an annual mass replacement ratio of 76% (Figure 4).

From 1983 when Plant #1 first began commercial operation, there has been a 737.5 billion pounds of steam extracted from the reservoir. Over the same period of time, 488.1 billion pounds of water has been injected for an overall mass replacement of 66.2%. The net withdrawal of steam reserves is 249.4 billion pounds. Figure 5 shows the cumulative steam production and water injection since commercial operation began.

On the NCPA lease, the rate of water injection increased from 1,225 gpm in year 2022 to 2,064 gpm in year 2023. This water is a combination of steam condensate recovered from the cooling towers and wastewater from the Southeast Geysers Effluent Pipeline (SEGEP). Figure 6 shows graphically where the water was injected and the relative amounts while Table 2 identifies the individual wells that received this water. Approximately 35.5% of the water injected in 2023 was from steam condensate while the remaining 64.5% was secondary treated wastewater from the SEGEP system.

It should be noted that the increased rate of water injection was mainly due to the fact that drought conditions eased enough to allow the SEGEP pipeline to extract additional

freshwater from Clearlake. During normal non-drought years, NCPA receives an average 2,700 gpm out of 5,600 gpm water that is delivered. Calpine, a partner in the SEGEP pipeline receives approximately 2,900 gpm of water. This supplemental water is injected into the reservoir to mitigate reservoir pressure declines and increase steam reserves.

Each year the freshwater component of SEGEP is the main variable in determining how much water is available for injection. The freshwater is subject to an annual restriction if the water level in Clearlake gets too low. The Rumsey gauge in Lakeport is the official device measuring the lake level and if it drops below 3.5 ft on May 1st of each year, the SEGEP pipeline loses access to any freshwater until May 1st of the following year. The lake level was 7.6 ft on May 1, 2023 and as a result, freshwater was available through most of year 2023 and into the first half of 2024. Freshwater will again be available for the rest of year 2024 and part of year 2025 as the lake level was 7.61 ft as of May 1, 2024. Figure 7 shows the historical SEGEP deliveries for NCPA and the total for the project while Figure 8 shows the fluctuations in lake level at the Rumsey gauge.

## **2023 RESERVOIR CHARACTERISTICS**

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Reservoir performance can be affected by a number of factors such as changes in the location or amount of water injected, the operating pressure of the field, gain or loss of production wells, or changes in the operation of nearby competitor leases. The effects of these changes on the reservoir are normally monitored by conducting annual pressure build-up tests on production wells and a continuous review of pressure, temperature, and flowrate data from the field. In addition, water injection influences the general level of micro-seismic activity and non-condensable gas production which impacts plant performance. This section will discuss changes in steam flowrate, reservoir pressures, seismic activity, and changes in non-condensable gases.

Steam flowrates averaged 1,210 klbs/hr in year 2023 and were significantly down from the average flowrate of 1,744 kph in year 2022. As noted earlier, Units #1, #2, and #4 were down significant periods of time and as a result, steam production was severely curtailed. If all units are returned to service, the average flowrate is expected to be around 1,714 kph. Since year 2023 was an anomaly for operations at the facility, the overall steam field decline is still projected to be a harmonic 0.8% going forward (Figure 9).

One of the most important parameters in predicting and explaining reservoir performance is static reservoir pressure. Figure 10 shows areal pressure distributions of static reservoir pressures for January 2023 and January 2024. In general, the majority of wells have shut-in pressures ranging from 60 to 80 psig with lower pressure wells predominantly on the west side of the field and higher-pressure wells on the east. In year 2023, shut-in pressures were either recorded or estimated for 57 wells (Table 3). The average wellhead shut-in pressure is 77.4 psig. The average well on the NCPA lease flowed 19,200 lb/hr at 65.8 psig during the year.

Studies by the United States Geological Survey (USGS) and others have demonstrated that the steam production and water injection at The Geysers can cause frequent micro seismic events to occur. As a result, NCPA and the other operators are required to continuously monitor and report on the earthquakes that occur within The Geysers geothermal field.

Figure 11 is a map showing the locations of the 785 seismic events of magnitude 1.5 and larger that occurred within The Geysers field during year 2023. Twenty of these events had an earthquake magnitude of 3.0 or greater. The largest seismic event was a magnitude 4.45 that occurred on the neighboring operator's lease. There was one seismic event with a magnitude 3.34 on the NCPA lease.

On the NCPA lease, there were 41 events of  $M=1.5$  or greater. Figure 12 shows the historical seismic activity for the NCPA lease from years 2011 through 2023. The seismic activity for year 2023 was lower than in year 2022.

Non-Condensable Gas (NCG) is a natural product of the reservoir and may be present in varying concentrations within the steam that is produced at The Geysers. NCG production reduces plant efficiency and increases chemical treatment costs. The values vary significantly based on operating guidelines for the field, plant outages, or injection strategy. Water injection in areas of high gas concentration generally reduces NCG production and improves plant efficiency.

As shown in the Figure 13, NCG concentrations were down for the year. The SEGEP pipeline operated at an increased level in year 2023 and NCG production decreased as a result. In year 2024, emphasis to increase injection on well pads E, P, and Q will be made to reduce NCG production. Table 4 shows the NCG levels for various wells while Figure 14 shows the relative changes throughout the field.

## NUMERICAL MODELING

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In 2023, NCPA contracted with the geothermal consulting firm GeothermEx to transfer its numerical model from the TETRAD software to a new software called Eclipse. The reason for the transfer was that the Geysers reservoir conditions have evolved over the past forty years of exploitation from saturated steam conditions to superheated steam conditions. The TETRAD software only allowed for generation forecasts assuming saturated steam conditions in the reservoir. The Eclipse software accounts for this additional factor and should provide better forecast results related to water injection and steam recovery.

The Eclipse software further uses an oil and gas database, Petrel, to store all the reservoir characteristics such as reservoir permeability, porosity, reservoir pressures, well data, steam production and water injection history. Petrel also serves as the pre and post processing software to run Eclipse and provide the final forecast results. After transferring the numerical model to the Eclipse software, GeothermEx was tasked with updating the production and injection history of the model further refining of the reservoir grids on the NCPA lease, and finally, providing eight generation forecasts.

The first three model runs were based steam wells flowing at fixed wellhead pressures that were equal to current conditions and seeing how reservoir pressures declined while water injection levels were adjusted to 30%, 80%, and 100% of the steam produced each year. With regard to these first three runs, the report states that "maintaining a lower level of injection allows a higher steam production rate overall". The report indicates that, "by the end of the 30-year forecast, the model suggests that net power production gradually declines

from 100 MW to 52 MW, 45 MW or 42 MW for the corresponding three scenarios of 30%, 80%, and 100% mass voidage replacement respectively.”

The next three model runs were based on fixed steam production rates while allowing reservoir pressures to decline at the same 30%, 80%, and 100% variation in water injection. Wellhead pressures were allowed to decline to 15 to 20 psi which is unrealistically low to deliver steam to the turbine inlet and produced power. The forecasts showed net power respectively declining from 100 MW to 96 MW, 95 MW and 92 MW for the corresponding 30%, 80%, and 100 % mass replacement voidage. As with the first three model runs, lower water injection levels resulted higher levels of steam production.

The seventh model run was to determine how fast reservoir pressures would rebound if all steam production was stopped and all of NCPA’s share of the SEGEP wastewater was injected into the reservoir. Shutting in the field showed reservoir pressures rebounding approximately 40 to 100 psi within the first year or so, then continuing to decline due to steam production outside the NCPA lease.

The eighth and final model run was based on a customized production and injection cycle where the steam field was shut-in for four months and water injection prior and after the shut-in period was varied. The forecast showed a lower decline rate than in the first three forecast scenarios and net generation would decline from 100 MW to 58 MW over the next 30 years.

The report concludes “that the injection scheme has not been fully optimized.” The model shows water pooling in the bottom of the reservoir and while supporting reservoir pressures over the long term, injected water is not being quickly recovered as it could be. The upper parts of the reservoir are still superheated and shallow injection at limited rates could result in faster recovery of this water as steam.

Water injection is necessary for the long-term viability of the reservoir. With combination of steam condensate and SEGEP wastewater, it is possible inject more water into the reservoir than the annual steam production. The goal and challenge going forward will be to achieve a 105% mass replacement of annual steam production without adversely affecting the reservoir. This will require further numerical modeling studies, testing of different injection strategies, and additional investment in the injection system.

## **2024 GENERATION FORECAST**

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NCPA’s Geothermal Facility is projected to generate 640.8 GWhrs net in 2024. For FY 2025, the net generation amount is projected to be 694.4 GWhrs. The updated forecast assumes that both Plants #1 and #2 will be at full operation starting around August 2024 and will have 95% availability for the rest of the year.

As noted earlier, the projected steam flowrate continues to decline at an 0.8% harmonic decline rate (Figure 9). Figure 15 shows the projected net generation capacity based on the steam flowrate and accounting for outages. The 2024 peak gross and net generation capacity



are respectively projected to be 102 MW gross and 92 MW net, but due to the significant down time for Plant #1 and Plant #2 during the first half of 2024, the average gross and net generation levels will respectively be 84.6 MW and 77.5 MW. The forecast assumes month long outages are planned for Plants #1 and #2 during the months of March and May each year. It further assumes that six-week overhauls are planned every five years starting with Unit #4 in 2028, Unit #1 in 2029, and Unit #2 in 2030. Figure 16 shows the expected generation from 2024 through 2048. Estimated reserves for the 25-year projection are 16,672 GWhrs. Tables 5 through 10 provide detailed levels of expected generation, average generation levels, steam production and water injection.

## 2024 GEOTHERMAL OPERATING PROTOCOL

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The Geothermal Project Operating Agreement requires the NCPA Commission to establish an Operating Plan and an annual operating level for the Geothermal Units. The purpose of the plan is to maximize the efficient use of the geothermal resource, protect the power plants and equipment, and meet all regulatory and permitting requirements.

The current 2023 Geothermal Operating Protocol was approved by the NCPA Commission during the May 25, 2023 meeting. The Protocol shown in Figure 17 uses a two-zone strategy with wells on the west side of the NCPA lease producing to Plant #1, Units #1 and #2 while the wells on the east side of the NCPA lease produced to Plant #2, Unit #4. The 2023 Protocol also allowed for reduction of load under the economic conditions listed below.

- Curtailing generation is an option that may occur only when the Day Ahead Market Prices are a minimum of negative \$25 per MWhr and Net of the Renewable Energy Credit (REC) value.
- The level of curtailment will be limited to 45 MW with discretion to adjust this level based on the steam field response.
- Duration of the curtailment is to be a minimum of 4 hours.
- Curtailments are limited to once per calendar day.

In 2024, the recommended Operating Protocol is to continue using the two-zone strategy, operate Plants #1 and #2 at baseload conditions with the goal of maximizing generation. Reductions in load may occur under the same condition as listed for the 2023 Operating Protocol. The Protocol establishes a 2024 annual peak generation target of 102 gross MW.



## SUMMARY

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### Year 2023 Review

- NCPA's Geothermal Facility generated 516.6 GWhrs of electrical power in 2023. This amount of electrical generation fell short by 22.3% of the facility's goal of 664.8 GWhrs for the calendar year.
- Plants #1 and #2 were down for significant periods of time due to equipment failures leading to major equipment repairs and overhauls of the turbine generators. Availability for Units #1, #2, and #4 were respectively 16%, 83% and 52% for the year.
- Steam production for the year was 11.9 Glbs while water injection was 9.0 Glbs for an annual mass replacement ratio of 76%.
- The average rate of water injection increased from 1,225 gpm in year 2022 to 2,064 gpm in year 2023. The increase was due to the availability of freshwater to SEGEP following two years of drought conditions.
- The flow rate decline for the steam field remains unchanged at a harmonic rate of 0.8%.

### Numerical Modeling

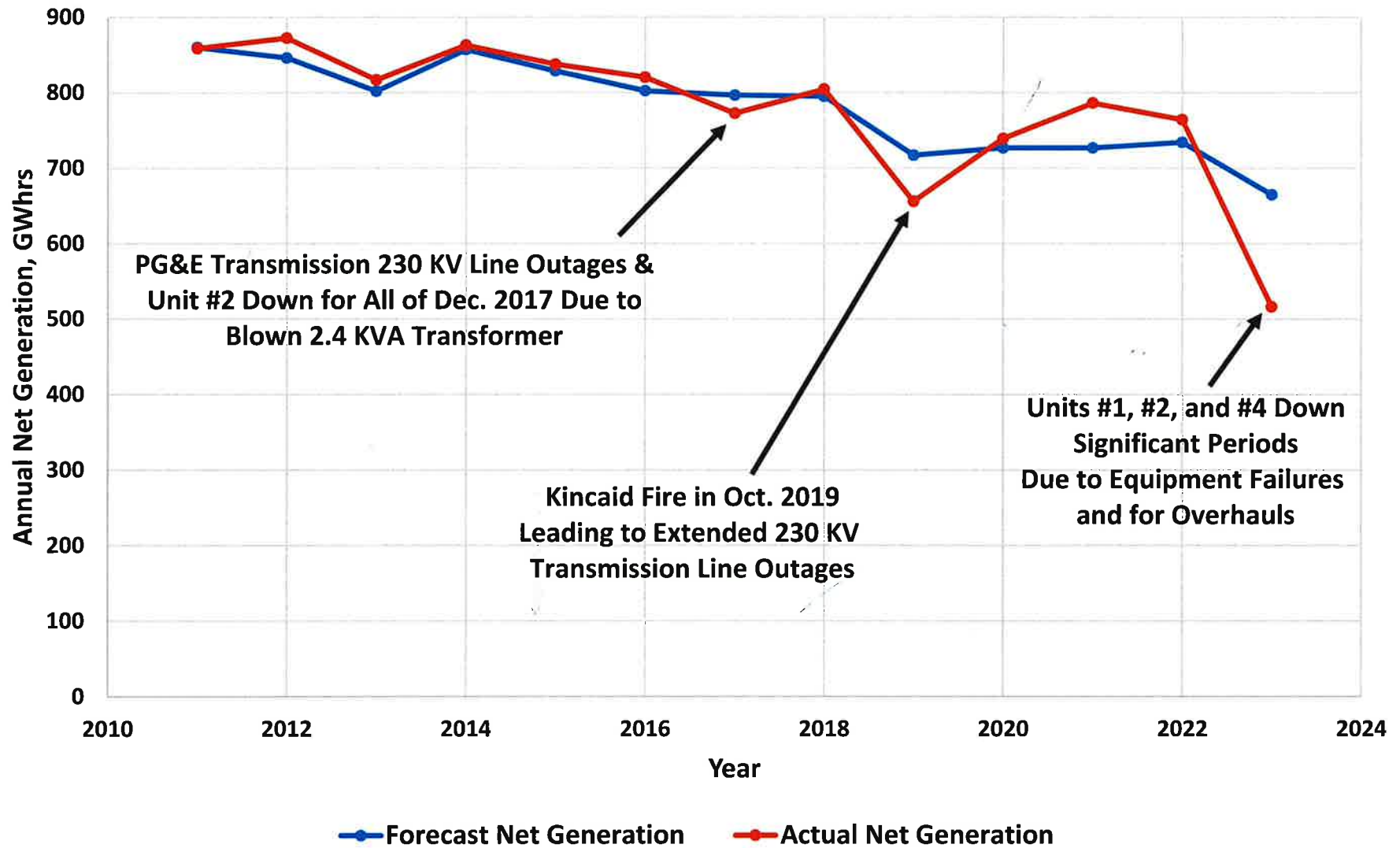
- NCPA tasked the geothermal consulting firm GeothermEx with transferring its numerical model to a new software called Eclipse. The Eclipse software incorporates superheated steam conditions in its forecast whereas the earlier Tetrad software did not.
- GeothermEx updated production and injection history in the numerical model and then provided eight forecast runs.
- The forecast runs provided three general conclusions
  - Under varying injection amounts of 30%, 80% and 100% mass replacement, less injection resulted in higher steam recovery.
  - The model shows water pooling at the bottom of the reservoir leading to saturated steam conditions while the upper sections of the reservoir remain superheated.
  - The injection scheme could be further optimized by injecting at shallower depths.
- The goal going forward will be to achieve a 105% mass replacement of annual steam production without adversely affecting the reservoir.

### Year 2024 Generation Forecast

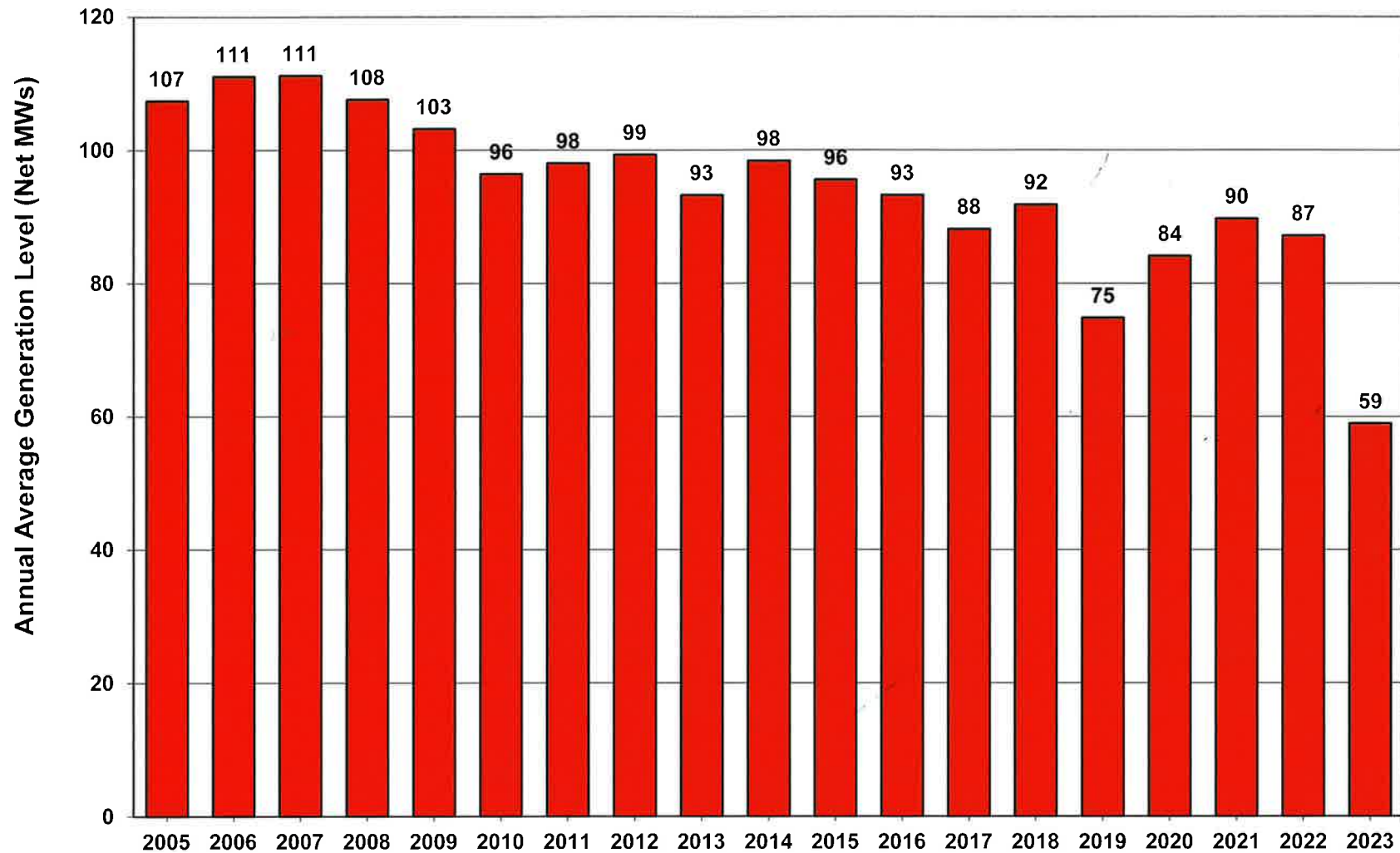
- NCPA's Geothermal Facility is projected to generate 640.8 GWhrs net in 2024. For FY 2025, the net generation is projected to be 694.4 GWhrs.
- The 2024 peak gross and net generation capacity are respectively projected to be 102 MW gross and 92 MW net. However, due to significant downtime to Plants #1 and #2, the average gross and net generation levels will respectively be 84.6 MW and 77.5 MW.

## Comparison of Forecast & Actual Net Generation Steam Field Operations Reports, Yrs 2011 - 2023

Figure 1



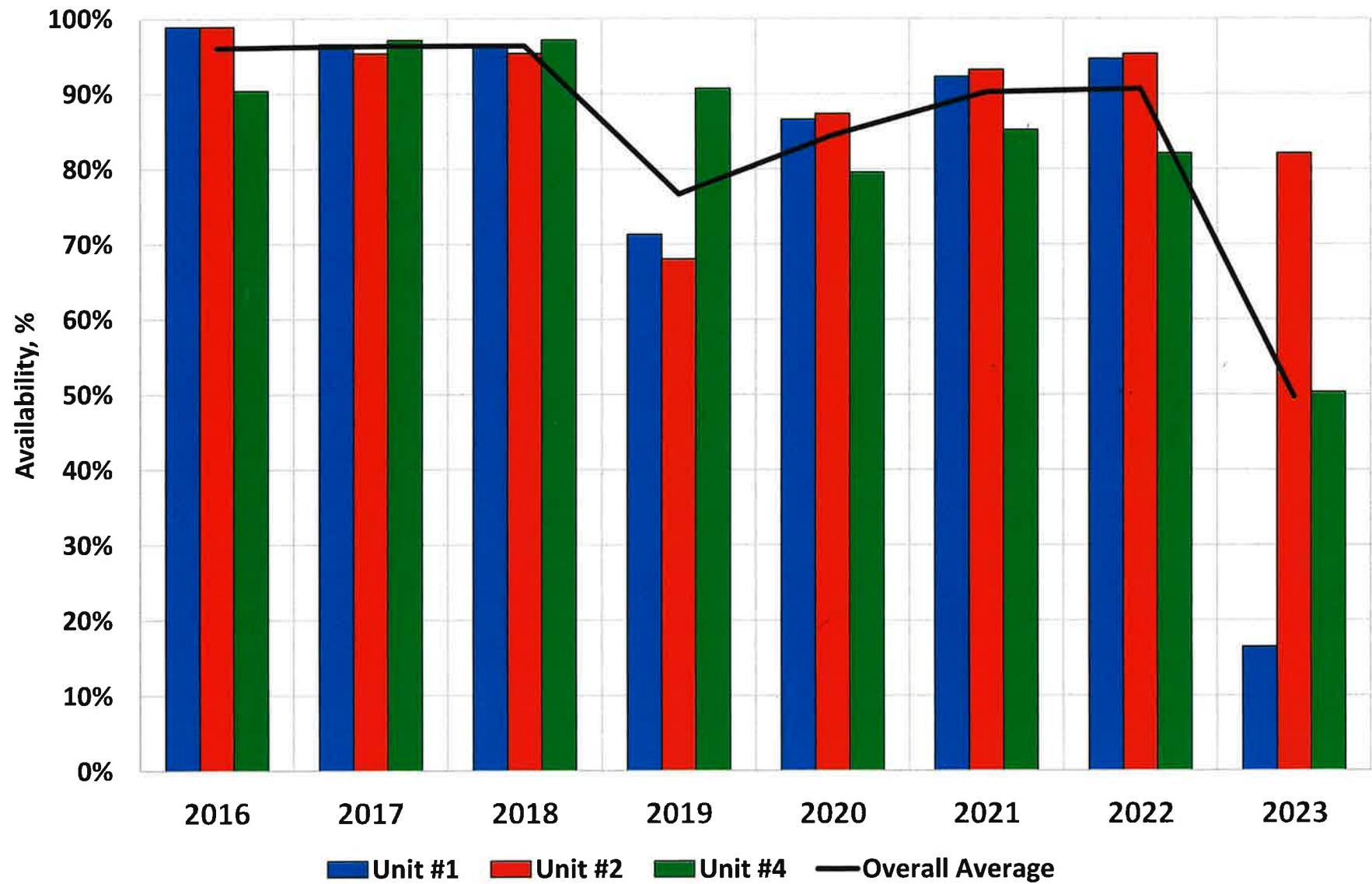
**Historical Power Generation Levels**  
**Figure 2**



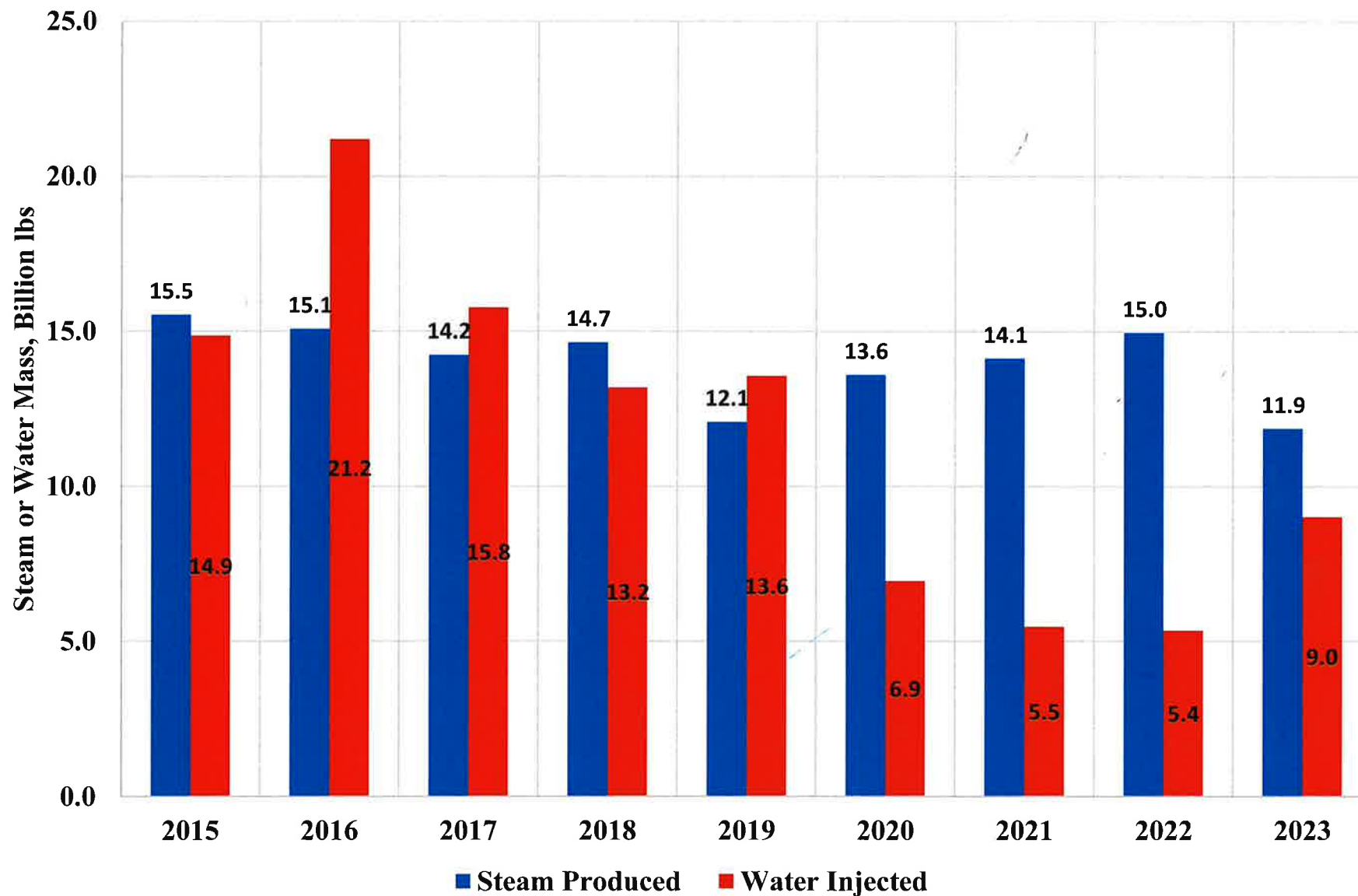
\*Generation levels include downtime for unit outages and overhauls

## Availability of Geothermal Units

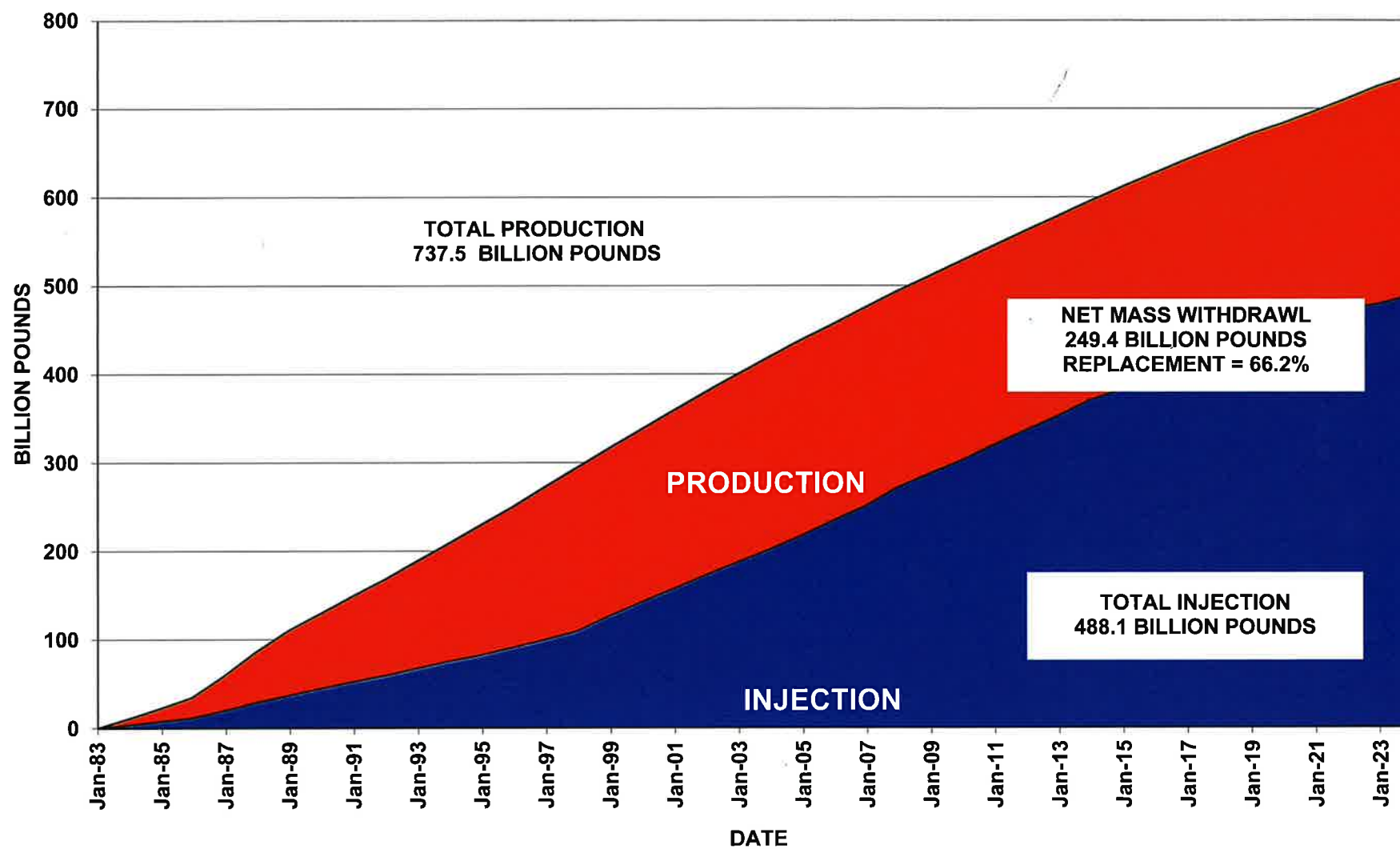
Figure 3



**Historical NCPA Steam Production and Water Injection Levels**  
**Figure 4**



**FIGURE 5**  
**NCPA STEAMFIELD**  
**CUMULATIVE PRODUCTION AND INJECTION**



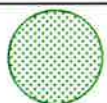
**FIGURE 6**  
**NCPA STEAM FIELD**  
**RELATIVE DISTRIBUTION OF INJECTED WATERS**  
**DURING 2023**

CALPINE

CALPINE

**LEGEND**

Circle Area is Proportional to Volume Injected



CONDENSATE  
INJECTION WELL



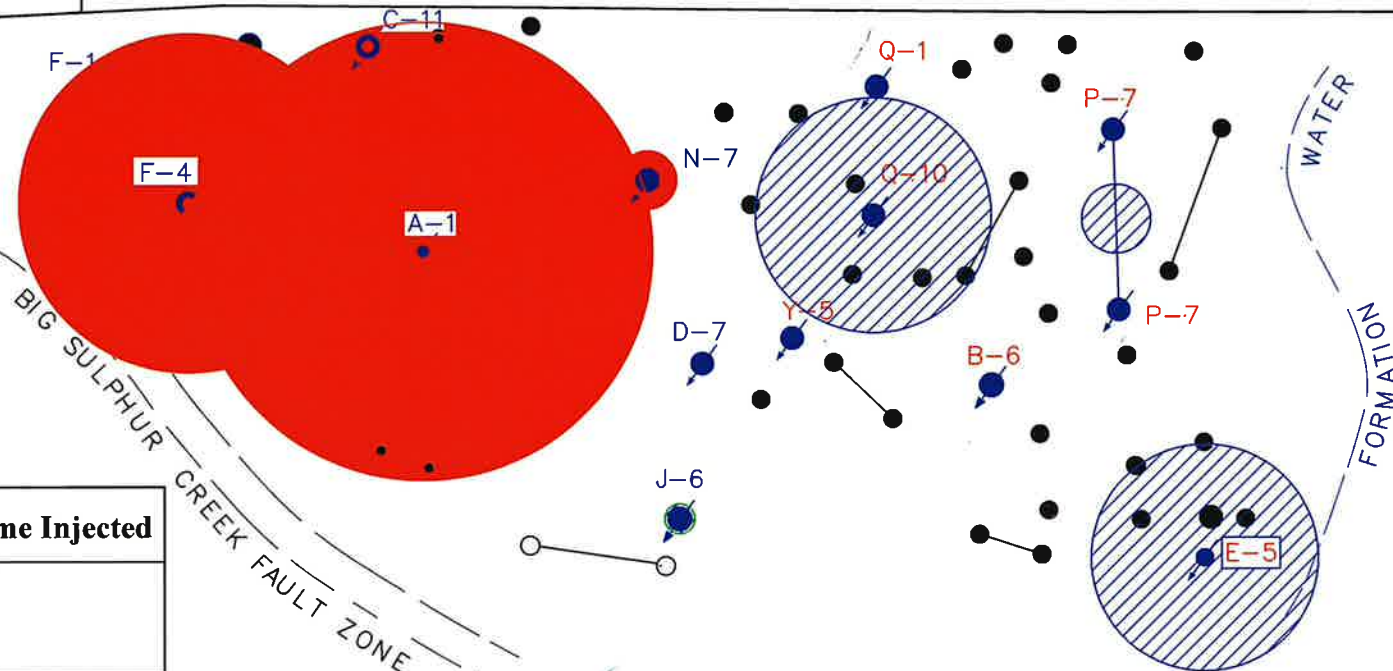
EFFLUENT  
INJECTION WELL



MIXED CONDENSATE  
AND EFFLUENT WATER  
INJECTION WELL

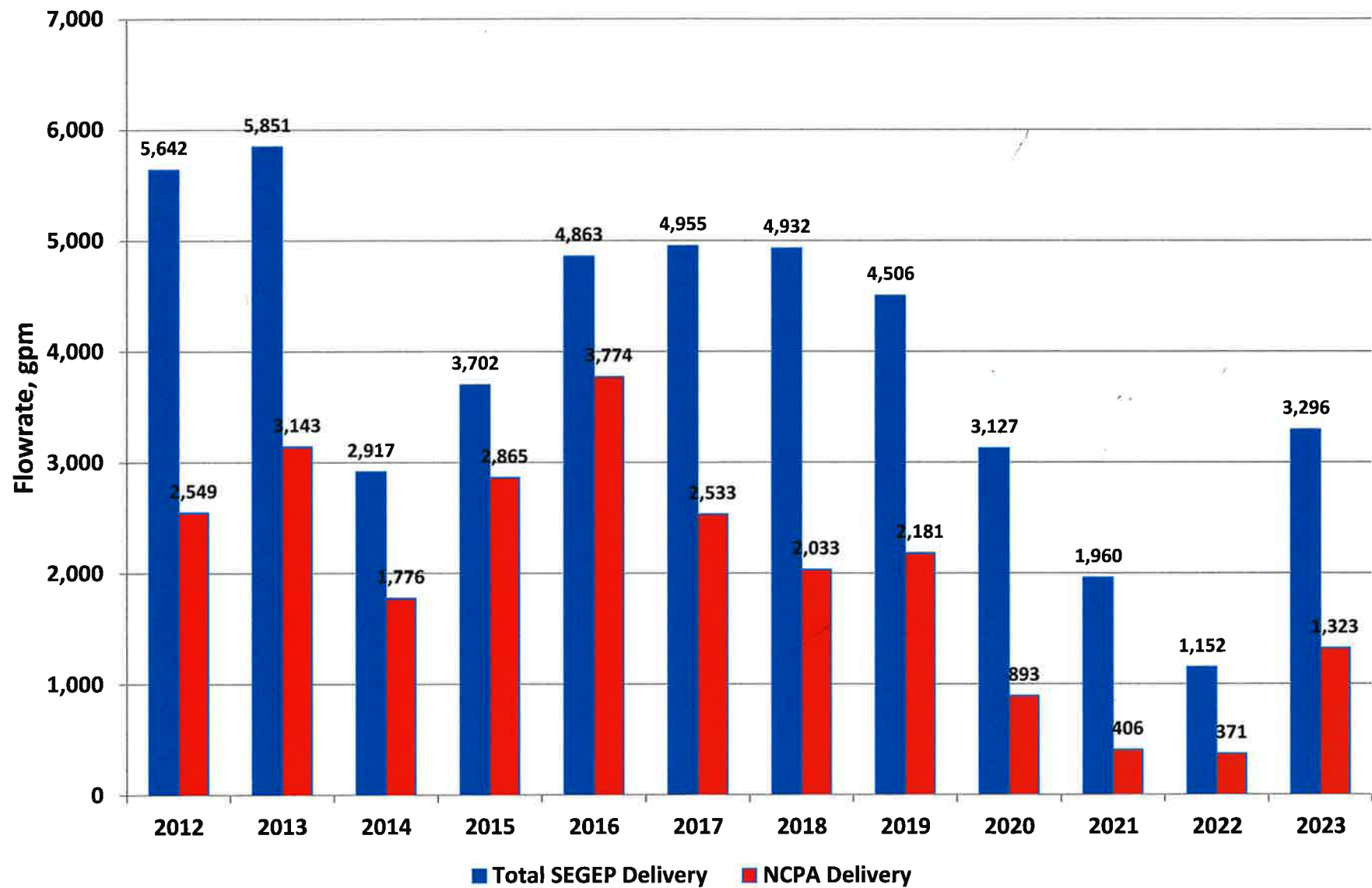


STEAM PRODUCTION  
WELL LOCATION



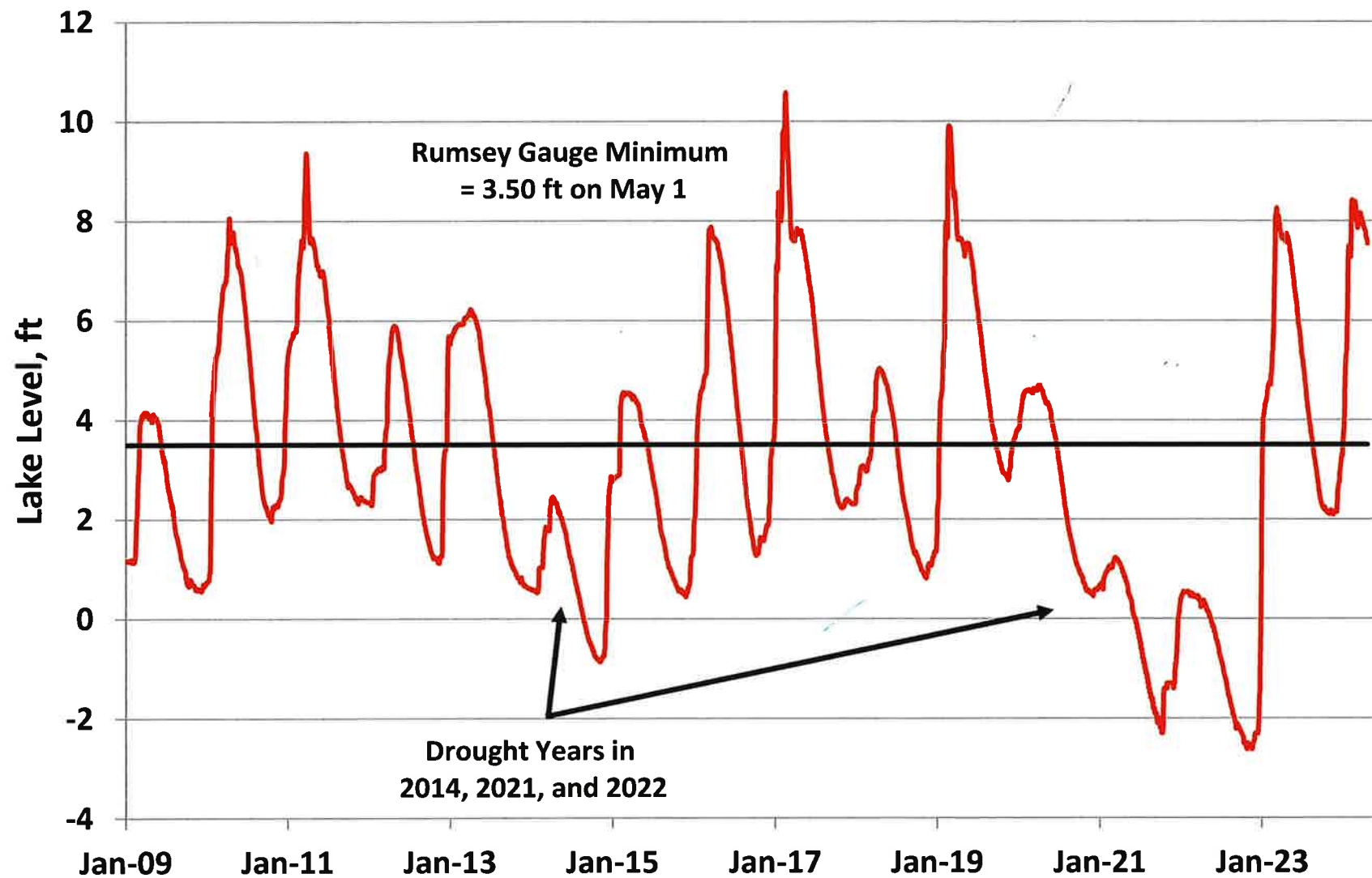


**Figure 7. History of SEGEP Deliveries Total and NCPA  
(Annual Average GPM)**



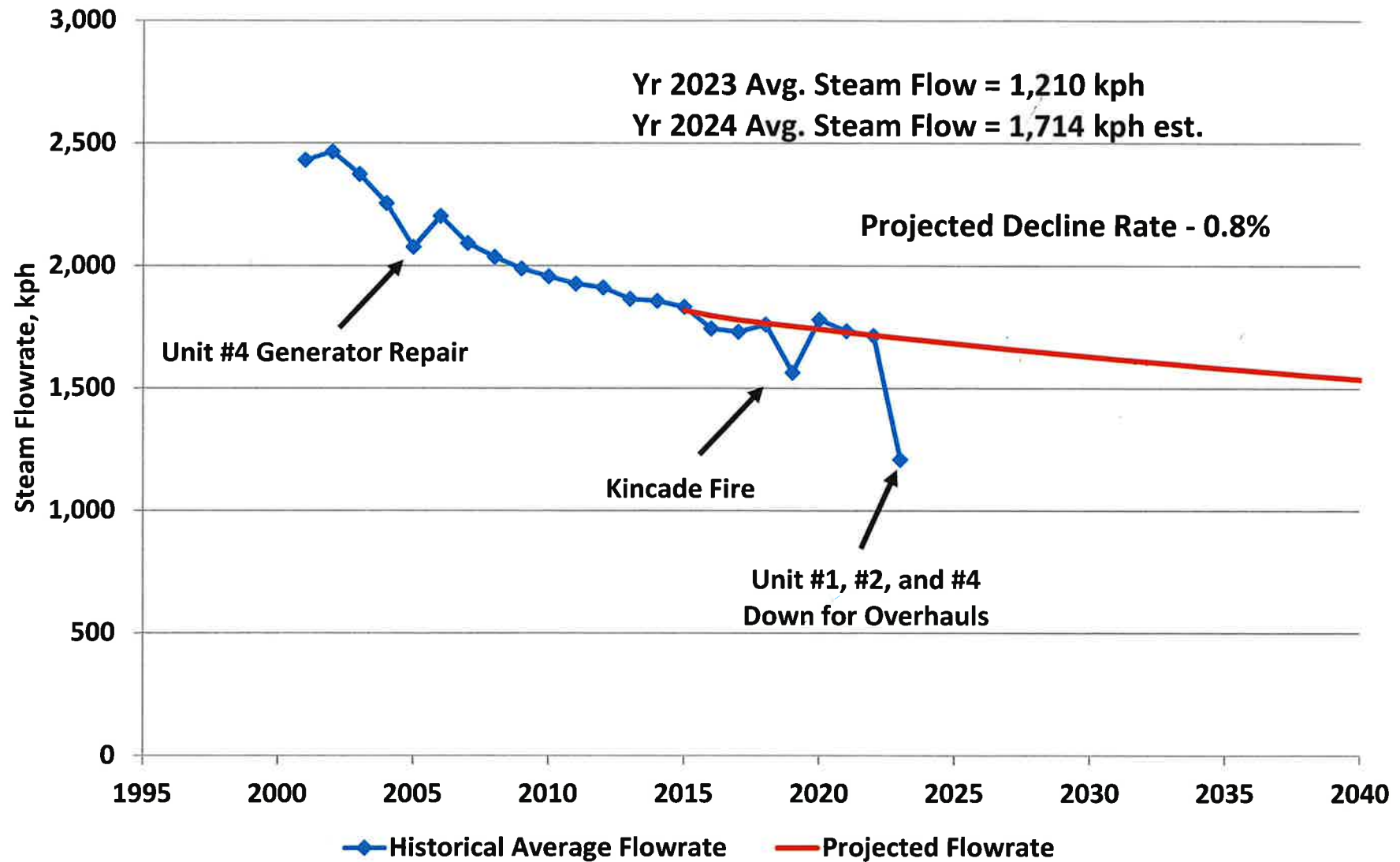


**Clear Lake Water Level - USGS Rumsey Gauge**  
**2009 - Present**  
**Figure 8**



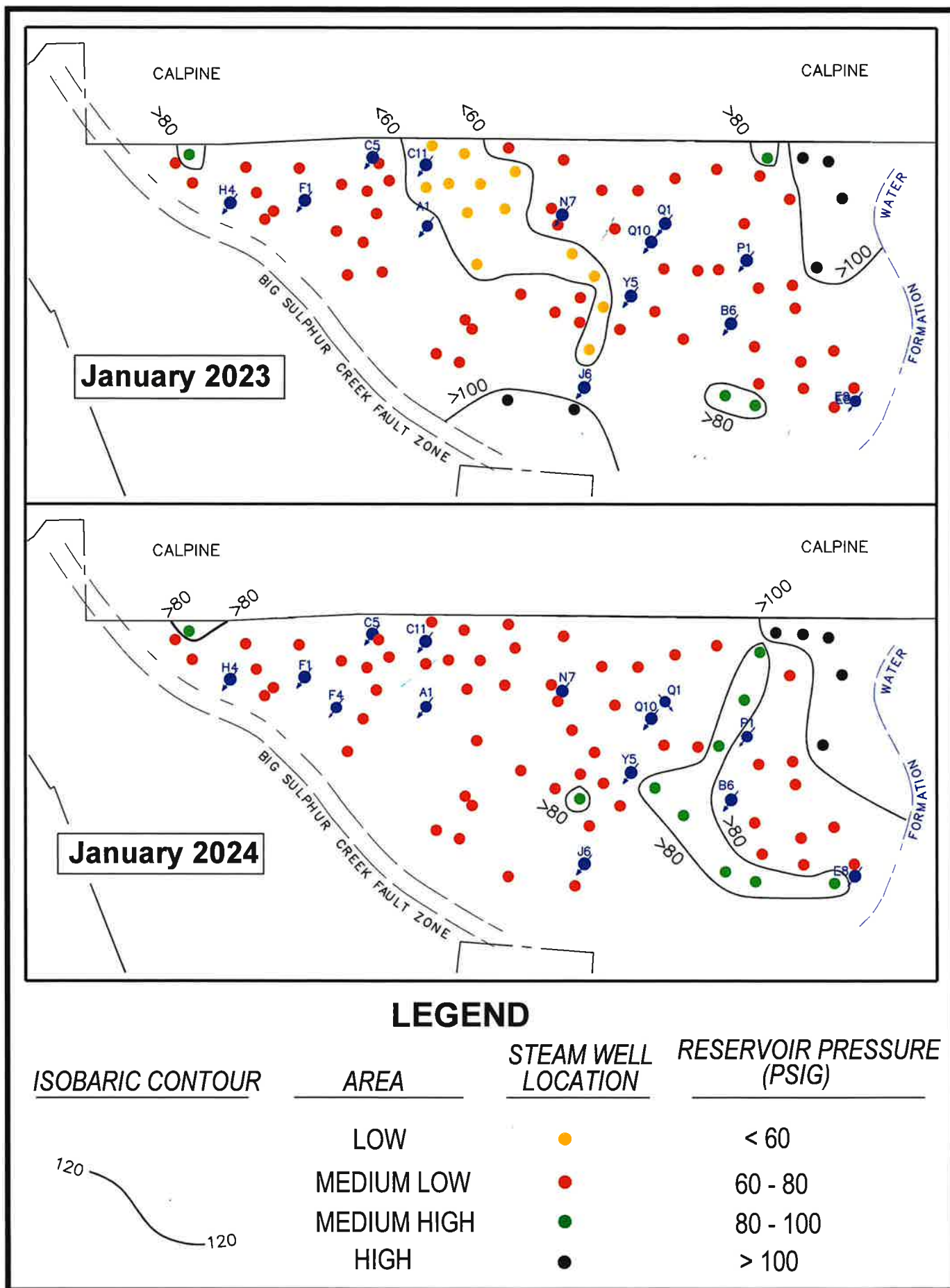
## Historical and Projected Steam Flowrates Combined NCPA Plant #1 & #2

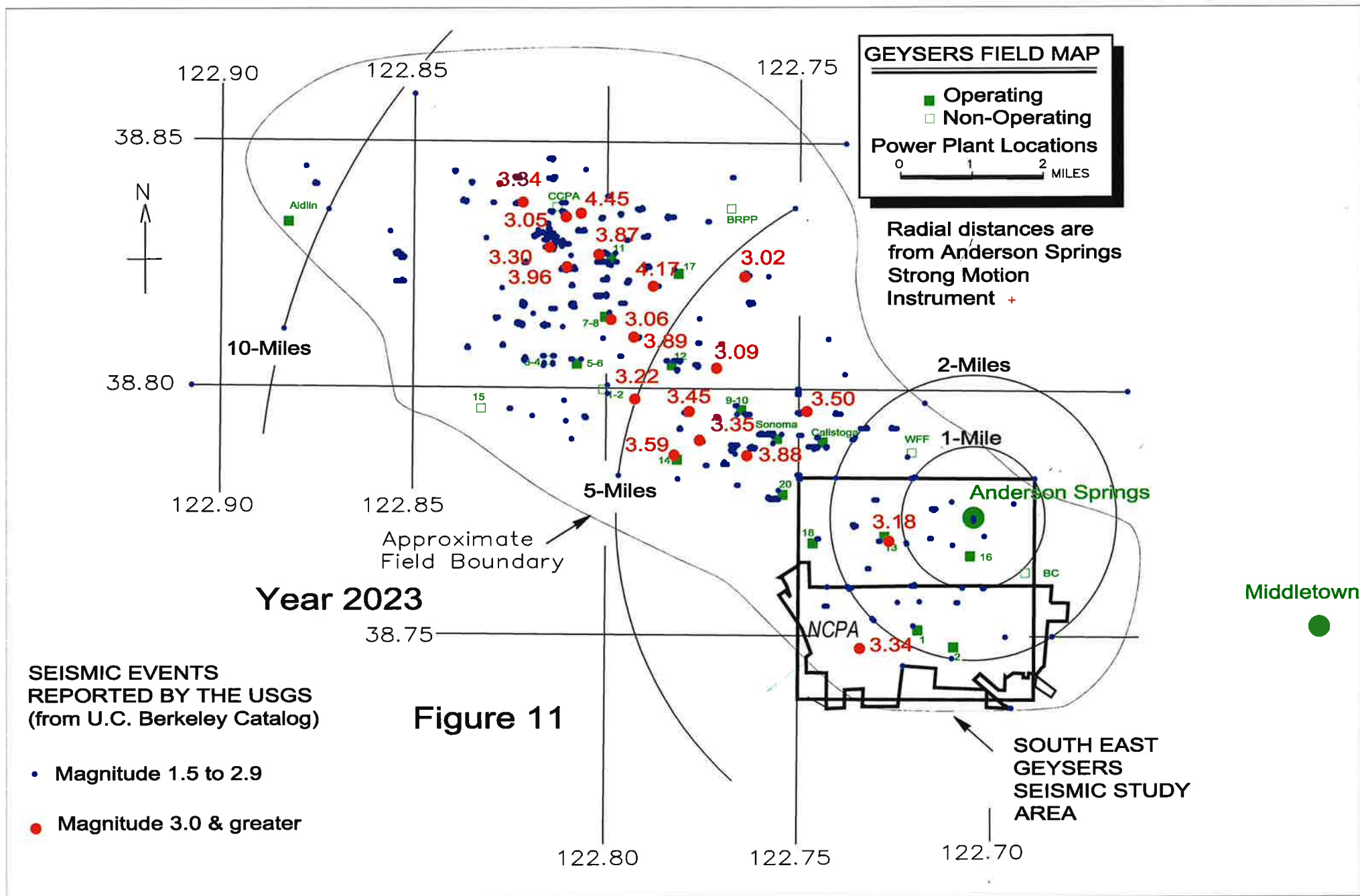
Figure 9



# FIGURE 10

## NCPA STEAM FIELD RESERVOIR PRESSURE

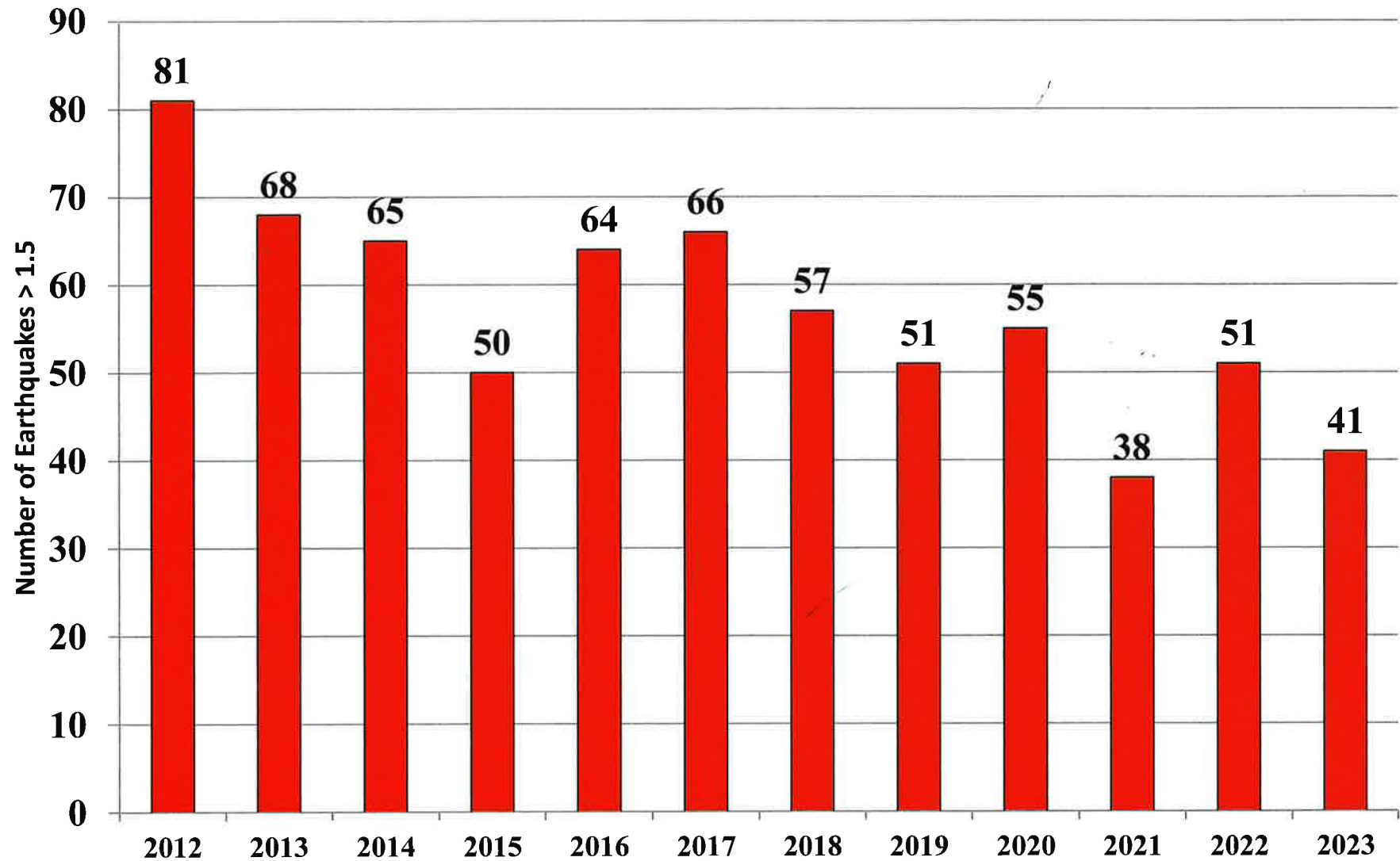




## Historical Seismic Activity on NCPA Lease

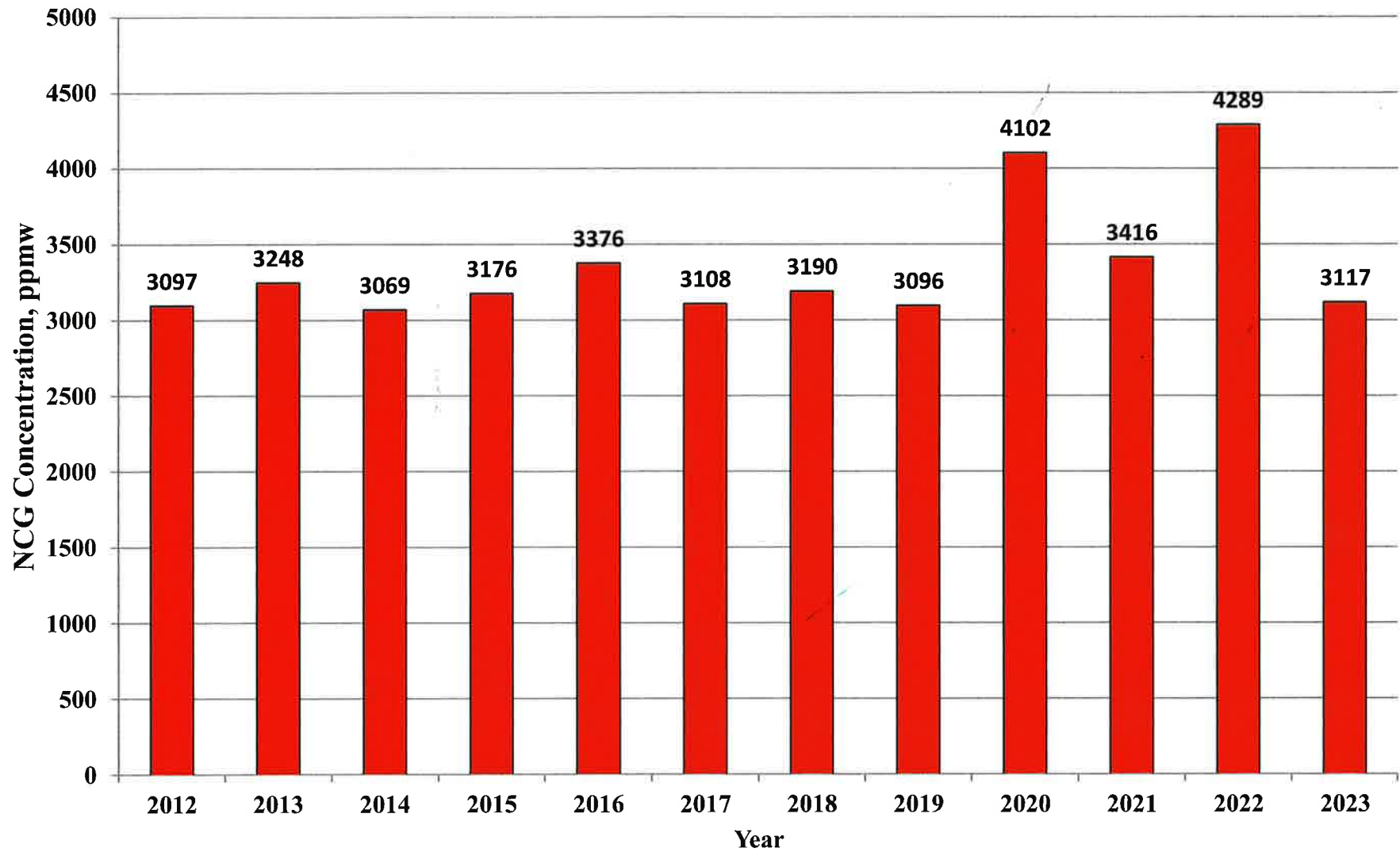
Magnitude 1.5 or greater

Figure 12



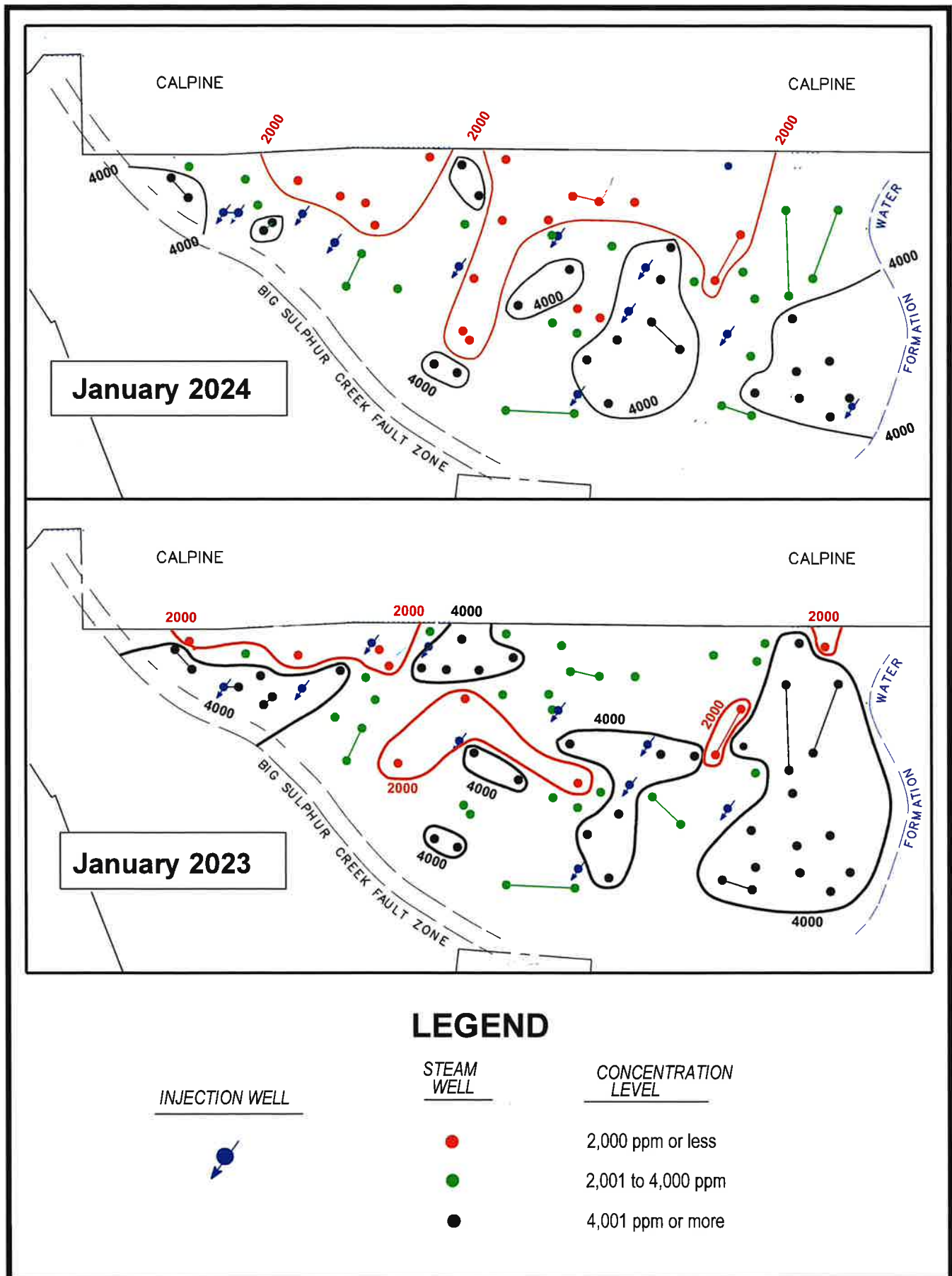
# Historical Non-Condensable Gas (NCG) Concentrations on NCPA Lease

Figure 13



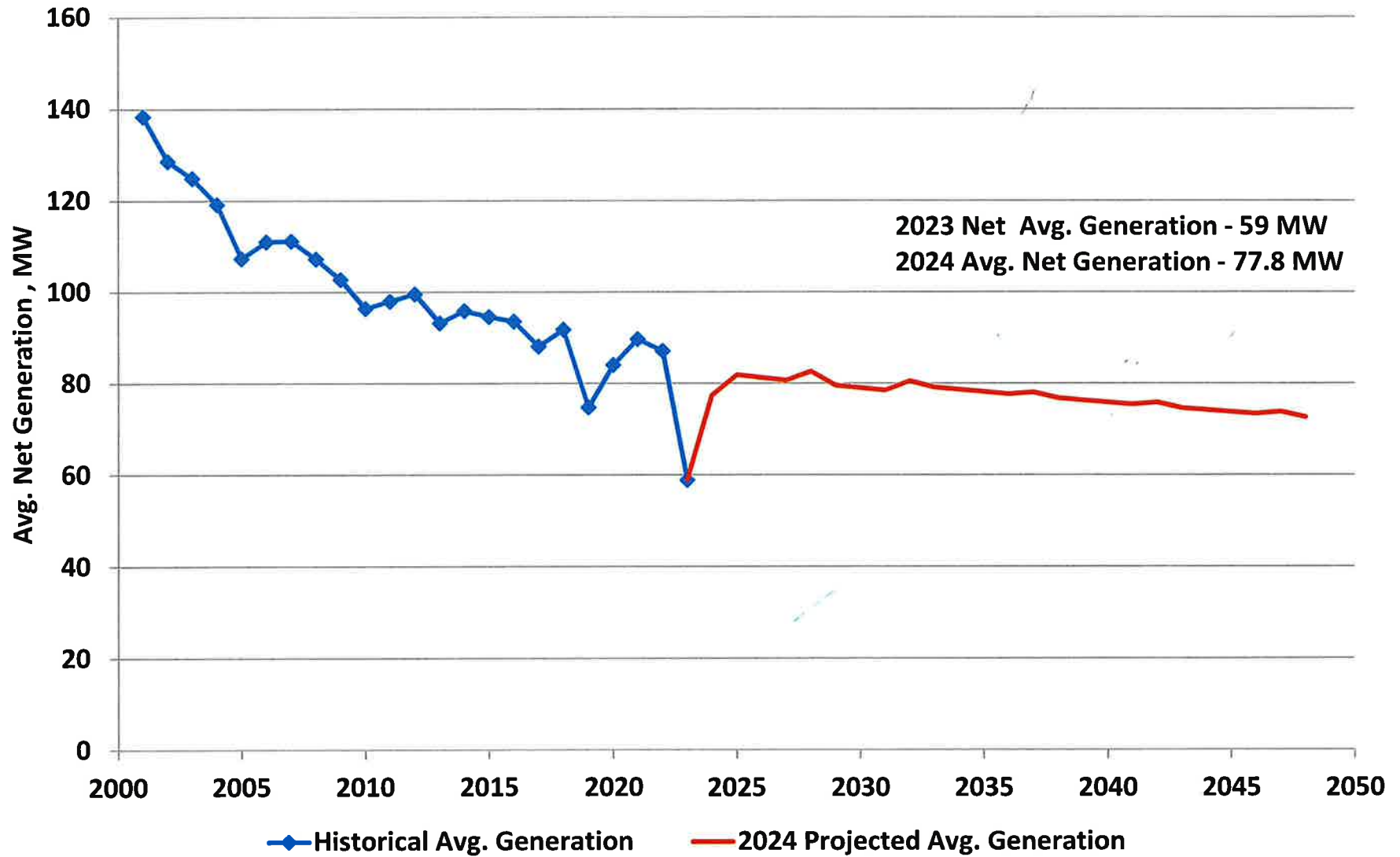


**FIGURE 14**  
**NONCONDENSABLE GAS CONCENTRATIONS**  
**IN NCPA STEAM (ppm)**



## Historical and Projected Average Net Generation Level Combined NCPA Plants #1 & #2

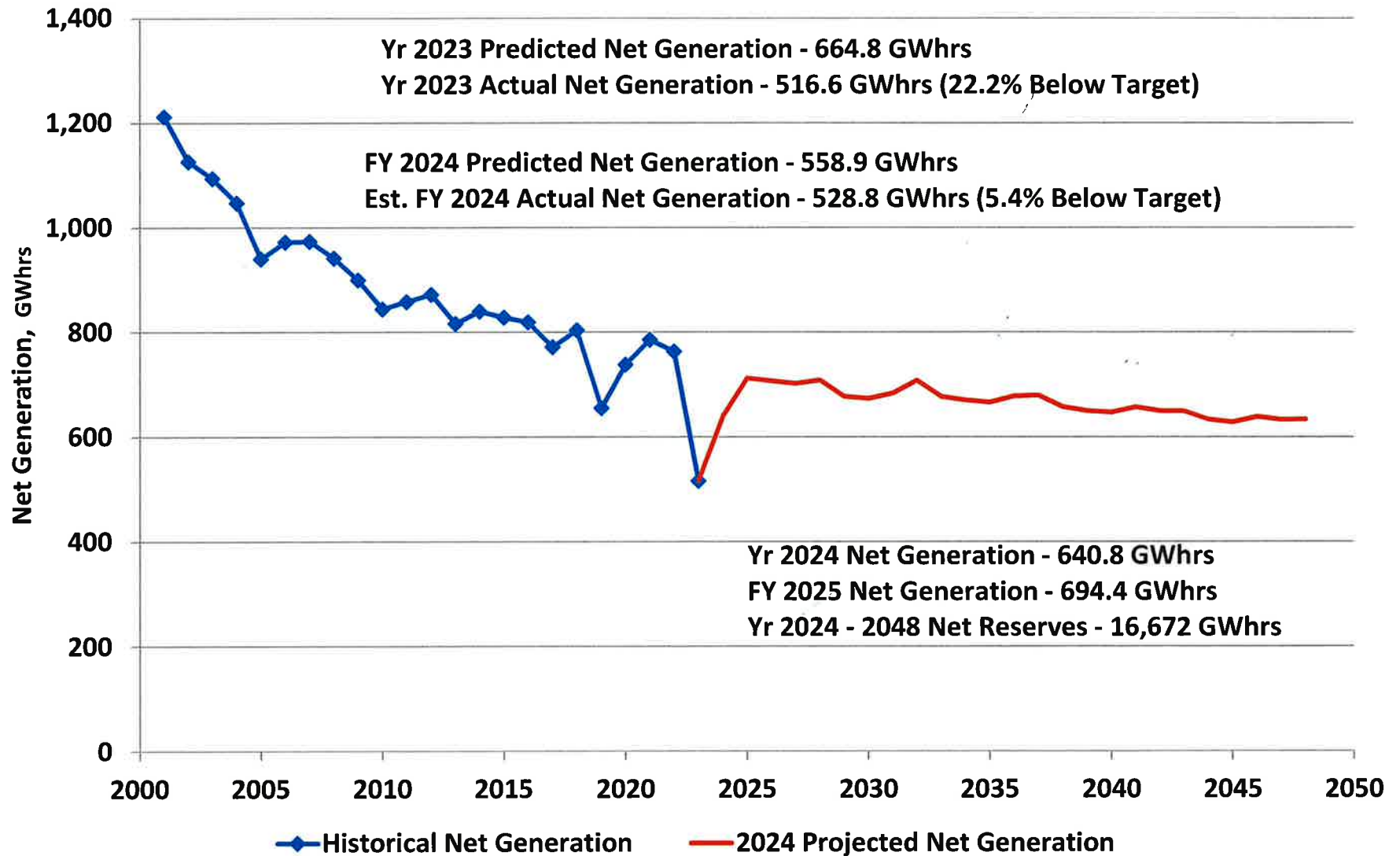
Figure 15



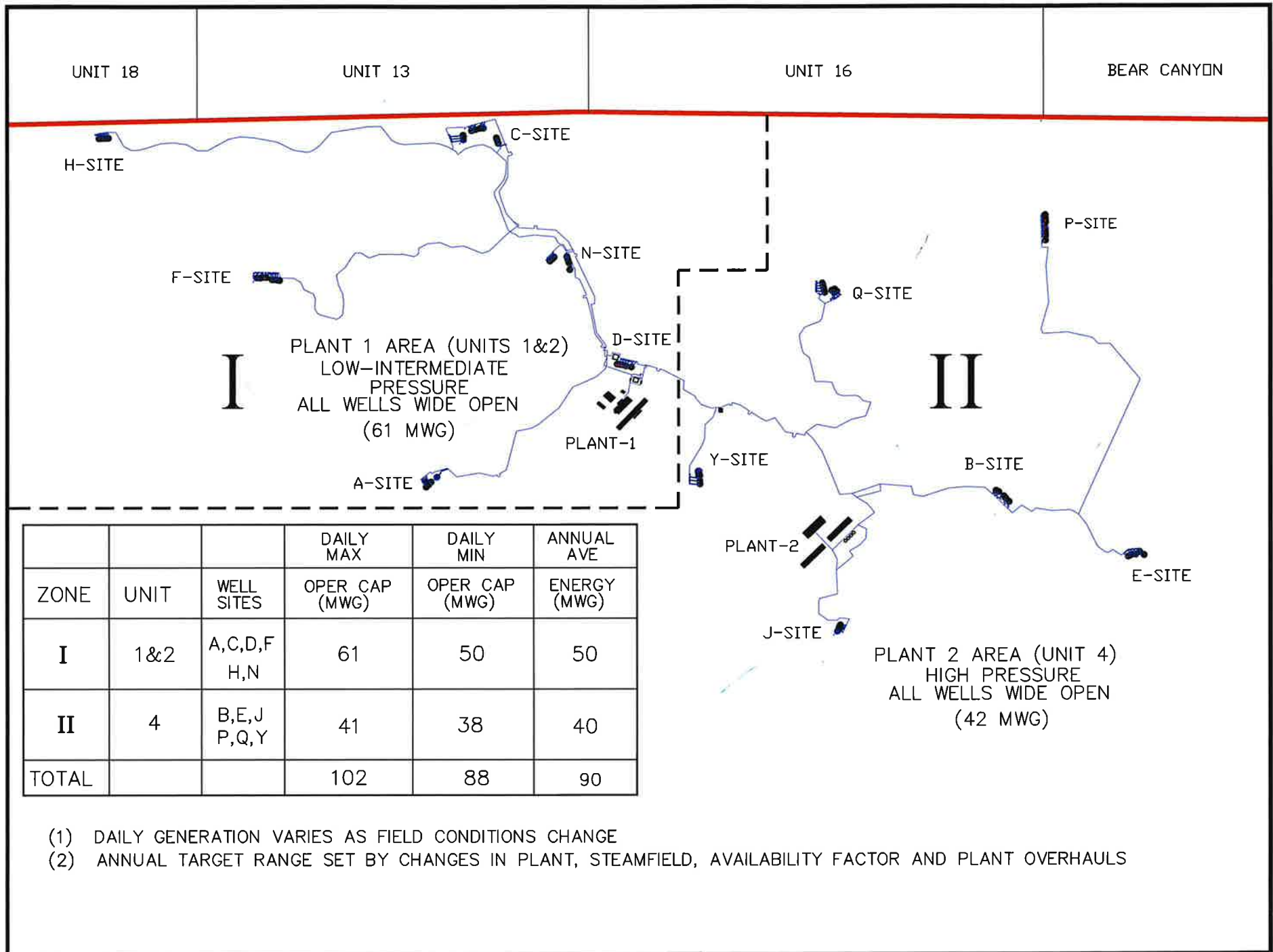


## Historical and Projected Net Generation Combined NCPA Plants #1 & #2

Figure 16



# Figure 17. 2024 GEOTHERMAL OPERATIONAL PLAN



**TABLE 1 GEOTHERMAL FACILITIES**  
**Summary Table**

	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
<b>Generation ( gross)</b>										
(MWh)	922,995	903,299	887,299	833,211	874,403	711,902	833,866	841,946	813,753	617,150
(MW)	105.4	103.1	101.0	95.1	99.8	81.3	94.9	96.1	92.9	70.5
<b>Generation (net)</b>										
(MWh)	862,842	837,379	819,149	772,398	804,425	655,798	739,049	786,098	763,924	516,608
(MW)	98.5	95.6	93.3	88.2	91.8	74.9	84.1	89.7	87.2	59.0
<b>Protocol</b>										
(MW gross)	107	107	107	105	105	102	101	104	103	102
<b>Steam Conversion</b>										
(Lbs / Kw Gross)	17.33	17.20	17.00	17.10	16.76	16.97	16.31	16.78	18.39	19.24
<b>Steam Delivered</b>										
(Billion Lbs)	16.00	15.54	15.08	14.24	14.65	12.08	13.60	14.13	14.96	11.88
<b>Load Flexibility (gross)</b>										
Monthly High (MW)	110	110	110	103	105	110	107	109	104	102
Monthly Low (MW)	104	104	103	77	83	68	67	55	52	52
<b>Injection</b>										
Total (Billion Lbs)	12.39	14.86	21.21	15.78	13.19	13.57	6.95	5.48	5.37	9.02
Condensate (Billion Lbs)	4.62	4.20	4.94	4.64	4.36	3.86	3.29	3.80	3.75	3.20
Effluent (Billion Lbs)	7.77	12.50	16.27	11.13	8.83	9.71	3.67	1.68	1.62	5.82
<b>Mass Replacement</b>										
Annual (%)	77.5%	95.6%	140.6%	110.8%	90.0%	112.3%	51.1%	38.8%	35.9%	76.0%
Cumulative (%)	62.6%	63.4%	65.2%	66.2%	66.7%	67.5%	67.2%	66.7%	66.0%	66.2%
<b>Wells Used For Injection</b>										
	12	13	11	10	10	8	6	6	6	7
<b>NCPA Micro-seismic Activity M&gt;= 1.5</b>										
	58	50	64	66	57	51	55	38	51	41
<b>NCPA Micro-seismic Activity Maximum Magnitude Event</b>										
	4.38	2.99	3.37	2.92	3.09	2.84	2.86	3.98	2.76	3.34
<b>NCG Concentration (ppmw)</b>										
	3,069	3,176	3,376	3,108	3,190	3,096	4,102	3,416	4,289	3,117

Table 2. ANNUAL REPORT OF NCPA INJECTION AT THE GEYSERS STEAM FIELD for Year 2023 (in 1000 Gallons)																
Well		Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Condensate <sup>(1)</sup>	Effluent <sup>(2)</sup>	Well Total
A-1	Condensate	31,661	26,716	27,597	16,935	16,597	2,662	13,366	16,480	13,933	12,491	18,292	16,716	213,445		395,286
	Effluent	6,903	9,394	19,341	22,843	16,115	25,081	21,089	16,896	17,551	12,300	10,471	3,857		181,841	
<b>B-6</b>	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
C-5	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
C-11	Condensate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
<b>E-5</b>	Effluent	2,568	10,829	15,880	24,551	20,025	6,319	26,308	22,942	26,418	438	-	-		156,278	156,278
D-7	Condensate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
F-4	Condensate	25,038	23,686	12,547	9,492	7,386	612	10,368	10,843	10,466	8,978	7,153	11,714	138,283		270,981
	Effluent	5,531	7,331	11,894	12,426	6,209	21,589	18,526	13,769	14,009	10,467	7,212	3,735		132,698	
H-1	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
H-4	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
J-6	Condensate	-	-	9,189	11,645	-	-	-	-	-	-	-	-	20,834		20,834
N-2	Condensate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
N-7	Condensate	11,603	664	-	-	-	-	-	-	-	-	-	-	12,267		32,381
	Effluent	19,626	-	246	-	-	-	-	56	56	130	-	-		20,114	
<b>P-7</b>	Effluent	-	-	2,407	19,998	13,921	6,013	5,033	-	-	-	-	-		47,372	47,372
<b>P-9</b>	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
<b>Q-10</b>	Effluent	10,547	6,392	16,793	21,961	15,792	16,479	22,315	25,543	25,613	-	-	-		161,435	161,435
<b>Q-3</b>	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
<b>Q-4</b>	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
<b>Q-7</b>	Condensate	-	-	-	-	-	-	-	-	-	-	-	-		-	-
	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Q-1	Effluent	-	-	-	-	-	-	-	-	-	-	-	-		-	-
Y-5		-	-	-	-	-	-	-	-	-	-	-	-		-	-
Totals		113,476	85,012	115,894	139,851	96,045	78,754	117,005	106,529	108,046	44,804	43,128	36,022	Condensate(1) 384,829	Effluent(2) 699,737	Total 1,084,566
During each month the % of Effluent Pipeline water that was fresh water withdrawn from Clear Lake:																
		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
Notes: 1. "Effluent" (pipeline) volumes are water from Clear Lake together with LACOSAN and Clearlake Oaks treated wastewater.																
2. The 9 <b>Bold</b> well names in <i>italics</i> are located in Lake County (Central Valley Region), the 10 others are in Sonoma County (North Coast Region).																

**Table 3**  
**RESERVOIR PRESSURE**  
**BY WELL 2023**

WELL	PRESS	WELL	PRESS	WELL	PRESS	WELL	PRESS
A-3	68.2	D-1	71.0	H-1	72.4	P-1	
A-4	74.0	D-2	80.0	H-2	83.5	P-2	107.5
A-5	68.5	D-6	78.0	H-3	73.0	P-4	80.5
A-6		D-7	75.0	H-4	72.8	P-5	133.0
A-SITE	70.2	D-8	75.0	H-5	72.3	P-6	136.0
		D-SITE	75.8	H-SITE	74.8	P-7	78.0
B-2	78.5					P-8	135.0
B-3	79.3	E-1	79.2	J-2	74.6	P-9	
B-4	77.5	E-2	79.0	J-3	80.0	P-SITE	111.7
B-5	78.3	E-3	71.0	J-4	91.3		
B-6		E-4	79.5	J-5	71.8	Q-1	
B-SITE	78.4	E-5		J-SITE	79.4	Q-3	72.3
		E-6	82.5			Q-4	73.9
C-1	66.5	E-8				Q-5	73.1
C-2	66.7	E-SITE	78.2	N-1	64.0	Q-6	73.4
C-4	70.5			N-2	65.3	Q-7	72.3
C-5	66.2	F-1		N-3	70.5	Q-8	79.0
C-6	66.0	F-2	71.2	N-4	68.1	Q-9	90.2
C-7	66.8	F-3		N-5	67.4	Q-SITE	76.3
C-8	71.0	F-4	72.0	N-6	70.5		
C-9		F-5	74.0	N-SITE	67.6	Y-1	74.5
C-10	70.8	F-6	70.1			Y-2	71.0
C-SITE	68.1	F-7	71.0			Y-3	75.3
		F-SITE	71.7			Y-4	
						Y-5	
						Y-SITE	73.6

VALUES ARE FROM PRESSURE BUILD- UP TESTS  
SHADED NUMBERS ARE FOR DATA OBTAINED FROM OTHER STATIC  
PRESSURE OBSERVATIONS

57 WELLS TESTED      AVE. SHUT-IN WELL PRESS EQUALS      77.4 psig

AVE SITE PRESS EQUALS      77.2 psig

AVE. FLOWRATE =      19.2 kph at      65.8 psig



TABLE 4 NCG CONCENTRATIONS (PPMW) 2023 BY WELL, AND SITE AND PROJECT											
WELL		NCG	WELL		NCG	WELL		NCG	WELL		NCG
A-3	13653		D-1	3493		H-1	2340		P-1		
A-4	2572		D-2	2234		H-2	2233		P-2	1509	
A-5	2727		D-6	2171		H-3	4495		P-4	808	
A-6	1286		D-7	1727		H-4			P-5	1531	
A-SITE	5059		D-8	4381		H-5	4005		P-6	2780	
			D-SITE	2801		H-SITE		3268	P-7	3828	
B-2	2665								P-8	2667	
B-3	4555		E-1	12515		J-2			P-9		
B-4	2932		E-2	5587		J-3	7356		P-SITE		2187
B-5	3741		E-3	4974		J-4	3175				
B-6			E-4	6137		J-5	3346		Q-1		
B-SITE	3473		E-5			J-SITE		4626	Q-3	4861	
			E-6	6182					Q-4	3131	
C-1	1565		E-SITE		7079	N-1	1436		Q-5	1199	
C-2	1691					N-2	2030		Q-6	681	
C-4	859		F-1	1613		N-3	1521		Q-7	6298	
C-5	1779		F-2	2646		N-4	1530		Q-8	1348	
C-6			F-3	814		N-5	5438		Q-9	689	
C-7	4343		F-4			N-6	4315		Q-A		
C-8	1811		F-5	1135		N-SITE		2712	Q-SITE		2601
C-9			F-6	586							
C-A	593		F-7	1631					Y-1	1601	
C-SITE	1806		F-SITE		1404				Y-2	6534	
									Y-3	8092	
									Y-4	6840	
									Y-5	5943	
									Y-SITE		5767
VALUES ARE FROM NCPA CHEM LAB ANALYSIS											
Number of wells samples wells sampled=										62	
AVG. WELL NCG =										3357	
AVG. SITE NCG =										3565	
NCG Flow Weighted Avg. =										3117	

**2024 Generation - 25 Year Forecast**  
**Table 5**

Year	Total Geo Facilities		Plant #1		Plant #2	
	Gross	Net	Gross	Net	Gross	Net
	Generation GWhr	Generation GWhr	Generation GWhr	Generation GWhr	Generation GWhr	Generation GWhr
2024	704.0	640.8	304.4	264.1	399.6	376.6
2025	791.9	712.7	470.2	410.4	321.6	302.3
2026	786.4	707.6	469.6	409.8	316.8	297.8
2027	781.0	702.6	469.0	409.2	312.0	293.4
2028	786.5	709.0	491.7	431.7	294.8	277.3
2029	753.8	678.2	450.9	393.3	302.8	284.9
2030	748.8	673.5	450.3	392.7	298.4	280.8
2031	760.6	683.6	466.5	406.7	294.1	276.9
2032	780.0	708.6	489.3	434.8	290.8	273.8
2033	753.4	677.7	480.1	420.3	273.3	257.4
2034	744.6	670.6	462.8	405.1	281.8	265.4
2035	740.1	666.4	462.2	404.6	277.9	261.8
2036	754.6	678.7	479.7	419.7	274.9	259.0
2037	755.2	679.8	484.9	425.0	270.3	254.8
2038	732.1	657.7	477.1	417.3	255.0	240.5
2039	723.0	650.3	459.9	402.2	263.1	248.1
2040	719.7	647.2	459.3	401.7	260.4	245.6
2041	731.5	657.2	475.3	415.5	256.2	241.7
2042	723.7	650.3	481.9	422.1	241.9	228.2
2043	723.7	649.9	474.1	414.3	249.6	235.6
2044	705.6	633.9	458.4	400.6	247.1	233.3
2045	699.8	628.5	456.5	398.8	243.3	229.7
2046	712.6	639.4	472.3	412.5	240.2	226.9
2047	705.8	633.4	478.9	419.1	226.9	214.4
2048	707.5	634.5	472.5	412.5	235.0	222.0

Notes:

1. Assumes 3 unit operation.
2. Steam Reserves: 323.3 Billion lb.
3. Gross Reserves: 18,526 GWhr
4. Net Reserves: 16,672 GWhr
5. Plant #1 Auxiliary Load is fixed at 7.5 MW.  
Plant #2 Auxiliary Load is fixed at 2.58 MW.
6. See Table 5B for scheduled outages.

**2024 Generation Capacity - 25 Year Forecast**  
**Table 6**

Year	Plant #1		Plant #2		Total	
	Avg. Gross	Avg. Net	Avg. Gross	Avg. Net	Avg. Gross	Avg. Net
	Gen.	Gen.	Gen.	Gen.	Gen.	Gen.
	MW	MW	MW	MW	MW	MW
2024	38.9	34.4	45.7	43.1	84.6	77.5
2025	54.0	47.2	36.9	34.7	91.0	81.9
2026	54.0	47.1	36.4	34.2	90.4	81.3
2027	53.9	47.0	35.8	33.7	89.7	80.7
2028	56.3	49.5	35.3	33.2	91.6	82.7
2029	53.8	46.9	34.8	32.7	88.5	79.6
2030	53.7	46.8	34.3	32.3	88.0	79.1
2031	53.6	46.7	33.8	31.8	87.4	78.5
2032	56.0	49.2	33.3	31.4	89.4	80.5
2033	55.1	48.3	32.8	30.9	88.0	79.2
2034	55.1	48.2	32.4	30.5	87.4	78.7
2035	55.0	48.1	31.9	30.1	86.9	78.2
2036	54.9	48.1	31.5	29.7	86.4	77.7
2037	55.7	48.8	31.1	29.3	86.8	78.1
2038	54.8	47.9	30.6	28.9	85.4	76.8
2039	54.7	47.9	30.2	28.5	85.0	76.4
2040	54.7	47.8	29.8	28.1	84.5	75.9
2041	54.6	47.7	29.4	27.8	84.0	75.5
2042	55.4	48.5	29.0	27.4	84.4	75.9
2043	54.5	47.6	28.7	27.1	83.1	74.6
2044	54.4	47.5	28.3	26.7	82.7	74.2
2045	54.3	47.4	27.9	26.4	82.3	73.8
2046	54.3	47.4	27.6	26.1	81.8	73.4
2047	55.0	48.1	27.2	25.7	82.3	73.9
2048	54.1	47.2	26.9	25.4	81.0	72.7

\* Average generation levels plants are capable of achieving.



## 2024 Scheduled Outages - 25 Year Forecast

**Table 7**

Year	Plant #1		Plant #2
	Unit 1	Unit 2	Unit 4
	Scheduled	Scheduled	Scheduled
	Outages	Outages	Outages
	hrs	hrs	hrs
2024	1440	2184	0
2025	744	744	744
2026	744	744	744
2027	744	744	744
2028	744	744	1008
2029	1008	744	744
2030	744	1008	744
2031	744	744	744
2032	744	744	744
2033	744	744	1008
2034	1008	744	744
2035	744	1008	744
2036	744	744	744
2037	744	744	744
2038	744	744	1008
2039	1008	744	744
2040	744	1008	744
2041	744	744	744
2042	744	744	744
2043	744	744	1008
2044	1008	744	744
2045	744	1008	744
2046	744	744	744
2047	744	744	744
2048	744	744	1008

**2024 Generation - 5 Year Forecast**

**Table 8**

Date	Total Geo Facilities		Plant #1		Plant #2	
	Gross	Net	Gross	Net	Gross	Net
	Generation GWHr	Generation GWHr	Generation GWHr	Generation GWHr	Generation GWHr	Generation GWHr
Jan-24	39.3	37.3	0.0	0.0	39.3	37.3
Feb-24	37.5	35.6	0.0	0.0	37.5	35.6
Mar-24	39.9	38.2	1.2	1.2	38.7	37.1
Apr-24	66.7	57.6	30.8	23.9	35.9	33.7
May-24	56.1	51.8	19.0	17.0	37.1	34.8
Jun-24	54.8	50.6	18.9	17.0	35.9	33.7
Jul-24	48.5	44.7	18.9	16.9	29.6	27.8
Aug-24	73.3	65.9	43.7	38.1	29.6	27.8
Sep-24	70.9	63.7	42.3	36.9	28.6	26.8
Oct-24	73.2	65.8	43.7	38.1	29.5	27.7
Nov-24	70.8	63.7	42.3	36.9	28.5	26.8
Dec-24	73.1	65.7	43.7	38.1	29.4	27.6
Jan-25	73.1	65.7	43.7	38.1	29.4	27.6
Feb-25	65.9	59.3	39.4	34.4	26.5	24.9
Mar-25	36.7	34.9	0.0	0.0	36.7	34.9
Apr-25	70.6	63.5	42.2	36.9	28.3	26.6
May-25	43.7	38.1	43.7	38.1	0.0	0.0
Jun-25	70.5	63.4	42.2	36.9	28.2	26.5
Jul-25	72.8	65.5	43.6	38.1	29.2	27.4
Aug-25	72.8	65.4	43.6	38.1	29.1	27.3
Sep-25	70.4	63.3	42.2	36.9	28.1	26.4
Oct-25	72.7	65.3	43.6	38.1	29.0	27.3
Nov-25	70.3	63.2	42.2	36.8	28.1	26.3
Dec-25	72.6	65.3	43.6	38.1	29.0	27.2
Jan-26	72.5	65.2	43.6	38.1	28.9	27.2
Feb-26	65.5	58.9	39.4	34.4	26.1	24.5
Mar-26	36.3	34.5	0.0	0.0	36.3	34.5
Apr-26	70.1	63.0	42.2	36.8	27.9	26.2
May-26	43.6	38.0	43.6	38.0	0.0	0.0
Jun-26	70.0	62.9	42.2	36.8	27.8	26.1
Jul-26	72.3	65.0	43.6	38.0	28.7	26.9
Aug-26	72.2	64.9	43.6	38.0	28.7	26.9
Sep-26	69.9	62.8	42.2	36.8	27.7	26.0
Oct-26	72.2	64.9	43.6	38.0	28.6	26.8
Nov-26	69.8	62.7	42.2	36.8	27.6	25.9
Dec-26	72.1	64.8	43.6	38.0	28.5	26.8
Jan-27	72.0	64.7	43.6	38.0	28.5	26.7
Feb-27	65.0	58.4	39.3	34.3	25.7	24.1
Mar-27	35.8	34.1	0.0	0.0	35.8	34.1
Apr-27	69.6	62.5	42.1	36.8	27.5	25.8
May-27	43.5	38.0	43.5	38.0	0.0	0.0
Jun-27	69.5	62.5	42.1	36.8	27.4	25.7
Jul-27	71.8	64.5	43.5	38.0	28.3	26.5
Aug-27	71.7	64.5	43.5	38.0	28.2	26.5
Sep-27	69.4	62.4	42.1	36.7	27.3	25.6
Oct-27	71.7	64.4	43.5	38.0	28.1	26.4
Nov-27	69.3	62.3	42.1	36.7	27.2	25.5
Dec-27	71.6	64.3	43.5	38.0	28.1	26.4
Jan-28	71.5	64.3	43.5	37.9	28.0	26.3
Feb-28	66.9	60.1	40.7	35.5	26.2	24.6
Mar-28	35.4	33.7	0.0	0.0	35.4	33.7
Apr-28	69.1	62.1	42.1	36.7	27.0	25.4
May-28	58.3	52.7	58.3	52.7	0.0	0.0
Jun-28	62.7	56.5	49.2	43.9	13.5	12.7
Jul-28	71.3	64.1	43.5	37.9	27.8	26.1
Aug-28	71.3	64.0	43.5	37.9	27.8	26.1
Sep-28	68.9	61.9	42.1	36.7	26.9	25.2
Oct-28	71.2	63.9	43.5	37.9	27.7	26.0
Nov-28	68.8	61.8	42.0	36.7	26.8	25.2
Dec-28	71.1	63.9	43.4	37.9	27.7	26.0

# 2024 Generation Capacity - 5 Year Forecast\*

Table 9

Year	Plant #1		Plant #2		Total	
	Avg. Gross	Avg. Net	Avg. Gross	Avg. Net	Avg. Gross	Avg. Net
	Gen. MW	Gen. MW	Gen. MW	Gen. MW	Gen. MW	Gen. MW
Jan-24	0.0	0.0	52.8	50.2	52.8	50.2
Feb-24	0.0	0.0	53.9	51.2	53.9	51.2
Mar-24	1.7	1.7	52.1	49.8	53.8	51.5
Apr-24	37.9	35.2	50.1	47.0	88.0	82.3
May-24	44.1	39.5	50.1	47.0	94.2	86.5
Jun-24	44.1	39.4	50.1	47.0	94.2	86.4
Jul-24	44.0	39.4	40.0	37.5	84.0	76.9
Aug-24	59.0	51.5	40.0	37.5	99.0	89.0
Sep-24	59.0	51.5	39.9	37.4	98.9	89.0
Oct-24	59.0	51.5	39.8	37.4	98.9	88.9
Nov-24	59.0	51.5	39.8	37.3	98.8	88.9
Dec-24	59.0	51.5	39.7	37.3	98.7	88.8
Jan-25	59.0	51.5	39.7	37.2	98.7	88.7
Feb-25	59.0	51.5	39.6	37.2	98.6	88.7
Mar-25	0.0	0.0	49.6	47.2	49.6	47.2
Apr-25	59.0	51.5	39.5	37.1	98.5	88.6
May-25	59.0	51.5	0.0	0.0	59.0	51.5
Jun-25	59.0	51.5	39.4	37.0	98.4	88.5
Jul-25	59.0	51.5	39.4	37.0	98.3	88.4
Aug-25	58.9	51.4	39.3	36.9	98.3	88.4
Sep-25	58.9	51.4	39.3	36.9	98.2	88.3
Oct-25	58.9	51.4	39.2	36.8	98.2	88.3
Nov-25	58.9	51.4	39.2	36.8	98.1	88.2
Dec-25	58.9	51.4	39.1	36.7	98.0	88.1
Jan-26	58.9	51.4	39.1	36.7	98.0	88.1
Feb-26	58.9	51.4	39.0	36.6	97.9	88.0
Mar-26	0.0	0.0	49.0	46.6	49.0	46.6
Apr-26	58.9	51.4	38.9	36.5	97.8	87.9
May-26	58.9	51.4	0.0	0.0	58.9	51.4
Jun-26	58.9	51.4	38.8	36.4	97.7	87.8
Jul-26	58.9	51.4	38.8	36.4	97.6	87.8
Aug-26	58.9	51.4	38.7	36.3	97.6	87.7
Sep-26	58.9	51.4	38.7	36.3	97.5	87.7
Oct-26	58.9	51.4	38.6	36.3	97.5	87.6
Nov-26	58.9	51.4	38.6	36.2	97.4	87.6
Dec-26	58.8	51.3	38.5	36.2	97.4	87.5
Jan-27	58.8	51.3	38.5	36.1	97.3	87.5
Feb-27	58.8	51.3	38.4	36.1	97.2	87.4
Mar-27	0.0	0.0	48.4	46.0	48.4	46.0
Apr-27	58.8	51.3	38.3	36.0	97.1	87.3
May-27	58.8	51.3	0.0	0.0	58.8	51.3
Jun-27	58.8	51.3	38.2	35.9	97.0	87.2
Jul-27	58.8	51.3	38.2	35.8	97.0	87.1
Aug-27	58.8	51.3	38.1	35.8	96.9	87.1
Sep-27	58.8	51.3	38.1	35.8	96.9	87.0
Oct-27	58.8	51.3	38.0	35.7	96.8	87.0
Nov-27	58.8	51.3	38.0	35.7	96.7	86.9
Dec-27	58.8	51.3	37.9	35.6	96.7	86.9
Jan-28	58.8	51.3	37.9	35.6	96.6	86.8
Feb-28	58.8	51.3	37.8	35.5	96.6	86.8
Mar-28	0.0	0.0	47.8	45.5	47.8	45.5
Apr-28	58.7	51.2	37.7	35.4	96.5	86.7
May-28	78.7	71.2	0.0	0.0	78.7	71.2
Jun-28	68.7	61.2	37.6	35.3	106.4	96.6
Jul-28	58.7	51.2	37.6	35.3	96.3	86.5
Aug-28	58.7	51.2	37.5	35.3	96.3	86.5
Sep-28	58.7	51.2	37.5	35.2	96.2	86.4
Oct-28	58.7	51.2	37.4	35.2	96.1	86.4
Nov-28	58.7	51.2	37.4	35.1	96.1	86.3
Dec-28	58.7	51.2	37.4	35.1	96.0	86.3

\* Average generation levels plants are capable of achieving.

**TABLE 10**  
**2024 FORECAST OF GEOTHERMAL PRODUCTION AND**  
**INJECTION**

TIME STEP	DATE	STEAM	COND	WATER
		PROD. BLBS	INJ BLBS	INJ BLBS
1	2024	13.8	4.4	14.9
2	2025	13.7	4.4	14.9
3	2026	13.6	4.4	14.9
4	2027	13.5	4.3	14.8
5	2028	13.5	4.3	14.8
6	2029	13.4	4.3	14.8
7	2030	13.3	4.3	14.8
8	2031	13.2	4.2	14.7
9	2032	13.2	4.2	14.7
10	2033	13.1	4.2	14.7
11	2034	13.0	4.2	14.7
12	2035	13.0	4.1	14.7
13	2036	12.9	4.1	14.6
14	2037	12.8	4.1	14.6
15	2038	12.8	4.1	14.6
16	2039	12.7	4.1	14.6
17	2040	12.7	4.0	14.6
18	2041	12.6	4.0	14.5
19	2042	12.5	4.0	14.5
20	2043	12.5	4.0	14.5
21	2044	12.4	4.0	14.5
22	2045	12.4	4.0	14.5
23	2046	12.3	3.9	14.4
24	2047	12.3	3.9	14.4
25	2048	12.2	3.9	14.4

**NOTES :**

1. CUM. PRODUCTION AND INJECTION 1983-2020
 

737.5	Billion Lbs Steam
488.1	Billion Lbs Water
2. TOTAL WATER IS CONDENSATE + EFFLUENT + LAKE + POND
3. FUTURE STEAM PRODUCTION 2024-2048 =
 

323.3	Billion Lbs
-------	-------------
4. FUTURE WATER INJECTION 2020-2045 =
 

366.1	Billion Lbs
-------	-------------

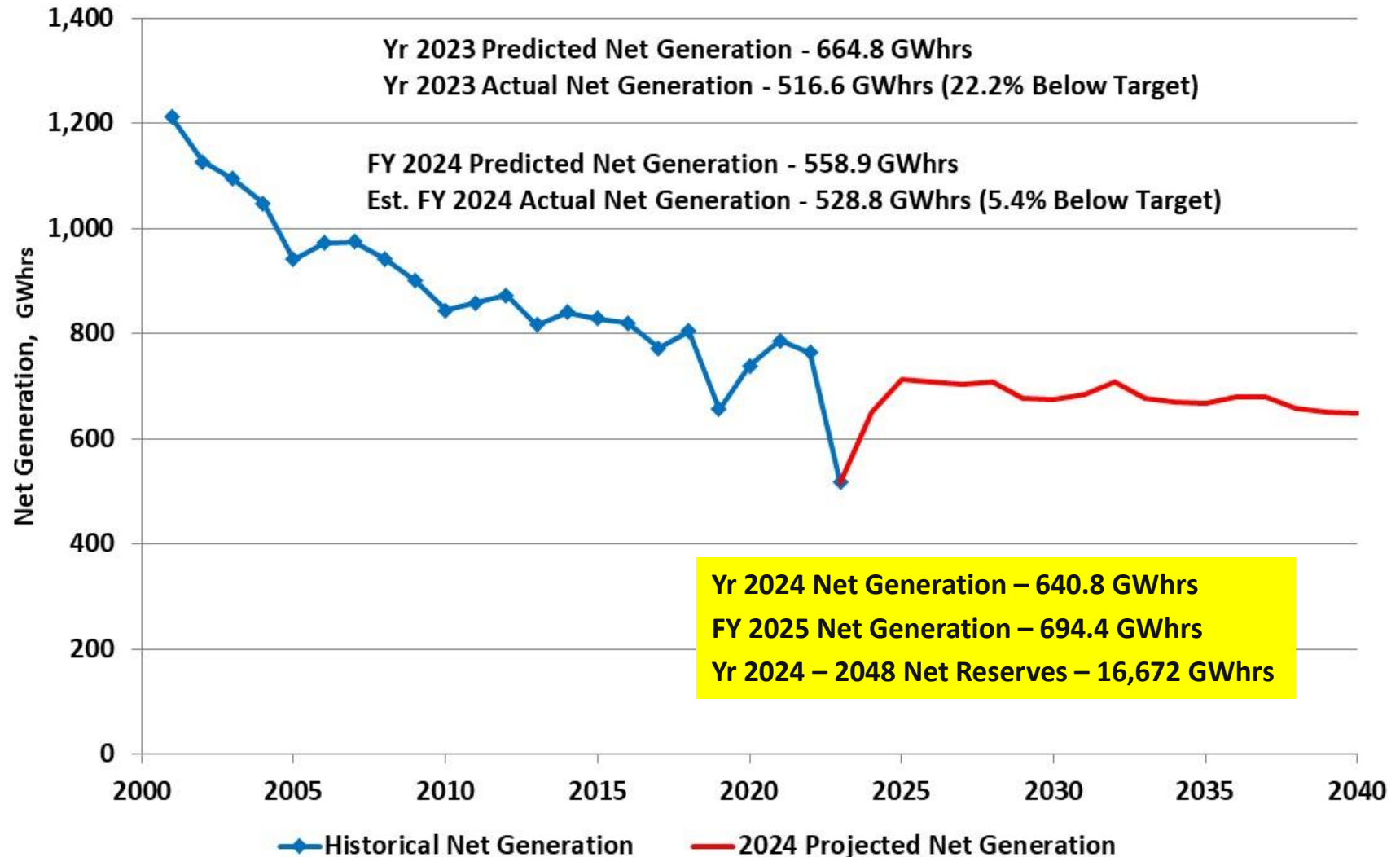


# **2024 Steam Field Operations & Forecast Report**

**Ed Voge**  
Reservoir Engineer, Geothermal Facility  
June 5, 2024

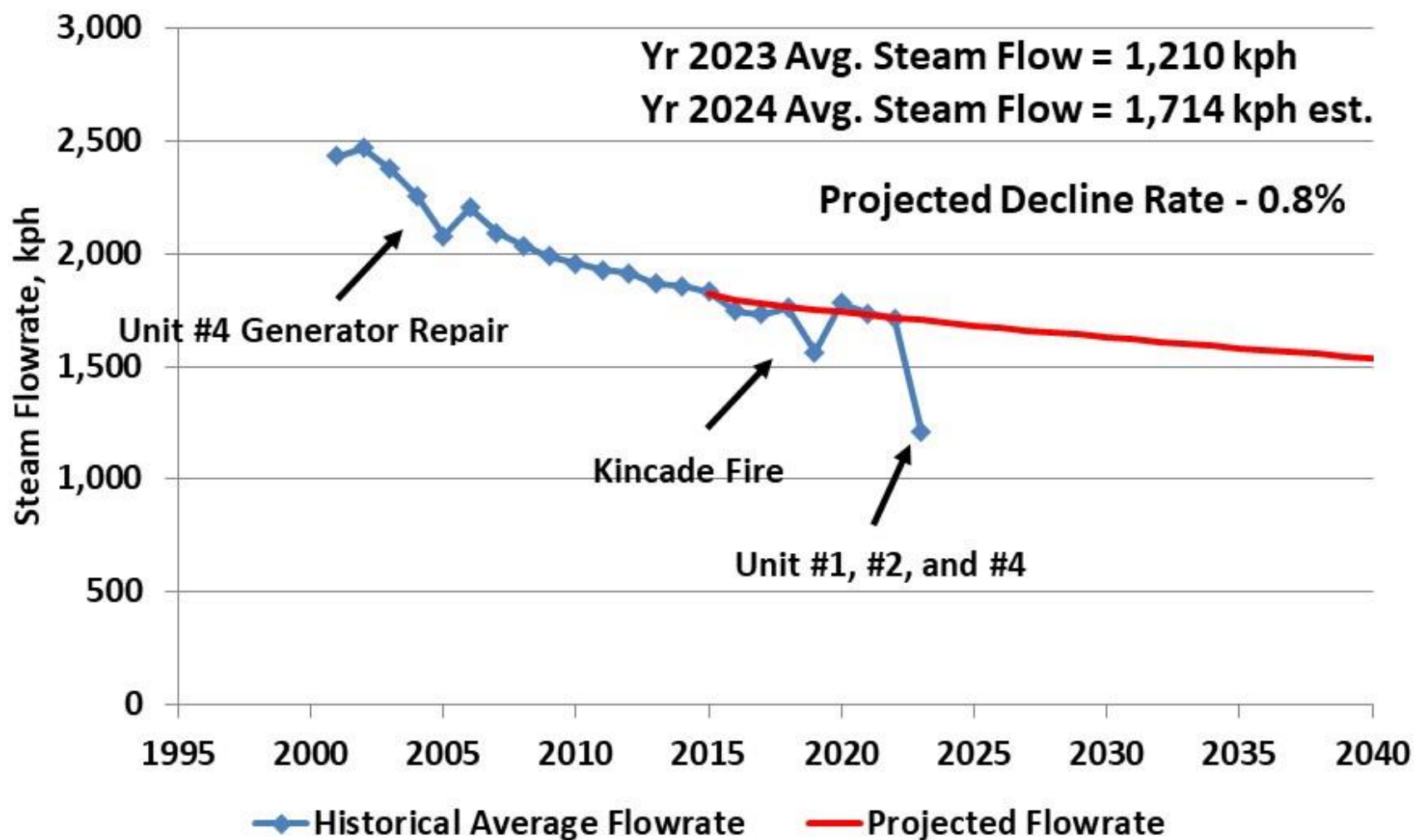
## Historical and Projected Net Generation Combined NCPA Plants #1 & #2

Figure 15



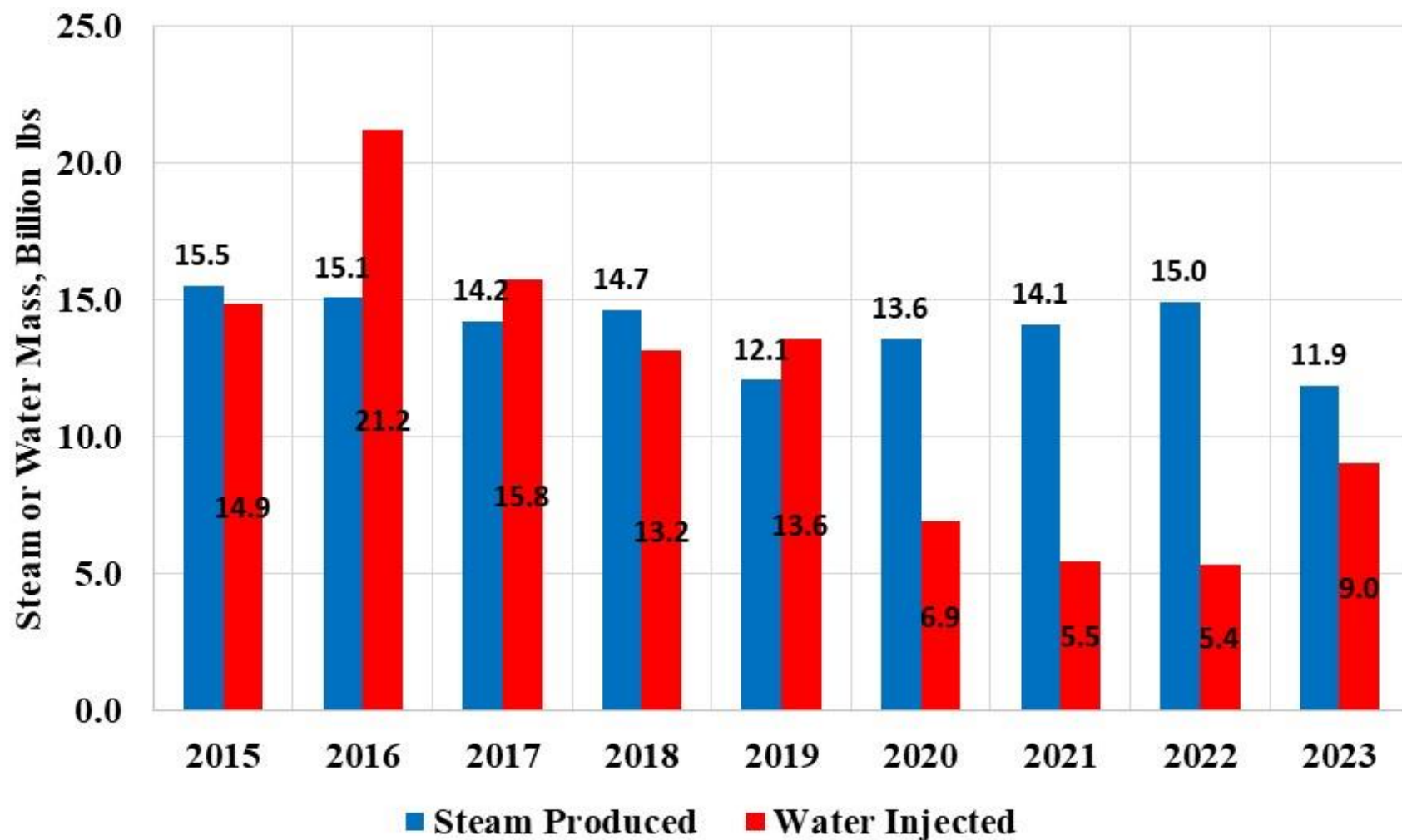
## Historical and Projected Steam Flowrates Combined NCPA Plant #1 & #2

Figure 13



## Historical NCPA Steam Production and Water Injection Levels

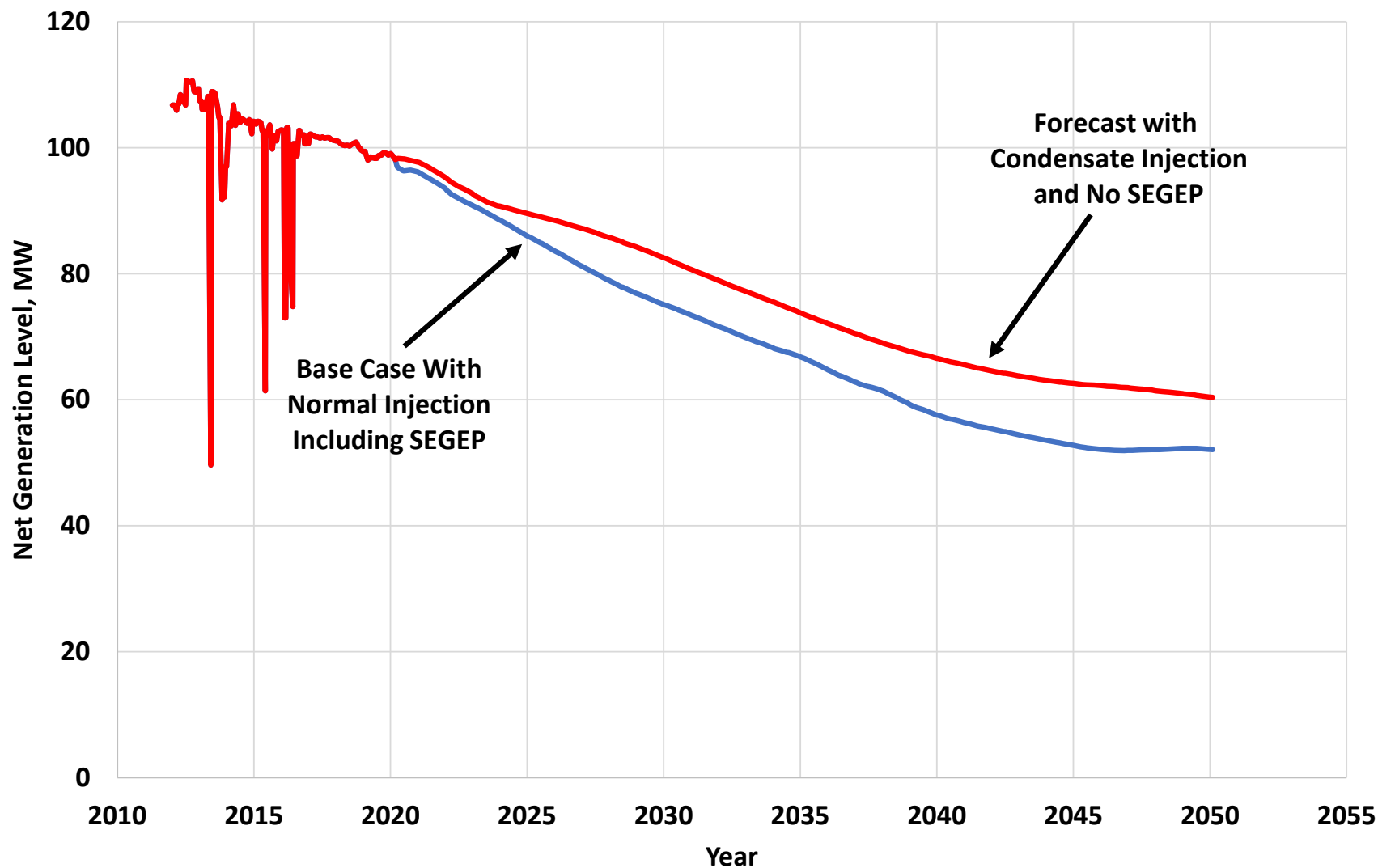
### Figure 2





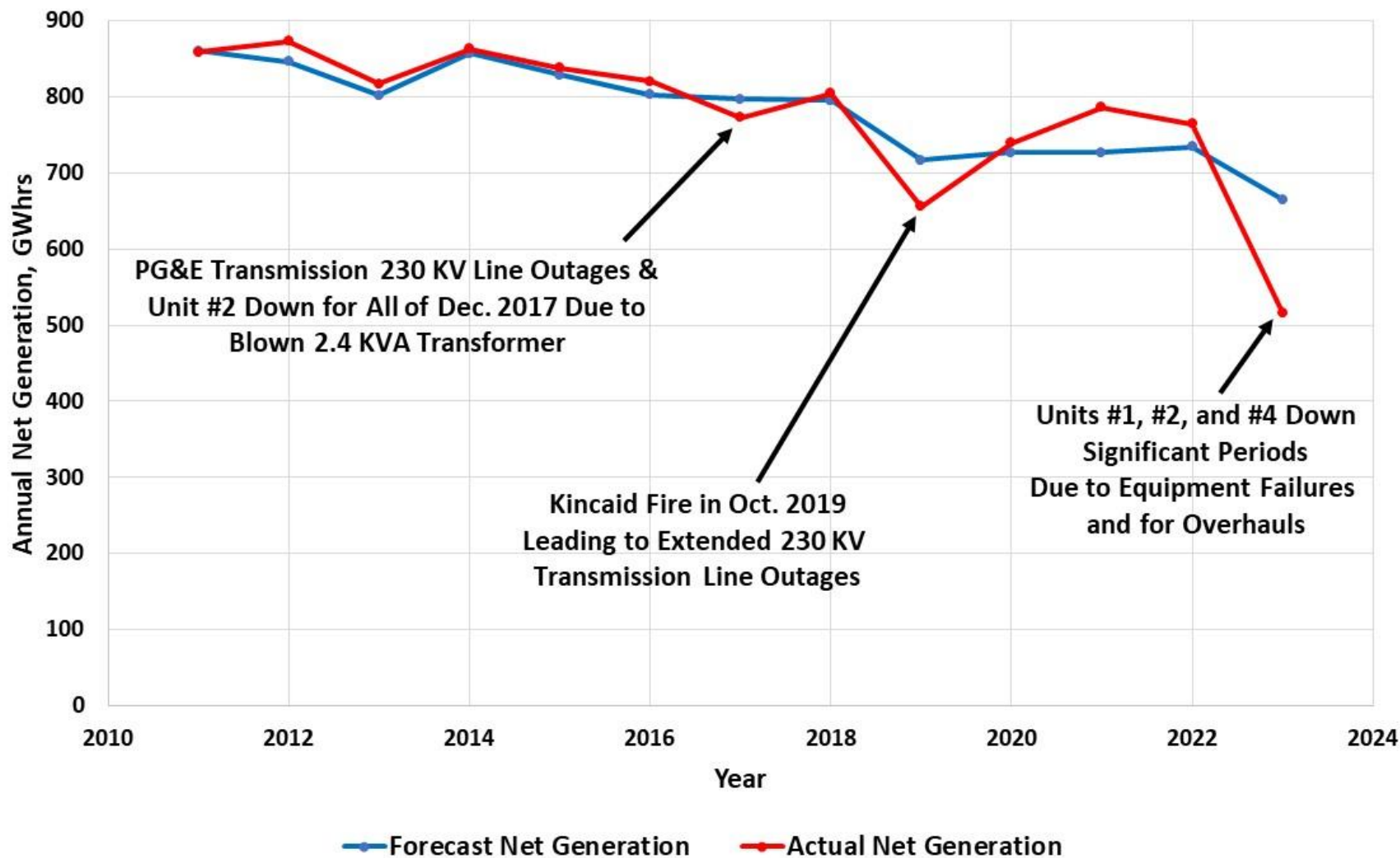
# Geothermex Simulation Projections

March 2020 - December 2050



## Comparison of Forecast & Actual Net Generation Steam Field Operations Reports, Yrs 2011 - 2023

Figure 1



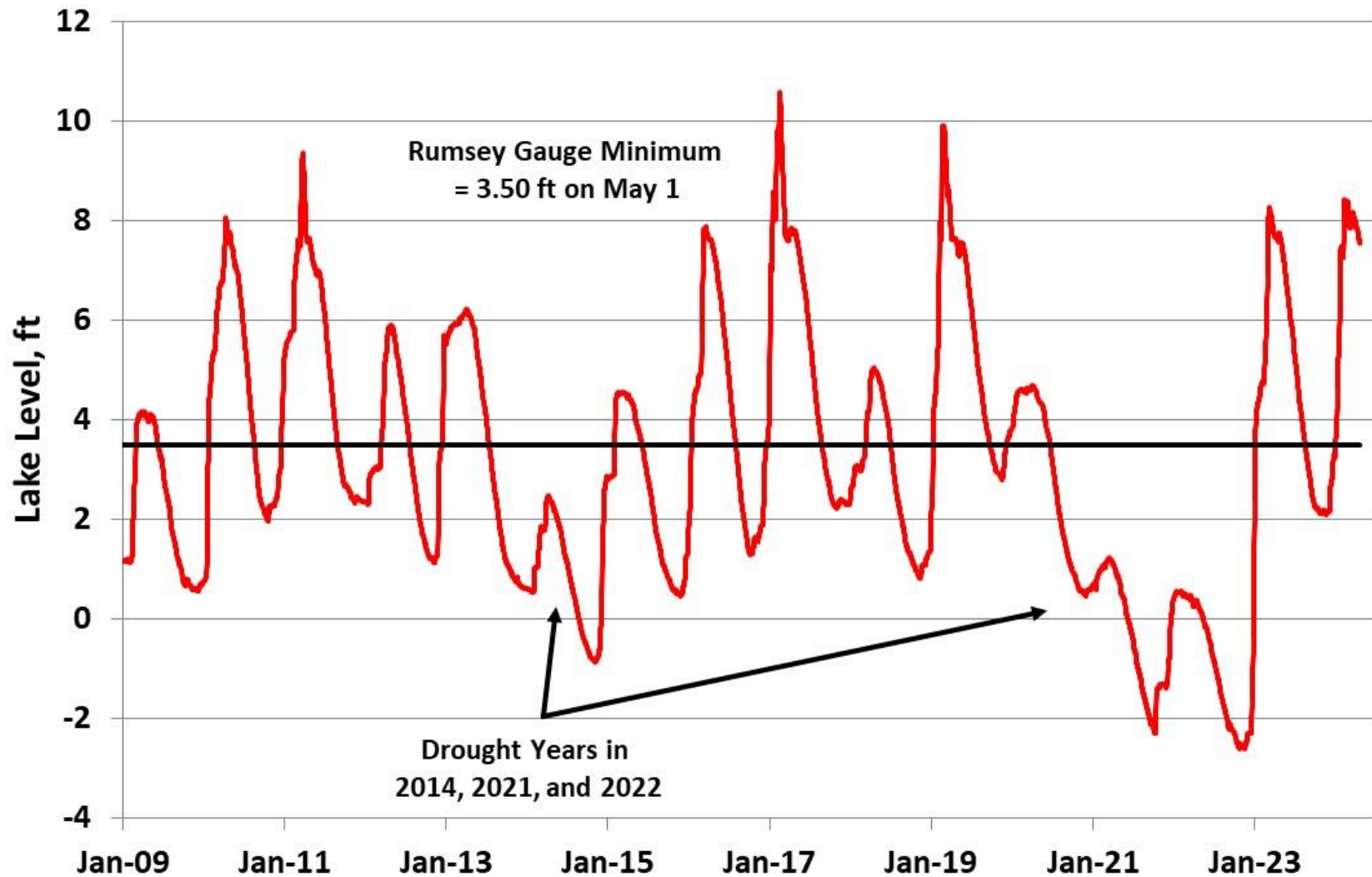
## Lake County Wastewater Recycling System

A partnership of  
**Northern California Power Agency**  
**Lake County Sanitation District**  
**Calpine Corporation**

- First phase operational 1997; second phase 2001
- Communities supplying effluent: 10
- Total countywide effluent recycled: 85%
- Effluent pipeline length: 50 miles
- Average flow rate: 5800 gpm
- Solar powered treatment & pumping: 3.4 MW
- Effluent-based geothermal power: 100 MW
- Avoided global warming CO<sub>2</sub> emissions: 8 billion lbs. (Jan. 08)



**Clear Lake Water Level - USGS Rumsey Gauge**  
**2009 - Present**  
**Figure 8**

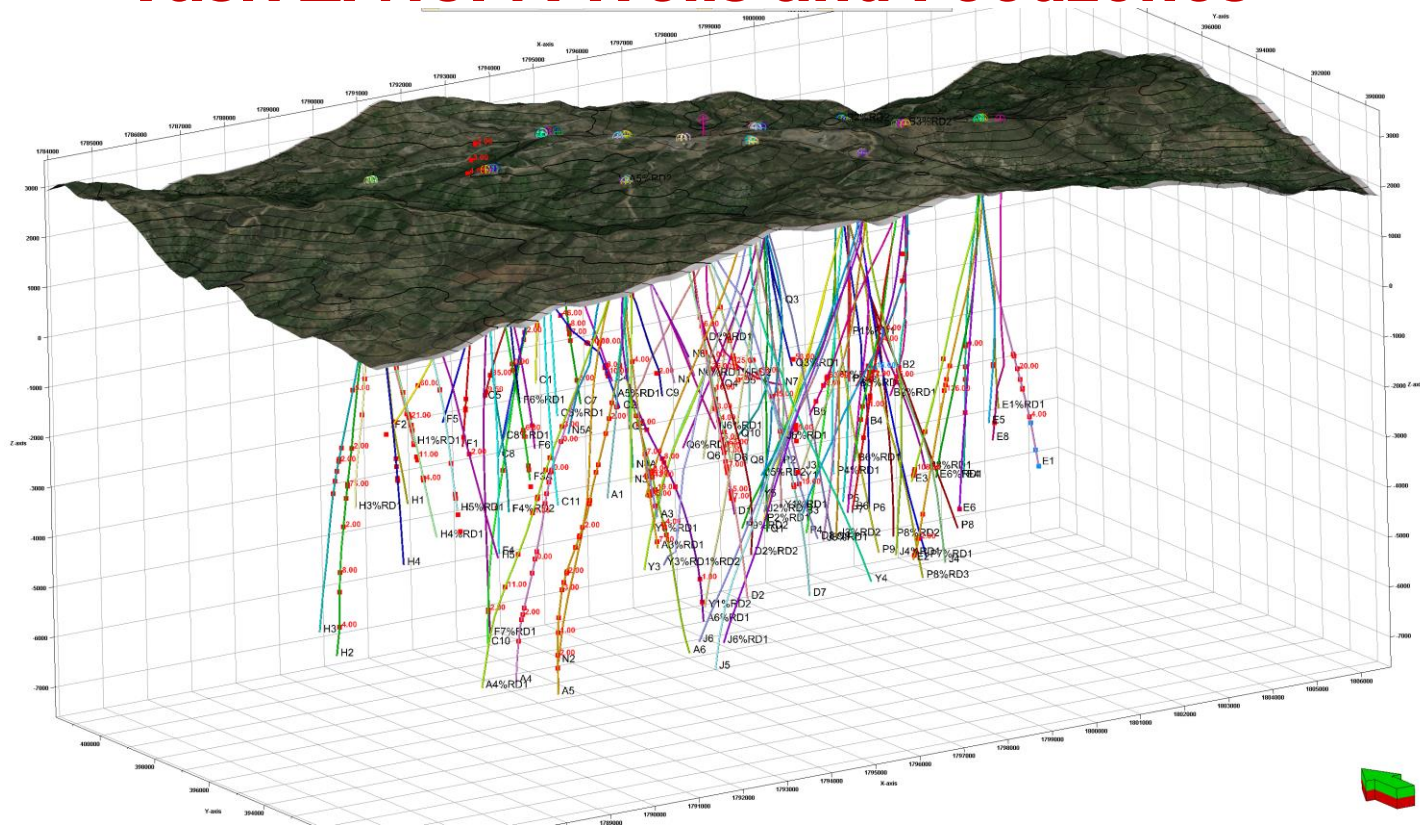


## Geothermex Project Scope

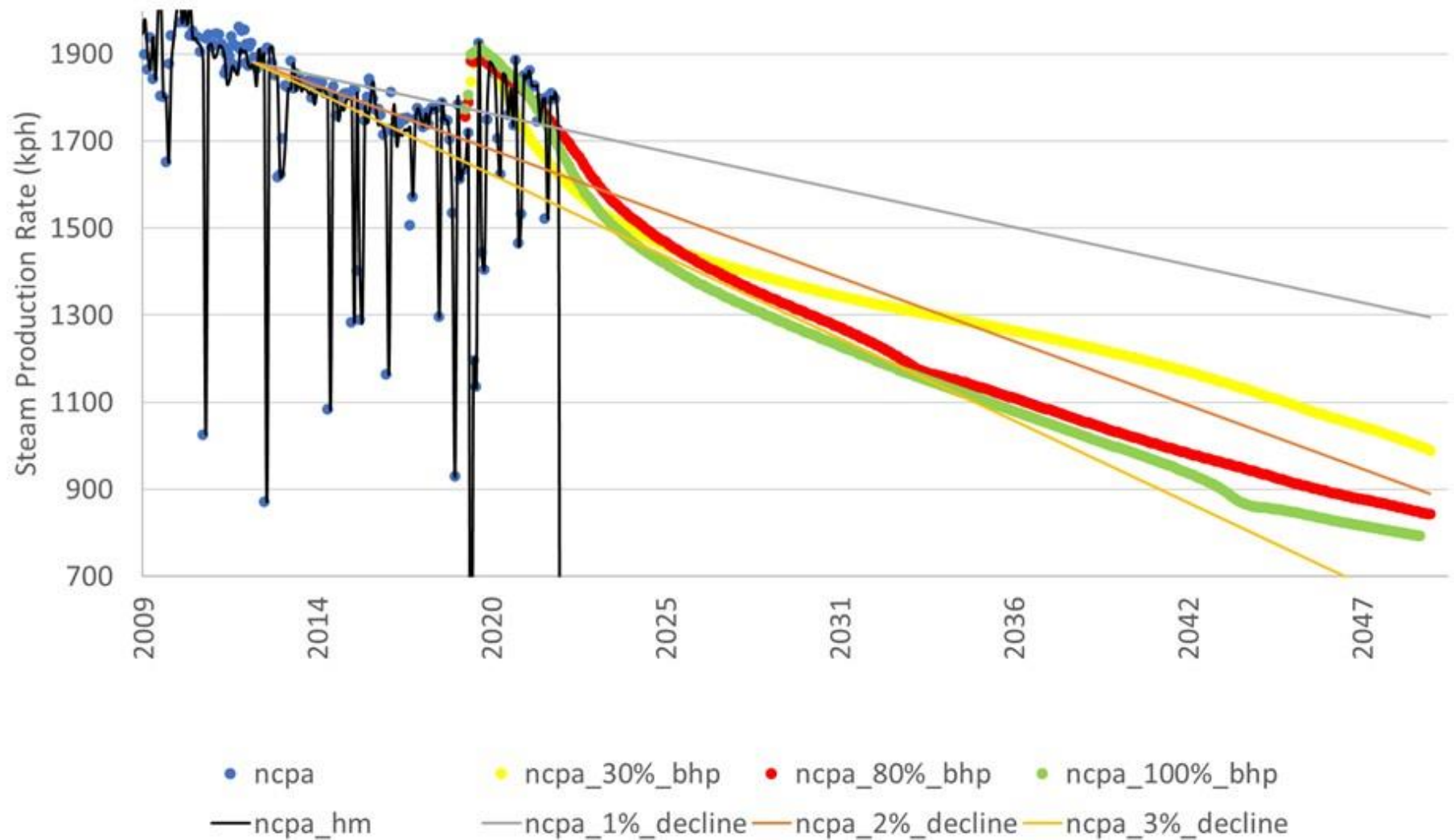
- Develop a numerical reservoir model of The Geysers geothermal field using the ECLIPSE simulation software, with emphasis placed on the NCPA leasehold.
  - **Essence of the previous model** developed by GeothermEx in 1990 (updated in 2009 and 2021)
  - More **advanced modeling capabilities** offered by ECLIPSE (complete thermodynamic properties of water including superheated steam condition)
  - **Higher model resolution** enabled by the parallel processing power of modern simulators.
  - Marked improvement on **visualization, field management**, caprock/basement geological representation, well data repository (completions, feedzone, trajectory, production history).
- Major milestones:
  - Task 1: Prepare wells and resource data for petrel model (Oct-2022)
  - Task 2: History matching and model calibration (mid-April)
  - Task 3: Reservoir forecast (8 scenarios) (May)
  - Task 4: Formal report (May)



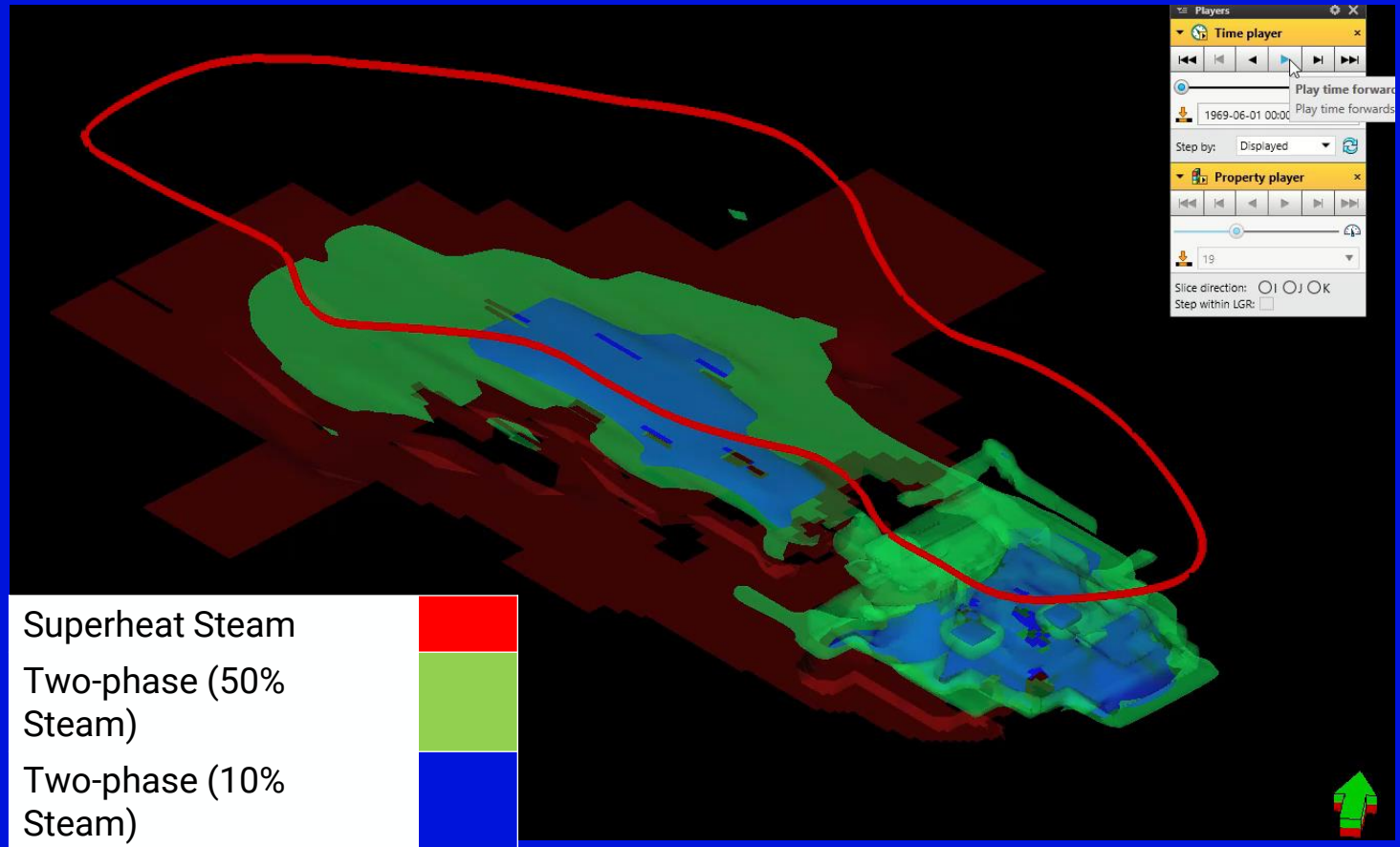
# Task 1: NCPA Wells and Feedzones



### NCPA Production (kph)- BHP Control Forecasts

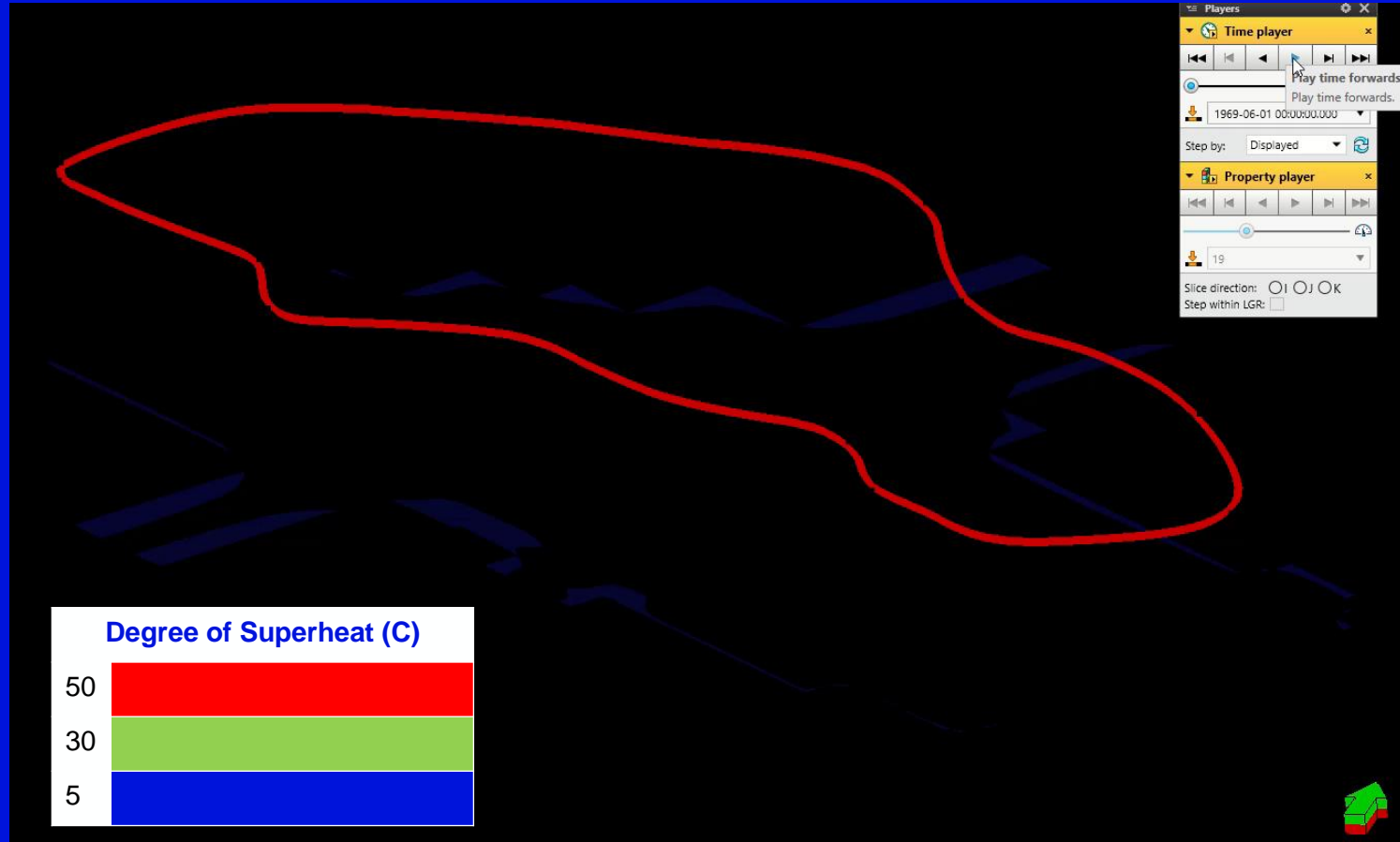


# Steam Saturation Evolution

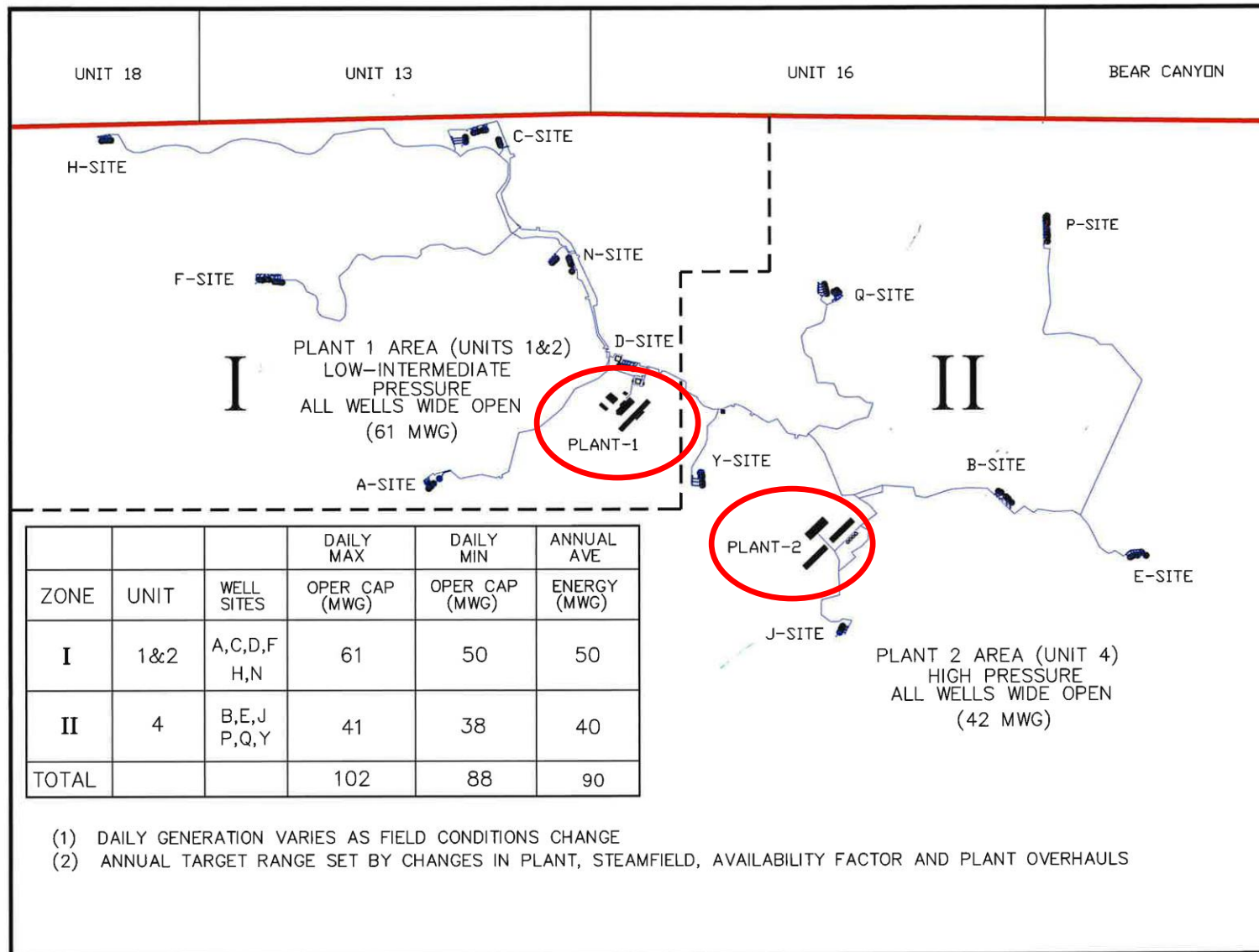




# Superheat Evolution



**Figure 17. GEOTHERMAL OPERATIONAL PLAN 2024**

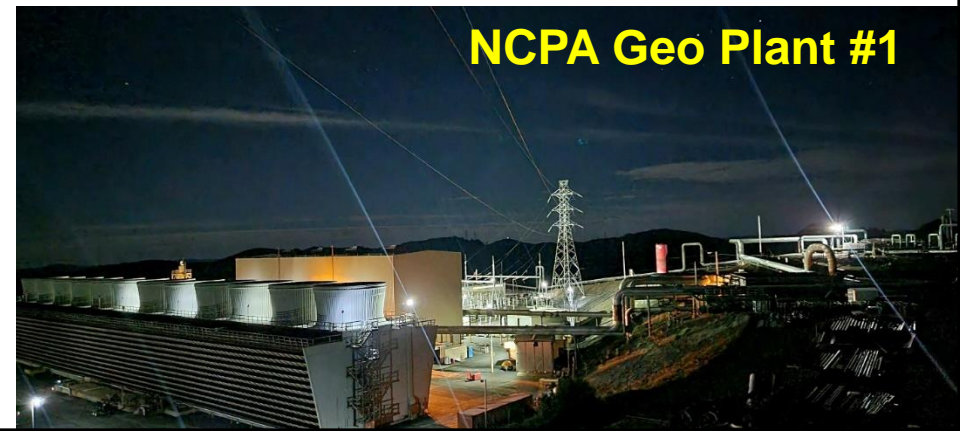


## 2024 Geo Facility Operating Protocol

- Two Zone, Baseload Operation with option to curtailment for
  - Negative Day Ahead pricing at least \$25 per MWhr and Net of the Renewable Energy Credit (REC) value
  - Level of Curtailment – 45 MW
    - Level to be adjusted based on field response
  - Duration to be four hours or more
  - Limit cycling to once per day
  - Operating Protocol to remain in effect until replaced by the Commission.

## Summary

- 2024 Net Generation – 640.8 GWhrs
  - FY2025 Net Generation – 694.4 GWhrs
- Reservoir
  - Steam Decline Rate = 0.8%
  - Water Injection – 76% Mass Replacement
- Numerical Model
  - Increased injection adversely affects steam production under current injection system.
  - Need to modify injection strategy
    - Spread water over larger area
    - Shallower depths



## Proposal

Staff is seeking a recommendation from the Facilities Committee for Commission approval of the 2024 Steam Field Operations and Forecast Report dated June 2024 as the Geothermal Operating Protocol effective July 1, 2024. This Operating Protocol is to remain in effect until replaced by the Commission.



**F-Site Well Pad**



# Commission Staff Report – *DRAFT*

**COMMISSION MEETING DATE:** June 27, 2024

**SUBJECT:** Integrated Engineers and Contractor Corporation dba IEC Corporation – Five Year Multi-Task Professional Services Agreement for Consulting Services Related to Renewable Energy, Power Generation, Power Delivery, and Energy Storage; Applicable to the following: All Northern California Power Agency (NCPA) Facilities, NCPA Members, Southern California Public Power Authority (SCPPA), and SCPPA Members

**AGENDA CATEGORY:** Consent

<b>FROM:</b>	Michael DeBortoli	<b>METHOD OF SELECTION:</b>
	Assistant General Manager	N/A
<b>Division:</b>	Generation Services	<i>If other, please describe:</i>
<b>Department:</b>	Combustion Turbines	

<b>IMPACTED MEMBERS:</b>		
All Members	<input checked="" type="checkbox"/>	
Alameda Municipal Power	<input type="checkbox"/>	
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	
City of Biggs	<input type="checkbox"/>	
City of Gridley	<input type="checkbox"/>	
City of Healdsburg	<input type="checkbox"/>	
City of Lodi	<input type="checkbox"/>	
City of Lompoc	<input type="checkbox"/>	
City of Palo Alto	<input type="checkbox"/>	
City of Redding	<input type="checkbox"/>	
City of Roseville	<input type="checkbox"/>	
City of Santa Clara	<input type="checkbox"/>	
City of Shasta Lake	<input type="checkbox"/>	
City of Ukiah	<input type="checkbox"/>	
Plumas-Sierra REC	<input type="checkbox"/>	
Port of Oakland	<input type="checkbox"/>	
Truckee Donner PUD	<input type="checkbox"/>	
Other	<input type="checkbox"/>	
<i>If other, please specify</i>		
<hr/>		
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## **RECOMMENDATION:**

Approve Resolution 24-XX authorizing the General Manager or his designee to enter into a Multi-Task Professional Services Agreement with Integrated Engineers and Contractor Corporation dba IEC Corporation for consulting services related to renewable energy, power generation, power delivery, and energy storage, with any non-substantial changes recommended and approved by the NCPA General Counsel, which shall not exceed \$1,000,000 over five years, for use at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA and SCPPA Members.

## **BACKGROUND:**

Consulting services related to renewable energy, power generation, power delivery, and energy storage are required from time to time for the operation and maintenance of facilities owned and/or operated by NCPA, NCPA Members, by SCPPA and SCPPA Members. NCPA desires to enter into this agreement so established terms and conditions are in place should this vendor be the successful bidder on future purchases. NCPA has agreements in place for similar services with Leidos Engineering, LLC, Mead & hunt, Inc., Provost & Pritchard Engineering Group, Inc., and Power Engineers, Inc.

## **FISCAL IMPACT:**

Upon execution, the total cost of the agreement is not to exceed \$1,000,000 over five years. Purchase orders referencing the terms and conditions of the agreement will be issued following NCPA procurement policies and procedures.

## **SELECTION PROCESS:**

This enabling agreement does not commit NCPA to any expenditure of funds. At the time services are needed, NCPA will bid the specific scope of work consistent with NCPA procurement policies and procedures. NCPA seeks bids from qualified providers as required. Bids are awarded to the vendor providing the best overall value to NCPA. NCPA will issue purchase orders based on cost and availability of the services needed at the time the service is required.

## **ENVIRONMENTAL ANALYSIS:**

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 of the California Environmental Quality Act. No environmental review is necessary.

## **COMMITTEE REVIEW:**

Pending Committee review and approval.

**AFTER FACILITIES APPROVAL:** On June 5, 2024 the Facilities Committee reviewed and endorsed the recommendation above for Commission approval.

**AFTER LEC PPC APPROVAL:** On June 10, 2024 the Lodi Energy Center Project Participant Committee reviewed and approved the recommendation above for Commission approval.

Respectfully submitted,

RANDY S. HOWARD  
General Manager

Attachments (2):

- Resolution 24-XX
- Multi-Task Professional Services Agreement with Integrated Engineers and Contractors Corporation dba IEC Corporation



**RESOLUTION 24-XX**

**RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY  
APPROVING A MULTI-TASK PROFESSIONAL SERVICES AGREEMENT WITH  
INTEGRATED ENGINEERS AND CONTRACTORS CORPORATION DBA IEC  
CORPORATION**

**(reference Staff Report XXX:24)**

WHEREAS, consulting services related to renewable energy, power generation, power delivery, and energy storage are required from time to time for the operation and maintenance of facilities owned and/or operated by the Northern California Power Agency (NCPA), NCPA Members, by the Southern California Public Power Authority (SCPPA), and SCPPA Members; and

WHEREAS, Integrated Engineers and Contractors Corporation dba IEC Corporation is a provider of these services; and

WHEREAS, the NCPA Commission has reviewed the Multi-Task Professional Services Agreement with Integrated Engineers and Contractors Corporation dba IEC Corporation to provide such services as needed at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA, and SCPPA Members; and

WHEREAS, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency authorizes the General Manager or his designee to enter into said Multi-Task Professional Services Agreement, with any non-substantial changes as approved by the NCPA General Counsel, which shall not exceed \$1,000,000 over five years, for use at any facilities owned and/or operated by NCPA, NCPA Members, by SCPPA, and SCPPA Members.

PASSED, ADOPTED and APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2024 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

\_\_\_\_\_  
JERRY SERVENTI  
CHAIR

ATTEST:

\_\_\_\_\_  
CARRIE POLLO  
ASSISTANT SECRETARY



## **MULTI-TASK PROFESSIONAL SERVICES AGREEMENT BETWEEN THE NORTHERN CALIFORNIA POWER AGENCY AND INTEGRATED ENGINEERS AND CONTRACTORS CORPORATION DBA IEC CORPORATION**

This Professional Services Agreement ("Agreement") is made by and between the Northern California Power Agency, a joint powers agency with its main office located at 651 Commerce Drive, Roseville, CA 95678-6420 ("Agency") and Integrated Engineers and Contractors Corporation dba IEC Corporation, a corporation with its office located at 8775 Folsom Blvd., Ste 110, Sacramento, CA 95826 ("Consultant") (together sometimes referred to as the "Parties") as of \_\_\_\_\_, 2024 ("Effective Date") in Roseville, California.

**Section 1. SERVICES.** Subject to the terms and conditions set forth in this Agreement, Consultant shall provide to Agency the services described in the Scope of Services attached hereto as Exhibit A and incorporated herein ("Services"), at the time and place and in the manner specified therein.

- 1.1 Term of Agreement.** The term of this Agreement shall begin on the Effective Date and shall end when Consultant completes the Services, or no later than five (5) years from the date this Agreement was signed by Agency, whichever is shorter.
- 1.2 Standard of Performance.** Consultant shall perform the Services in the manner and according to the standards observed by a competent practitioner of the profession in which Consultant is engaged and for which Consultant is providing the Services. Consultant represents that it is licensed, qualified and experienced to provide the Services set forth herein.
- 1.3 Assignment of Personnel.** Consultant shall assign only competent personnel to perform the Services. In the event that Agency, in its sole discretion, at any time during the term of this Agreement, requests the reassignment of any such personnel, Consultant shall, immediately upon receiving written notice from Agency of such request, reassign such personnel.
- 1.4 Services Provided.** Services provided under this Agreement by Consultant may include Services directly to the Agency or, as requested by the Agency and consistent with the terms of this Agreement, to Agency members, Southern California Public Power Authority ("SCPPA") or SCPPA members.
- 1.5 Request for Services.** At such time that Agency determines to use Consultant's Services under this Agreement, Agency shall issue a Purchase Order. The Purchase Order shall identify the specific services to be performed ("Requested Services"), may include a not-to-exceed monetary cap on Requested Services and expenditures authorized by that Purchase Order, and a time by which the Requested Services shall be completed. Consultant shall have seven calendar days from the date of the Agency's issuance of the Purchase Order in which to respond in writing that Consultant chooses not to perform the Requested

Services. If Consultant agrees to perform the Requested Services, begins to perform the Requested Services or does not respond within the seven day period specified, then Consultant will have agreed to perform the Requested Services on the terms set forth in the Purchase Order, this Agreement and its Exhibits.

**Section 2.** **COMPENSATION.** Agency hereby agrees to pay Consultant an amount **NOT TO EXCEED ONE MILLION** dollars (\$1,000,000) for the Services, which shall include all fees, costs, expenses and other reimbursables, as set forth in Consultant's fee schedule, attached hereto and incorporated herein as Exhibit B. This dollar amount is not a guarantee that Agency will pay that full amount to the Consultant, but is merely a limit of potential Agency expenditures under this Agreement.

**2.1** **Invoices.** Consultant shall submit invoices, not more often than once a month during the term of this Agreement, based on the cost for services performed and reimbursable costs incurred prior to the invoice date. Invoices shall contain the following information:

- The beginning and ending dates of the billing period;
- Services performed;
- The Purchase Order number authorizing the Services;
- At Agency's option, the total number of hours of work performed under the Agreement by Consultant and each employee, agent, and subcontractor of Consultant performing services hereunder; and
- At Agency's option, when the Consultant's Scope of Work identifies tasks, for each work item in each task, a copy of the applicable time entries showing the name of the person doing the work, the hours spent by each person, a brief description of the work, and each reimbursable expense, with supporting documentation, to Agency's reasonable satisfaction.

Invoices shall be sent to:

Northern California Power Agency  
651 Commerce Drive  
Roseville, California 95678  
Attn: Accounts Payable  
[AcctsPayable@ncpa.com](mailto:AcctsPayable@ncpa.com)

**2.2** **Monthly Payment.** Agency shall make monthly payments, based on invoices received, for services satisfactorily performed, and for authorized reimbursable costs incurred. Agency shall have thirty (30) days from the receipt of an invoice that complies with all of the requirements above to pay Consultant.

**2.3** **Payment of Taxes.** Consultant is solely responsible for the payment of all federal, state and local taxes, including employment taxes, incurred under this Agreement.

- 2.4 Authorization to Perform Services.** The Consultant is not authorized to perform any Services or incur any costs whatsoever under the terms of this Agreement until receipt of written authorization from the Contract Administrator.
- 2.5 Timing for Submittal of Final Invoice.** Consultant shall have ninety (90) days after completion of its Services to submit its final invoice. In the event Consultant fails to submit an invoice to Agency for any amounts due within the ninety (90) day period, Consultant is deemed to have waived its right to collect its final payment from Agency.

**Section 3. FACILITIES AND EQUIPMENT.** Except as set forth herein, Consultant shall, at its sole cost and expense, provide all facilities and equipment that may be necessary to perform the Services.

**Section 4. INSURANCE REQUIREMENTS.** Before beginning any work under this Agreement, Consultant, at its own cost and expense, shall procure the types and amounts of insurance listed below and shall maintain the types and amounts of insurance listed below for the period covered by this Agreement.

- 4.1 Workers' Compensation.** If Consultant employs any person, Consultant shall maintain Statutory Workers' Compensation Insurance and Employer's Liability Insurance for any and all persons employed directly or indirectly by Consultant with limits of not less than one million dollars (\$1,000,000.00) per accident.
- 4.2 Commercial General and Automobile Liability Insurance.**
- 4.2.1 Commercial General Insurance.** Consultant shall maintain commercial general liability insurance for the term of this Agreement, including products liability, covering any loss or liability, including the cost of defense of any action, for bodily injury, death, personal injury and broad form property damage which may arise out of the operations of Consultant. The policy shall provide a minimum limit of \$2,000,000 per occurrence/\$2,000,000 aggregate. Commercial general coverage shall be at least as broad as ISO Commercial General Liability form CG 0001 (current edition) on "an occurrence" basis covering comprehensive General Liability, with a self-insured retention or deductible of no more than \$100,000. No endorsement shall be attached limiting the coverage.
- 4.2.2 Automobile Liability.** Consultant shall maintain automobile liability insurance form CA 0001 (current edition) for the term of this Agreement covering any loss or liability, including the cost of defense of any action, arising from the operation, maintenance or use of any vehicle (symbol 1), whether or not owned by the Consultant, on or off Agency premises. The policy shall provide a minimum limit of \$2,000,000 per each accident, with a self-insured retention or deductible of no more than \$100,000. This insurance shall provide contractual liability covering all motor vehicles and

mobile equipment to the extent coverage may be excluded from general liability insurance.

**4.2.3 General Liability/Umbrella Insurance.** The coverage amounts set forth above may be met by a combination of underlying and umbrella policies as long as in combination the limits equal or exceed those stated.

**4.3 Professional Liability Insurance.** Consultant shall maintain professional liability insurance appropriate to Consultant's profession performing work in connection with this Agreement in an amount not less than one million dollars (\$1,000,000) and two million dollars (\$2,000,000) aggregate covering the Consultant's errors and omissions. Any deductible or self-insured retention shall not exceed two hundred fifty thousand dollars (\$250,000) per claim. Such insurance shall be on a "claims-made" basis, subject to the following conditions: (1) the retroactive date of the policy shall be on or before the Effective Date of this Agreement; (2) the policy shall be maintained for at least five (5) years after completion of the Services and, if requested by Agency, evidence of coverage shall be provided during this period; and (3) if, within five (5) years of completion of the Services, coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the Effective Date of this Agreement, Consultant shall purchase "extended reporting" coverage for a minimum of five (5) years after completion of the Services and, if requested by Agency, provide evidence of coverage during this period.

**4.4 All Policies Requirements.**

**4.4.1 Verification of coverage.** Prior to beginning any work under this Agreement, Consultant shall provide Agency with (1) a Certificate of Insurance that demonstrates compliance with all applicable insurance provisions contained herein and (2) policy endorsements to the policies referenced in Section 4.2, adding the Agency as an additional insured and declaring such insurance primary in regard to work performed pursuant to this Agreement.

**4.4.2 Notice of Reduction in or Cancellation of Coverage.** Consultant shall provide at least thirty (30) days prior written notice to Agency of any reduction in scope or amount, cancellation, or modification adverse to Agency of the policies referenced in Section 4.

**4.4.3 Higher Limits.** If Consultant maintains higher limits than the minimums specified herein, the Agency shall be entitled to coverage for the higher limits maintained by the Consultant.

**4.4.4 Additional Certificates and Endorsements.** If Consultant provides services to Agency members, SCPPA and/or SCPPA members, Consultant shall provide certificates of insurance and policy endorsements, as referenced in Section 4.4.1, naming the specific

Agency member, SCPPA or Agency member for which the Services are to be performed.

**4.4.5 Waiver of Subrogation.** Consultant agrees to waive subrogation which any insurer of Consultant may acquire from Consultant by virtue of the payment of any loss. Consultant agrees to obtain any endorsement that may be necessary to effect this waiver of subrogation. In addition, the Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of Agency for all work performed by Consultant, its employees, agents and subcontractors.

**4.5 Consultant's Obligation.** Consultant shall be solely responsible for ensuring that all equipment, vehicles and other items utilized in the performance of Services are operated, provided or otherwise utilized in a manner that ensures they are and remain covered by the policies referenced in Section 4 during this Agreement. Consultant shall also ensure that all workers involved in the provision of Services are properly classified as employees, agents or independent contractors and are and remain covered by any and all workers' compensation insurance required by applicable law during this Agreement.

## **Section 5. INDEMNIFICATION AND CONSULTANT'S RESPONSIBILITIES.**

**5.1 Effect of Insurance.** Agency's acceptance of insurance certificates and endorsements required under this Agreement does not relieve Consultant from liability under this indemnification and hold harmless clause. This indemnification and hold harmless clause shall apply to any damages or claims for damages whether or not such insurance policies shall have been determined to apply. By execution of this Agreement, Consultant acknowledges and agrees to the provisions of this Section and that it is a material element of consideration.

**5.2 Scope.** Consultant shall indemnify, defend with counsel reasonably acceptable to the Agency, and hold harmless the Agency and its officials, commissioners, officers, employees, and volunteers from and against any and all claims to the extent that the claims arise out of, pertain to or relate to the negligence, recklessness or willful misconduct of the Consultant in its performance of Services under this Agreement. Consultant shall bear all losses, costs, damages, expense and liability of every kind, nature and description to the extent that they arise out of, pertain to, or relate to such claims, whether directly or indirectly ("Liabilities"). Such obligations to defend, hold harmless and indemnify the Agency shall not apply to the extent that such Liabilities are caused by the negligence, active negligence, or willful misconduct of the Agency.

## **Section 6. STATUS OF CONSULTANT.**

**6.1 Independent Contractor.** Consultant is an independent contractor and not an employee of Agency. Agency shall have the right to control Consultant only insofar as the results of Consultant's Services and assignment of personnel

pursuant to Section 1; otherwise, Agency shall not have the right to control the means by which Consultant accomplishes Services rendered pursuant to this Agreement. Notwithstanding any other Agency, state, or federal policy, rule, regulation, law, or ordinance to the contrary, Consultant and any of its employees, agents, and subcontractors providing services under this Agreement shall not qualify for or become entitled to, and hereby agree to waive any and all claims to, any compensation, benefit, or any incident of employment by Agency, including but not limited to eligibility to enroll in the California Public Employees Retirement System (PERS) as an employee of Agency and entitlement to any contribution to be paid by Agency for employer contributions and/or employee contributions for PERS benefits.

Consultant shall indemnify, defend, and hold harmless Agency for the payment of any employee and/or employer contributions for PERS benefits on behalf of Consultant or its employees, agents, or subcontractors, as well as for the payment of any penalties and interest on such contributions, which would otherwise be the responsibility of Agency. Consultant and Agency acknowledge and agree that compensation paid by Agency to Consultant under this Agreement is based upon Consultant's estimated costs of providing the Services, including salaries and benefits of employees, agents and subcontractors of Consultant.

Consultant shall indemnify, defend, and hold harmless Agency from any lawsuit, administrative action, or other claim for penalties, losses, costs, damages, expense and liability of every kind, nature and description that arise out of, pertain to, or relate to such claims, whether directly or indirectly, due to Consultant's failure to secure workers' compensation insurance for its employees, agents, or subcontractors.

Consultant agrees that it is responsible for the provision of group healthcare benefits to its fulltime employees under 26 U.S.C. § 4980H of the Affordable Care Act. To the extent permitted by law, Consultant shall indemnify, defend and hold harmless Agency from any penalty issued to Agency under the Affordable Care Act resulting from the performance of the Services by any employee, agent, or subcontractor of Consultant.

- 6.2 Consultant Not Agent.** Except as Agency may specify in writing, Consultant shall have no authority, express or implied, to act on behalf of Agency in any capacity whatsoever as an agent. Consultant shall have no authority, express or implied, pursuant to this Agreement to bind Agency to any obligation whatsoever.
- 6.3 Assignment and Subcontracting.** This Agreement contemplates personal performance by Consultant and is based upon a determination of Consultant's unique professional competence, experience, and specialized professional knowledge. A substantial inducement to Agency for entering into this Agreement was and is the personal reputation and competence of Consultant. Consultant may not assign this Agreement or any interest therein without the prior written

approval of the Agency. Consultant shall not subcontract any portion of the performance contemplated and provided for herein, other than to the subcontractors identified in Exhibit A, without prior written approval of the Agency. Where written approval is granted by the Agency, Consultant shall supervise all work subcontracted by Consultant in performing the services and shall be responsible for all work performed by a subcontractor as if Consultant itself had performed such work. The subcontracting of any work to subcontractors shall not relieve Consultant from any of its obligations under this Agreement with respect to the services and Consultant is obligated to ensure that any and all subcontractors performing any services shall be fully insured in all respects and to the same extent as set forth under Section 4, to Agency's satisfaction.

- 6.4 **Certification as to California Energy Commission.** If requested by the Agency, Consultant shall, at the same time it executes this Agreement, execute Exhibit C.

## **Section 7. LEGAL REQUIREMENTS.**

- 7.1 **Governing Law.** The laws of the State of California shall govern this Agreement.
- 7.2 **Compliance with Applicable Laws.** Consultant and its subcontractors and agents, if any, shall comply with all laws applicable to the performance of the work hereunder.
- 7.3 **Licenses and Permits.** Consultant represents and warrants to Agency that Consultant and its employees, agents, and subcontractors (if any) have and will maintain at their sole expense during the term of this Agreement all licenses, permits, qualifications, and approvals of whatever nature that are legally required to practice their respective professions.

## **Section 8. TERMINATION AND MODIFICATION.**

- 8.1 **Termination.** Agency may cancel this Agreement at any time and without cause upon ten (10) days prior written notice to Consultant.

In the event of termination, Consultant shall be entitled to compensation for Services satisfactorily completed as of the effective date of termination; Agency, however, may condition payment of such compensation upon Consultant delivering to Agency any or all records or documents, as referenced in Section 9.1 hereof.

- 8.2 **Amendments.** The Parties may amend this Agreement only by a writing signed by all the Parties.



**8.3 Survival.** All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating liability between Agency and Consultant shall survive the termination of this Agreement.

**8.4 Options upon Breach by Consultant.** If Consultant materially breaches any of the terms of this Agreement, including but not limited to those set forth in Section 4, Agency's remedies shall include, but not be limited to, the following:

**8.4.1** Immediately terminate the Agreement;

**8.4.2** Retain the plans, specifications, drawings, reports, design documents, and any other work product prepared by Consultant pursuant to this Agreement;

**8.4.3** Retain a different consultant to complete the Services not finished by Consultant; and/or

**8.4.4** Charge Consultant the difference between the costs to complete the Services that are unfinished at the time of breach and the amount that Agency would have paid Consultant pursuant hereto if Consultant had completed the Services.

## **Section 9. KEEPING AND STATUS OF RECORDS.**

**9.1 Records Created as Part of Consultant's Performance.** All reports, data, maps, models, charts, studies, surveys, photographs, memoranda, plans, studies, specifications, records, files, or any other documents or materials, in electronic or any other form, that Consultant prepares or obtains pursuant to this Agreement and that relate to the matters covered hereunder shall be the property of the Agency. Consultant hereby agrees to deliver those documents to the Agency upon termination of the Agreement. Agency and Consultant agree that, unless approved by Agency in writing, Consultant shall not release to any non-parties to this Agreement any data, plans, specifications, reports and other documents.

**9.2 Consultant's Books and Records.** Consultant shall maintain any and all records or other documents evidencing or relating to charges for Services or expenditures and disbursements charged to the Agency under this Agreement for a minimum of three (3) years, or for any longer period required by law, from the date of final payment to the Consultant to this Agreement.

**9.3 Inspection and Audit of Records.** Any records or documents that this Agreement requires Consultant to maintain shall be made available for inspection, audit, and/or copying at any time during regular business hours, upon oral or written request of the Agency. Under California Government Code Section 8546.7, if the amount of public funds expended under this Agreement exceeds ten thousand dollars (\$10,000.00), the Agreement shall be subject to

the examination and audit of the State Auditor, at the request of Agency or as part of any audit of the Agency, for a period of three (3) years after final payment under the Agreement.

#### **9.4 Confidential Information and Disclosure.**

**9.4.1 Confidential Information.** The term "Confidential Information", as used herein, shall mean any and all confidential, proprietary, or trade secret information, whether written, recorded, electronic, oral or otherwise, where the Confidential Information is made available in a tangible medium of expression and marked in a prominent location as confidential, proprietary and/or trade secret information. Confidential Information shall not include information that: (a) was already known to the Receiving Party or is otherwise a matter of public knowledge, (b) was disclosed to Receiving Party by a third party without violating any confidentiality agreement, (c) was independently developed by Receiving Party without reverse engineering, as evidenced by written records thereof, or (d) was not marked as confidential Information in accordance with this section.

**9.4.2 Non-Disclosure of Confidential Information.** During the term of this Agreement, either party may disclose ("The Disclosing Party") confidential Information to the other party ("the Receiving Party"). The Receiving Party: (a) shall hold the Disclosing Party's Confidential Information in confident; and (b) shall take all reasonable steps to prevent any unauthorized possession, use, copying, transfer or disclosure of such Confidential Information.

**9.4.3 Permitted Disclosure.** Notwithstanding the foregoing, the following disclosures of Confidential Information are allowed. Receiving Party shall endeavor to provide prior written notice to Disclosing Party of any permitted disclosure made pursuant to Section 9.4.3.2 or 9.4.3.3. Disclosing Party may seek a protective order, including without limitation, a temporary restraining order to prevent or contest such permitted disclosure; provided, however, that Disclosing Party shall seek such remedies at its sole expense. Neither party shall have any liability for such permitted disclosures:

**9.4.3.1** Disclosure to employees, agents, consultants, contractors, subcontractors or other representatives of Receiving Party that have a need to know in connection with this Agreement.

**9.4.3.2** Disclosure in response to a valid order of a court, government or regulatory agency or as may otherwise be required by law; and

**9.4.3.3** Disclosure by Agency in response to a request pursuant to the California Public Records Act.

**9.4.4 Handling of Confidential Information.** Upon conclusion or termination of the Agreement, Receiving Party shall return to Disclosing Party or destroy Confidential Information (including all copies thereof), if requested by Disclosing Party in writing. Notwithstanding the foregoing, the Receiving Party may retain copies of such Confidential Information, subject to the confidentiality provisions of this Agreement: (a) for archival purposes in its computer system; (b) in its legal department files; and (c) in files of Receiving Party's representatives where such copies are necessary to comply with applicable law. Party shall not disclose the Disclosing Party's Information to any person other than those of the Receiving Party's employees, agents, consultants, contractors and subcontractors who have a need to know in connection with this Agreement.

## **Section 10. MISCELLANEOUS PROVISIONS.**

- 10.1 Attorneys' Fees.** If a party to this Agreement brings any action, including an action for declaratory relief, to enforce or interpret the provision of this Agreement, the prevailing party shall be entitled to reasonable attorneys' fees in addition to any other relief to which that party may be entitled. The court may set such fees in the same action or in a separate action brought for that purpose.
- 10.2 Venue.** In the event that either party brings any action against the other under this Agreement, the Parties agree that trial of such action shall be vested exclusively in the state courts of California in the County of Placer or in the United States District Court for the Eastern District of California.
- 10.3 Severability.** If a court of competent jurisdiction finds or rules that any provision of this Agreement is invalid, void, or unenforceable, the provisions of this Agreement not so adjudged shall remain in full force and effect. The invalidity in whole or in part of any provision of this Agreement shall not void or affect the validity of any other provision of this Agreement.
- 10.4 No Implied Waiver of Breach.** The waiver of any breach of a specific provision of this Agreement does not constitute a waiver of any other breach of that term or any other term of this Agreement.
- 10.5 Successors and Assigns.** The provisions of this Agreement shall inure to the benefit of and shall apply to and bind the successors and assigns of the Parties.
- 10.6 Conflict of Interest.** Consultant may serve other clients, but none whose activities within the corporate limits of Agency or whose business, regardless of location, would place Consultant in a "conflict of interest," as that term is defined in the Political Reform Act, codified at California Government Code Section 81000 *et seq.*

Consultant shall not employ any Agency official in the work performed pursuant to this Agreement. No officer or employee of Agency shall have any financial interest in this Agreement that would violate California Government Code Sections 1090 *et seq.*

**10.7 Contract Administrator.** This Agreement shall be administered by the Assistant General Manager, Generation Services Division or his/her designee, who shall act as the Agency's representative. All correspondence shall be directed to or through the representative.

**10.8 Notices.** Any written notice to Consultant shall be sent to:

Eric Quintero  
President  
8775 Folsom Blvd., Ste 110  
Sacramento, CA 95826

Any written notice to Agency shall be sent to:

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

With a copy to:

Jane E. Luckhardt  
General Counsel  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

**10.9 Professional Seal.** Where applicable in the determination of the Agency, the first page of a technical report, first page of design specifications, and each page of construction drawings shall be stamped/sealed and signed by the licensed professional responsible for the report/design preparation.

**10.10 Integration; Incorporation.** This Agreement, including all the exhibits attached hereto, represents the entire and integrated agreement between Agency and Consultant and supersedes all prior negotiations, representations, or agreements, either written or oral. All exhibits attached hereto are incorporated by reference herein.

**10.11 Alternative Dispute Resolution.** If any dispute arises between the Parties that cannot be settled after engaging in good faith negotiations, Agency and Consultant agree to resolve the dispute in accordance with the following:

- 10.11.1** Each party shall designate a senior management or executive level representative to negotiate any dispute;
- 10.11.2** The representatives shall attempt, through good faith negotiations, to resolve the dispute by any means within their authority.
- 10.11.3** If the issue remains unresolved after fifteen (15) days of good faith negotiations, the Parties shall attempt to resolve the disagreement by negotiation between legal counsel. If the above process fails, the Parties shall resolve any remaining disputes through mediation to expedite the resolution of the dispute.
- 10.11.4** The mediation process shall provide for the selection within fifteen (15) days by both Parties of a disinterested third person as mediator, shall be commenced within thirty (30) days and shall be concluded within fifteen (15) days from the commencement of the mediation.
- 10.11.5** The Parties shall equally bear the costs of any third party in any alternative dispute resolution process.
- 10.11.6** The alternative dispute resolution process is a material condition to this Agreement and must be exhausted as an administrative prior to either Party initiating legal action. This alternative dispute resolution process is not intended to nor shall be construed to change the time periods for filing a claim or action specified by Government Code §§ 900 *et seq.*
- 10.12 Controlling Provisions.** In the case of any conflict between the terms of this Agreement and the Exhibits hereto, a Purchase Order, or Consultant's Proposal (if any), the Agreement shall control. In the case of any conflict between the Exhibits hereto and a Purchase Order or the Consultant's Proposal, the Exhibits shall control. In the case of any conflict between the terms of a Purchase Order and the Consultant's Proposal, the Purchase Order shall control.
- 10.13 Counterparts.** This Agreement may be executed in multiple counterparts, each of which shall be an original and all of which together shall constitute one agreement.
- 10.14 Construction of Agreement.** Each party hereto has had an equivalent opportunity to participate in the drafting of the Agreement and/or to consult with legal counsel. Therefore, the usual construction of an agreement against the drafting party shall not apply hereto.
- 10.15 No Third Party Beneficiaries.** This Agreement is made solely for the benefit of the parties hereto, with no intent to benefit any non-signator third parties. However, should Consultant provide services to an Agency member, SCPA or

SCPPA member (collectively for the purpose of this Section only “Member”) pursuant to Section 1.4, the parties recognize that such Member may be a third party beneficiary solely as to the Purchase Order and Requested Services relating to such Member.

The Parties have executed this Agreement as of the date signed by the Agency.

NORTHERN CALIFORNIA POWER AGENCY

INTEGRATED ENGINEERS AND  
CONTRACTORS CORPORATION DBA  
IEC CORPORATION

Date\_\_\_\_\_

Date\_\_\_\_\_

\_\_\_\_\_  
**RANDY S. HOWARD,**  
**General Manager**

\_\_\_\_\_  
**R. ERIC QUINTERO,**  
**President**

Attest:

\_\_\_\_\_  
Assistant Secretary of the Commission

Approved as to Form:

\_\_\_\_\_  
Jane E. Luckhardt, General Counsel

## **EXHIBIT A**

### **SCOPE OF SERVICES**

Integrated Engineers and Contractors Corporation dba IEC Corporation ("Consultant") shall provide consulting services related to Renewable Energy, Power Generation, Power Delivery, and Energy Storage to the Northern California Power Agency ("Agency"), its Members, Southern California Public Power Authority ("SCPPA") or SCPPA Members.

Services may include, but not be limited to, the following:

- Engineering and technical support
- Design review
- Project management support
- Feasibility studies
- Cost Estimating
- Cyber security compliance
- Security projects
- Renewable Portfolio Standard (RPS) Projects
- Energy consulting services
- Energy Management services
- Power studies and analysis
- Substation design and technical support

No services under this Agreement shall include work that would qualify as a Public Works Project under guidelines established by the State of California.

## EXHIBIT B

### COMPENSATION SCHEDULE AND HOURLY FEES

Compensation for all tasks, including hourly fees and expenses, shall not exceed the amount set forth in Section 2 of the Agreement. The hourly rates and or compensation break down and an estimated amount of expenses is as follows:

#### **Professional Engineering Services**

Principal Engineer II	\$220
Principal Engineer I	\$195
Senior Engineer II	\$165
Senior Engineer I	\$145
Senior Project Engineer	\$165
Lead Associate Engineer	\$145
Associate Project Engineer	\$135
Associate Engineer II	\$125
Associate Engineer I	\$110

#### **Technical Services**

Project Professional II	\$145
Project Professional I	\$125
Senior Designer	\$125
Senior Multimedia Designer	\$110
Drafter	\$110
Project Assistant	\$90

#### **Professional Management**

Managing Principal	\$240
Director	\$240
Project Manager II	\$220
Project Manager I	\$195

#### **Other Costs**

1. Direct Expenses (non-equipment) will be billed at cost.
2. Mileage will be billed at the published IRS mileage rates in effect.
3. Travel to and from client sites will be billed at hourly rates shown above.
4. Federal published per diem rates (GSA) will apply if applicable.
5. Subcontractors' labor and expenses will be marked up by 10%.
6. An annual escalation rate of 3% will apply.



Upon 30 days advance notice and no more than once each calendar year, Integrated Engineers and Contractors Corporation dba IEC Corporation may increase rates for new Purchase Orders. If NCPA does not accept the increased rates, NCPA may terminate this Agreement.

Pricing for services to be performed at NCPA Member or SCPPA locations will be quoted at the time services are requested.

NOTE: As a public agency, NCPA shall not reimburse Consultant for travel, food and related costs in excess of those permitted by the Internal Revenue Service.

**EXHIBIT C**

**CERTIFICATION**

**Affidavit of Compliance for Contractors**

**R. Eric Quintero, President**

I, \_\_\_\_\_

(Name of person signing affidavit)(Title)

do hereby certify that background investigations to ascertain the accuracy of the identity and employment history of all employees of

\_\_\_\_\_  
Integrated Engineers and Contractors Corporation, dba IEC Corporation

(Company name)

for contract work at:

LODI ENERGY CENTER, 12745 N. THORNTON ROAD, LODI, CA 95242

(Project name and location)

have been conducted as required by the California Energy Commission Decision for the above-named project.

\_\_\_\_\_  
(Signature of officer or agent)

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2024.

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.



## **Integrated Engineers and Contractors Corporation dba IEC Corporation Multi-Task Professional Services Agreement**

Facilities Committee  
June 5, 2024

## Background

- This is an existing NCPA vendor.
- The current agreement with IEC Corporation is expiring.
- It is recommended to place this item on the consent calendar.
- For use at all facilities owned and/or operated by NCPA, NCPA Members, SCPPA and SCPPA Members
- Similar Agreements in Place:
  - Leidos Engineering, LLC
  - Mead & Hunt, Inc.
  - Provost & Pritchard Engineering Group, Inc.
  - Power Engineers, Inc.

## General Scope of Work

- Term of Agreement = 5 years
- Cost = Not to Exceed \$1,000,000
- Services Provided:
  - Consulting services related to the following:
    - Renewable energy
    - Power Generation
    - Power Delivery
    - Energy Storage

## **Environmental Analysis**

- As an enabling agreement, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a “project” for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

## Proposal

- Staff is seeking a recommendation from the Facilities Committee for Commission approval of the Five Year Multi-Task Professional Services Agreement between NCPA and Integrated Engineers and Contractors Corporation dba IEC Corporation, in an amount not to exceed \$1,000,000, for use at any facilities owned and/or operated by NCPA, NCPA Members, SCPPA and SCPPA Members.



# Commission Staff Report – *DRAFT*

**COMMISSION MEETING DATE:** June 27, 2024

**SUBJECT:** NCPA 2024 Wildfire Mitigation Plan Revisions; Applicable to the following: All Northern California Power Agency (NCPA) Facilities

**AGENDA CATEGORY:** Consent

<b>FROM:</b>	Michael DeBortoli	<b>METHOD OF SELECTION:</b>
	Assistant General Manager	N/A
Division:	Generation Services	<i>If other, please describe:</i>
Department:	Generation Services	

<b>IMPACTED MEMBERS:</b>		
All Members	<input checked="" type="checkbox"/>	
Alameda Municipal Power	<input type="checkbox"/>	
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	
City of Biggs	<input type="checkbox"/>	
City of Gridley	<input type="checkbox"/>	
City of Healdsburg	<input type="checkbox"/>	
City of Lodi	<input type="checkbox"/>	
City of Lompoc	<input type="checkbox"/>	
City of Palo Alto	<input type="checkbox"/>	
City of Redding	<input type="checkbox"/>	
City of Roseville	<input type="checkbox"/>	
City of Santa Clara	<input type="checkbox"/>	
City of Shasta Lake	<input type="checkbox"/>	
City of Ukiah	<input type="checkbox"/>	
Plumas-Sierra REC	<input type="checkbox"/>	
Port of Oakland	<input type="checkbox"/>	
Truckee Donner PUD	<input type="checkbox"/>	
Other	<input type="checkbox"/>	
<i>If other, please specify</i>		
<hr/>		
<hr/>		



## **RECOMMENDATION:**

Approve Resolution 24-XX for the NCPA 2024 Wildfire Mitigation Plan, with updated revisions based on the qualified independent evaluators recommendations and Wildfire Safety Advisory Board (WSAB) 2022 recommendations.

## **BACKGROUND:**

Public Utilities Code, Division 4.1, Chapter 6 Wildfire Mitigation, Code 8387 requires electric utilities to assess the risk of catastrophic wildfire posed by a utility's overhead electrical lines and equipment. In response to this requirement, NCPA created its Wildfire Mitigation Plan to reduce the risk of NCPA facilities igniting wildfire, including identifying preventative maintenance procedures and practices. The NCPA Wildfire Mitigation Plan was initially approved in the December 5, 2019 Commission Meeting. Annual independent evaluations of the Wildfire Mitigation Plan were conducted in 2020, 2021, 2022 and 2023, with minor revisions to the plan. Each revision has been approved in annual Commission Meetings.

For 2024, NCPA contracted with Power Engineers, Inc., a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure, to complete the evaluation of NCPA's Wildfire Mitigation Plan. The independent evaluator issued a report (attached as an appendix to the Wildfire Mitigation Plan) stating that NCPA's Wildfire Mitigation Plan appropriately addressed all elements required under CPUC Section 8387 (b) (2) and WSAB 2022 recommendations. The independent evaluation and report were completed May 28, 2024.

NCPA is now seeking Commission approval of the NCPA 2024 Wildfire Mitigation Plan, to include the recommended revisions provided by the qualified independent evaluator, revise the Wildfire Mitigation Plan from Version 2.0 to 3.0, and post the Wildfire Mitigation Plan to NCPA's website.

## **FISCAL IMPACT:**

Any expenses associated with the preventative maintenance procedures and practices included in the plan are already covered in previously approved Plant budgets.

## **ENVIRONMENTAL ANALYSIS:**

Work associated with this Project is categorically exempt under Class 1, 3, 4, and 11 Exemptions under CEQA guidelines 15061(b)(3), 15301(b), 15303, 15304, and 15311 and is therefore categorically exempt from CEQA. Class 1 is the "existing facilities" exemption, which includes the repair, maintenance, or minor alteration of existing public structures, facilities, mechanical equipment, involving negligible or no expansion of use. Class 3 is installation of small new equipment and facilities in small structures. Class 4 is minor alterations in the condition of the land Class 11 is construction or placement of minor structures accessory to existing facilities. All necessary Federal, State and County notifications will be made before commencing the work.

A Notice of Exemption was approved by the NCPA Commission on September 27, 2013, for this class of work and was filed in Lake and Sonoma Counties, and in Alpine, Calaveras, San Joaquin, and Tuolumne Counties.

**COMMITTEE REVIEW:**

Pending Committee review and approval.

AFTER FACILITIES APPROVAL: On June 5, 2024, the Facilities Committee reviewed and endorsed the recommendation above for Commission approval.

Respectfully submitted,

RANDY S. HOWARD  
General Manager

Attachments (2):

- Resolution 24-XX
- Northern California Power Agency Wildfire Mitigation Plan 3.0

## RESOLUTION 24-XX

### RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY APPROVING THE NCPA 2023 WILDFIRE MITIGATION PLAN ASSESSMENT REPORT AND REVISIONS

(reference Staff Report #XXX:24)

WHEREAS, Public Utilities Code, Division 4.1, Chapter 6 Wildfire Mitigation Code 8387 requires electric utilities to assess the risk of catastrophic wildfire posed by a utility's overhead electrical lines and equipment; and

WHEREAS, NCPA's Wildfire Mitigation Plan was approved by the NCPA Commission at its December 5, 2019 meeting (SR: 233:19; Reso: 19-100); and

WHEREAS, NCPA hired an outside consultant to review and assess the comprehensiveness of this Wildfire Mitigation Plan, including recommended updates to the plan; and

WHEREAS, work associated with this Project is categorically exempt under Class 1, 3, 4, and 11 Exemptions under CEQA guidelines 15061(b)(3), 15301(b), 15303, 15304, and 15311 and is therefore categorically exempt from CEQA. Class 1 is the "existing facilities" exemption, which includes the repair, maintenance, or minor alteration of existing public structures, facilities, mechanical equipment, involving negligible or no expansion of use. Class 3 is installation of small new equipment and facilities in small structures; Class 4 is minor alterations in the condition of the land; and, Class 11 is construction or placement of minor structures accessory to existing facilities. All necessary Federal, State and County notifications will be made before commencing the work. A Notice of Exemption was approved by the NCPA Commission on September 27, 2013, for this class of work and was filed in Lake and Sonoma Counties, and in Alpine, Calaveras, San Joaquin, and Tuolumne Counties; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency approves the NCPA 2024 Wildfire Mitigation Plan with updated revisions based on the qualified independent evaluators recommendations.

PASSED, ADOPTED and APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2024, by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

\_\_\_\_\_  
JERRY SERVENTI  
CHAIR

ATTEST:

\_\_\_\_\_  
CARRIE POLLO  
ASSISTANT SECRETARY

# NORTHERN CALIFORNIA POWER AGENCY WILDFIRE MITIGATION PLAN 2024

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**VERSION 3.0**

## **CURRENT VERSION DESCRIPTION**

*Version 3.0 – A comprehensive review of NCPA's 2024 Wildfire Mitigation Plan. NCPA's Commission approved this WMP on June 27<sup>th</sup>, 2024. This WMP includes the Qualified Independent Evaluators (IE) Comprehensive Review Report describing revisions in Appendix 6.*

# TABLE OF CONTENTS

Executive Summary.....	iv
1. Overview.....	1
1.A. Policy Statement .....	1
1.B. Purpose of the Wildfire Mitigation Plan .....	1
1.B.1. Coordination with Local Agencies.....	2
1.C. Organization of the Wildfire Mitigation Plan .....	3
2. Goals .....	4
2.A. Minimizing Sources of Ignition .....	4
2.B. Resiliency of the Electric Grid.....	4
2.C. Identifying Unnecessary or Ineffective Actions.....	4
3. Roles and Responsibilities .....	5
3.A. Utility Governance Structure .....	5
3.B. Wildfire prevention organizational responsibilities .....	6
3.C. Wildfire Response, Communication, and Recovery.....	6
3.D. Coordination with Water Utilities/Department .....	7
3.E. Coordination With Communication Infrastructure Providers.....	7
3.F. Mutual Aid Agreements .....	8
4. Wildfire Risks and Drivers .....	9
4.A. Risks Associated With Topographic and Climatological Factors .....	10
4.B. Risks related to design, operation, and MAINTENANCE.....	11
4.C. Changes to CPUC Fire Threat Map .....	12
4.C.1. Map Comparisons and Updates .....	12
4.C.2. Fire Zone Review Process.....	13

5. Wildfire Preventative Strategies .....	14
5.A. Preventative Strategies and Programs .....	14
5.B. Potential Climate Change Effects .....	16
5.C. Potential Climate Change Risk Management Impacts .....	16
5.D. Tree Mortality .....	17
5.E. Vegetation Management .....	17
5.F. Inspections .....	18
5.G. Fire Prevention, Safety, Emergency Response training .....	19
5.H. Reclosing Policy .....	20
5.I. De-energization .....	20
5.J.1. Impacts to Public Safety .....	20
5.J.2. Customer Notification Protocols .....	21
6. Left Blank .....	22
7. Restoration of Service .....	23
7.A. Metrics and Assumptions for Measuring Plan Performance .....	23
Metric 1: Fire Ignitions .....	23
Metric 2: Wires Down .....	23
Metric 3: Fall in Hazard Trees Ignitions .....	24
7.B. Impact of Metrics on Plan .....	24
7.C. Monitoring and Auditing the Plan .....	24
7.D. Identifying and Correcting Deficiencies in the Plan .....	25
7.E. Monitoring the Effectiveness of Inspections .....	25
8. Independent Auditor .....	26
9. References .....	27
APPENDIX 1 – FIRE RISK ASSESSMENT MAPS .....	28
APPENDIX 2 – INDEPENDENT EVALUATOR REPORT 2020 .....	30
APPENDIX 3 – INDEPENDENT EVALUATOR REPORT 2021 .....	33

APPENDIX 4 – INDEPENDENT EVALUATOR REPORT 2022.....	57
APPENDIX 5 – INDEPENDENT EVALUATOR REPORT 2023.....	75
APPENDIX 6 – INDEPENDENT EVALUATOR REPORT 2024.....	89
Revision History.....	99
ATTACHMENT A - PUC 8387 (B) REQUIREMENTS TABLE .....	100
ATTACHMENT B – WSAB RECOMMENDED ELEMENTS TABLE.....	102
ATTACHMENT C – WILDFIRE RISK ELEMENTS AND CONTROLS .....	104
ATTACHMENT D – PUBLIC SAFETY POWER SHUTOFF PROCEDURES.....	105

## EXECUTIVE SUMMARY

Northern California Power Agency (NCPA) has prepared the following Wildfire Mitigation Plan (WMP) in accordance with California Public Utilities Commission (CPUC) regulation 8387 (Senate Bill 901). NCPA is a Joint Powers Agency, which owns and operates several electrical generation facilities to support its members' generation needs.

The objective of this WMP is to reduce the risk of wildfires that could be ignited or propagated by NCPA's electrical equipment or facilities in high fire threat locations. The plan describes the range of activities that NCPA is taking to mitigate the threat of power line-ignited wildfires, including its current programs, policies, and procedures as well as future plans to decrease risk and improve resiliency. The plan has prioritized the prevention of elements that create a wildfire event: 1) fuel or geographic conditions represented by the California Department of Forestry and Fire Protection and the CPUC risk maps, and 2) ignition represented by facilities subject to creating a fire. The facility types of highest interest are open-wire power lines (transmission and distribution) that are near heavy vegetation or forest.

NCPA has no retail customers. As such, this report focuses exclusively on NCPA's electrical facilities with minimal discussion regarding customer communication typical of other utility WMPs.



## 1. OVERVIEW

### 1.A. POLICY STATEMENT

The Northern California Power Agency (NCPA), a California Joint Action Agency, has an overarching goal to provide safe, reliable, and economic electric service to its public power members and associate members. To meet this goal, NCPA constructs, maintains, and operates its equipment in a manner that minimizes the risk of wildfire ignition and propagation caused by NCPA-owned and -operated electric utility equipment (generation, generation tie-lines, and distribution).

### 1.B. PURPOSE OF THE WILDFIRE MITIGATION PLAN

The objective of this Wildfire Mitigation Plan (WMP) is to reduce the risk of wildfires that could be ignited or propagated by NCPA's electrical equipment or facilities in high fire threat locations.

This WMP applies to NCPA's Geothermal Facility and Hydroelectric (Hydro) Facility located in two different geographical areas. These facilities contain electrical equipment in high fire threat locations. The Geothermal Plant is located near the Geysers in Lake County and the Hydro Facility is located in the North Fork Stanislaus River watershed.

The WMP describes the range of activities that NCPA is taking to mitigate the threat of power line-ignited wildfires, including: (1) current programs, policies, and procedures; and (2) future plans to decrease risk and improve resiliency. This WMP is subject to direct supervision by the NCPA Commission and is implemented by the NCPA General Manager. This WMP complies with the requirements of Public Utilities Code section 8387 (originally SB-901) for publicly owned electric utilities to prepare a wildfire mitigation plan by January 1, 2020, and to review and update it annually thereafter.

Historically, NCPA has continuously improved its practices to minimize wildfire risks. This includes:

- A transmission line vegetation management program that is compliant with North American Electric Reliability Corporation Standard FAC-003 and California Department of Forestry and Fire Protection (CAL FIRE) regulations
- Compliance with CAL FIRE and California Public Utilities Commission (CPUC) regulations and guidance for overhead distribution and transmission lines
- CAL FIRE emergency response plans
- Power management/dispatch response procedures
- Periodic equipment inspections and safe work practices
- Workforce training

This WMP complies with requirements of Public Utilities Code section 8387 (Senate Bill 901).

In November 2022, NCPA initiated the development of this current WMP (Version 2.0). NCPA hired Dudek to evaluate NCPA's electrical facilities, processes, and documentation based on the design, configuration, operations, maintenance, and condition of NCPA facilities in relation

to their potential to initiate a wildfire event. The comprehensive evaluation included consideration of NCPA system descriptions, record design/construction documents, typical facilities layouts, basic fire protection system features, data sheets, inspection practices and procedures, baseline vegetation conditions, potential climate change effects, vegetation management practices, fire threat and hazard maps, and other documentation.

In 2020, per Section 8 of this WMP, NCPA hired an outside consultant, Dudek, to review, assess the comprehensiveness, and provide recommendations to this plan. Subsequently, NCPA elected to modify its Draft WMP that incorporated Dudek's recommended modifications. The Revised WMP (version 1.1) was provided to Dudek on April 29, 2020. Dudek reviewed the Revised WMP and determined that it appropriately addressed all elements required under CPUC Section 8387(b)(2). In 2020, this WMP was presented at the NCPA commission meeting, a public meeting, and is posted on NCPA's public website domain. A similar process was followed with Dudek and NCPA's Commission in May of 2021 and 2022 for Versions 1.2 and 1.3.

In 2024, NCPA hired POWER Engineers, Inc. (POWER) to review and revise Version 2.0 of the Draft WMP. POWER reviewed the 2023 WMP and determined that it appropriately addressed all elements required under CPUC Section 8387(b)(2).

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#### 1.B.1. COORDINATION WITH LOCAL AGENCIES

NCPA's local wildfire mitigation coordination efforts include regular meetings for its Emergency Action Plan process. The NCPA Hydro Facility hosts an annual face-to-face meeting with local emergency management agencies, including: the United States Forest Service (USFS); CAL FIRE; sheriff departments for Calaveras, Tuolumne, and Alpine counties; California Highway Patrol; California Department of Parks and Recreation (Calaveras Big Trees State Park); and others. Since many NCPA Hydro facilities are located on USFS lands, a separate annual meeting is held with the USFS and wildfire mitigation is an agenda.

The NCPA Hydro and Geothermal facilities also coordinate vegetation management activities with CAL FIRE and routinely utilize CAL FIRE (in cooperation with California Department of Corrections Conservation Fire Camp labor) for vegetation management and wildfire mitigation around the facilities. Additionally, NCPA Geothermal Facility staff meet annually with Pacific Gas and Electric (PG&E), Calpine (operator of other geothermal facilities at the Geysers), CAL FIRE, the Bureau of Land Management, and Lake County Sanitation District.

Board (WSAB) developed template for review of Publicly Owned Utility WMPs

<b>Utility Name:</b>	<b>Northern California Power Agency</b>
<b>Size:</b>	<1.5 square miles (39 miles x 200 feet ground clearance)
<b>Assets:</b>	Yes - Generation, Yes - Transmission (Only a generator tie line), Yes - Distribution (Only for NCPA Utilities)
<b>Number of Customers:</b>	Zero Customers. Wholesale provider to PG&E electrical grid.
<b>Customer Classes:</b>	Zero Customers. Wholesale provider to PG&E electrical grid.
<b>Location Topography:</b>	No - Urban, Yes - Wildland Urban Interface, Yes - Rural/Forest, No - Rural/Desert, No - Rural/Agricultural
<b>Percent Territory in CPUC High Fire Threat Maps:</b>	Yes - Includes Maps, 61% in Tier 2, 7% in Tier 3
<b>CAL Fire Map Fire Threat Zones:</b>	Yes - Includes Maps, 45% Very High, 27% High, 11% in Moderate
<b>Existing Grid Hardening Measures</b>	Yes - Describes hardened & non-hardened infrastructure
<b>Utility Fire Threat Risk Level:</b>	No - Hi, No - Low, Yes - Mixed
<b>Impact by another utility's PSPS?</b>	Yes - Impacted by PG&E PSPS
<b>Mitigates impact of another utility's PSPS?</b>	No - NCPA is a wholesaler of power feeding into PG&E electrical grid.
<b>Expects to initiate its own PSPS?</b>	No - NCPA is a wholesaler of power feeding into PG&E electrical grid.
<b>Prevailing wind directions and speeds by season?</b>	No - In Maps, Yes - Includes description in Section 4.A.

## 1.C. ORGANIZATION OF THE WILDFIRE MITIGATION PLAN

This WMP includes the following elements:

- Objectives of the plan
- Roles and responsibilities for carrying out the plan
- Identification of key wildfire risks and risk drivers
- Description of wildfire prevention, mitigation, and response strategies and programs
- Metrics for evaluating the performance of the plan and identifying areas for improvement
- Review and validation of the plan
- Timelines

## 2. GOALS

### 2.A. MINIMIZING SOURCES OF IGNITION

The primary goal of this WMP is to minimize the probability that NCPA's transmission and distribution system may be the origin or contributing fire ignition source. NCPA's priorities include facility improvement projects (Section 5A) as well as continued and improved inspection, maintenance, and vegetation management practices. NCPA evaluated, and continues to evaluate and implement, prudent and cost-effective improvements (Section 5A) to its physical assets, operations, and training to meet this objective.

### 2.B. RESILIENCY OF THE ELECTRIC GRID

The secondary goal of this WMP is to improve electrical grid resiliency. For this WMP, NCPA assessed, and will continue to assess, new industry practices and technologies that will reduce the likelihood of an interruption (frequency) in service and improve the restoration (duration) of service.

### 2.C. IDENTIFYING UNNECESSARY OR INEFFECTIVE ACTIONS

The final goal for this WMP is to measure the effectiveness of specific wildfire mitigation strategies. If a particular action, program component, or protocol is unnecessary or ineffective, NCPA will assess whether a modification or replacement is merited. This WMP will also help determine if more cost-effective measures would produce the same or improved results.

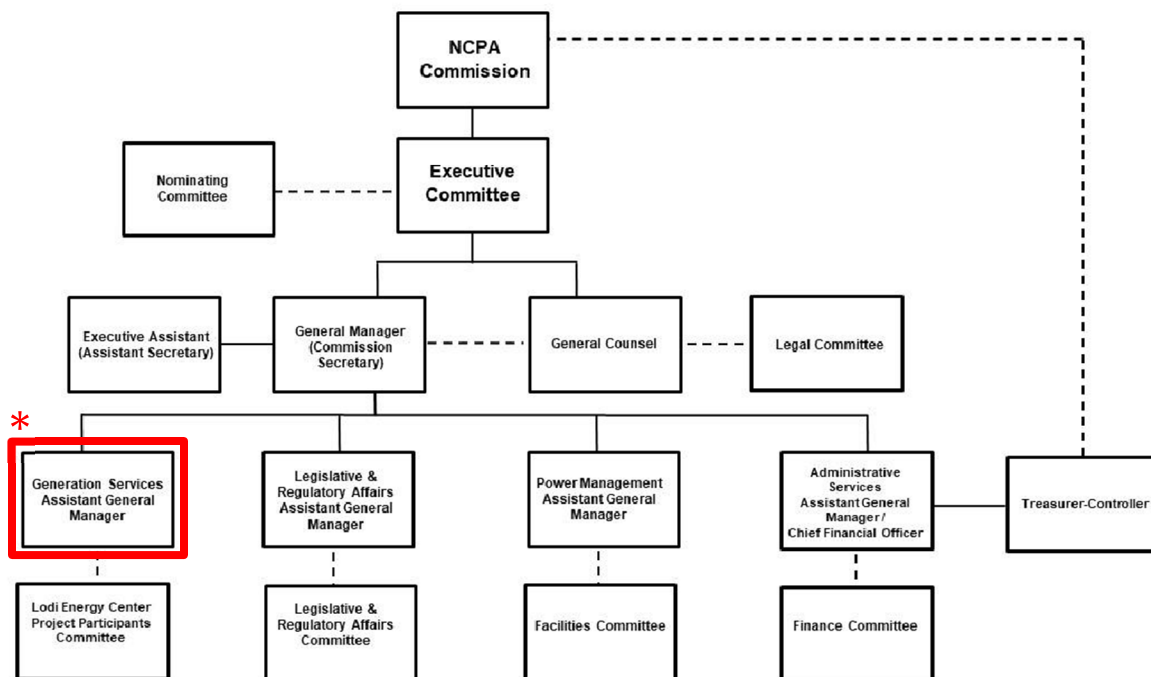
NCPA's current and planned wildfire risk mitigation activities are formally reviewed annually regarding effectiveness of ongoing practices, investigation of new technologies, and changing climate and ground conditions to prioritize the highest value activities for fire risk mitigation. These actions align with NCPA's Strategic Priorities of "Prepare" and "Value": *"Develop and maintain diverse generation resource portfolio in accordance with or exceeding renewable portfolio standard and capacity obligations"* and *"Develop and enhance strategies to control costs and minimize risks while optimizing the value of assets"*. These Priorities indicate the Agency's commitment to addressing the ongoing shift in service conditions for generation assets brought about by changing climate conditions and risks to energy deliverability brought about by increasing drought and aging transmission and distribution infrastructure.

### 3. ROLES AND RESPONSIBILITIES

#### 3.A. UTILITY GOVERNANCE STRUCTURE

NCPA is governed by a Commission that maintains several committees, including an Executive Committee, a Nominating Committee, a Legal Committee, a Legislative & Regulatory Affairs Committee, a Facilities Committee, and a Finance Committee. The Executive Committee includes a Chair, Vice Chair, and seven at-large representatives.

Among its approximately 160 employees, NCPA has an internal management team, including a General Manager, an Assistant General Manager for Legislative & Regulatory Affairs, an Assistant General Manager for Power Management, an Assistant General Manager for Generation Services, an Assistant General Manager for Finance & Administrative Services, a General Counsel, and an Executive Assistant & Assistant Secretary to the Commission.



\*The red box above indicates the responsible department of the North Fork Stanislaus Hydroelectric Project and Geyser's Geothermal Projects. NCPA plant managers are responsible for executing the WMP and serve under the Generation Services Assistant General Manager.

### 3.B. WILDFIRE PREVENTION ORGANIZATIONAL RESPONSIBILITIES

NCPA is governed by a Commission comprised of one representative for each of its public power utility members. The Commission is responsible for the general management of the affairs, property, and business of the Agency. Under direction of the General Manager, Agency staff are responsible for providing various administrative, operating, and planning services for the Agency. This establishes all funding and is applied to all wildfire funding mechanisms in this WMP (i.e., 3.B., 3.C., 5.A., 5.F, 5.G., 5.H.).

NCPA's organizational responsibilities with respect to wildfire mitigation correspond to its two main facility locations that reside in high fire threat areas: The North Fork Stanislaus Hydro Project and Geyser's Geothermal Projects. Hydro and Geothermal plant managers have responsibility for operations at each respective generating facility. Plant supervisors at each location are responsible for workforce training and executing all policies and procedures related to fire risks, equipment design, maintenance, inspection, vegetation management, and operations.

Revisions to the NCPA WMP are presented to the NCPA Facilities Committee for review and comment before being routed for final approval to the NCPA Commission. The NCPA WMP and archived versions are available for public review on the NCPA website (Policy → Reports → Wildfire Mitigation Plan).

The NCPA Dispatch Center in Roseville, under the direction of the Assistant General Manager for Power Management, has jurisdictional and operational responsibilities for the generator tie lines, including procedures for Operating Instructions and Emergency Assistance (NCPA-PM-108) and Emergency Operating Guidelines for the Collierville-Bellota 230-kV Lines (NCPA-PM-201).

Under the Assistant General Manager's direction, plant managers are responsible for implementation and execution of the WMP with respect to their facilities (see notes in Section 3.A., Governance Structure Diagram). In coordination with the NCPA Dispatch Center, plant managers coordinate activities with internal and external entities necessary to operate and react to wildfire activity.

Additionally, all NCPA employees are responsible for:

- Performing good housekeeping practices
- Maintaining their work areas free of potentially flammable materials
- Participating in fire prevention and suppression training as required

### 3.C. WILDFIRE RESPONSE, COMMUNICATION, AND RECOVERY

The objective of crisis management is providing direction for rapid hazard assessment, prioritization, notification, and applicable actions. NCPA evaluated potential hazards in the work environment and surrounding areas and worked with local authorities to develop emergency response plans for each facility that address mitigation of hazards and effective response. The goals are to protect personnel, the public, the environment, and NCPA assets.

NCPA utilizes a number of resources to communicate emergency or hazardous conditions to

personnel (including non-NCPA personnel) at hydro and geothermal plants, powerhouses, and associated facilities and locations. These resources include two-way radio communications equipment, cell phones, satellite phones, telephone landlines, email, and the Internet.

The Agency maintains separate emergency response plans, due to different geographic locations, for Geothermal and Hydro generation projects. These plans provide guidance and emergency resources for: fire events; unplanned, sudden, or non-sudden hazardous materials/waste releases; air emissions exceedances; natural or manmade disasters (earthquakes, floods, bomb threats, or suspected terrorist or sabotage events, etc.); or emergency hazards.

Any accident or incident requiring emergency response and support from external agencies is reported to the appropriate NCPA plant supervisor. The event(s) type and severity determines the appropriate response and course of action.

The NCPA Dispatch Center is the main point of contact for PG&E on any public safety power shutoff (PSPS) notification affecting any of NCPA's or members' generation and member loads. NCPA does not have a defined service territory; however, the NCPA Dispatch Center's responsibility is to pass along relevant PG&E PSPS notification to affected members based on phone messages or emails received from PG&E through its Everbridge mass notification system. The NCPA Dispatch Center also follows up on the Everbridge PSPS notifications with information on any planned power shutoff events based on PG&E's PSPS websites or direct PG&E communication where current and real-time information is available.

NCPA provides wholesale power to cities and utilities, typically known as NCPA members, only via the utility grid. Since NCPA does not have retail customers, no customer notification protocols are in place.

### 3.D. COORDINATION WITH WATER UTILITIES/DEPARTMENT

Power from NCPA generation facilities is delivered to the California Independent System Operator (CAISO) grid. The NCPA Hydroelectric Project transports and delivers water owned by two water utilities through infrastructure (dams and tunnels) operated by NCPA. One of those entities, the Calaveras County Water District (CCWD), owns the NCPA-operated Hydro Facility that delivers this water. The Utica Water and Power Authority (UWPA) also receives some of the water through the same facilities. Neither curtailment of NCPA generation facilities nor de-energization of the NCPA powerlines has any impact on the abilities of CCWD or UWPA to obtain water. NCPA routinely communicates and coordinates with CCWD and UWPA, and both entities are included on communication flow charts for the relevant emergency plans.

### 3.E. COORDINATION WITH COMMUNICATION INFRASTRUCTURE PROVIDERS

NCPA does not provide power directly to any communication infrastructure providers, and therefore does not routinely coordinate with communication infrastructure providers related to wildfire mitigation or power outages.

### 3.F. MUTUAL AID AGREEMENTS

NCPA members are uniquely and ideally qualified to assist with the emergency replacement of poles and wires that are necessary to return electric distribution and communication facilities to normal operating condition. However, mutual aid agreements have also long been utilized by publicly owned utilities during times of need. These agreements are usually formed and exercised among neighboring utilities as proximity allows for quick response and fewer travel expenses. Additionally, mutual aid agreements that have a broader geographical reach, including across states or nations, can provide better protection from large regional events that impact neighboring utilities.

NCPA is a member of the California Utilities Emergency Association, which plays a key role in ensuring emergency communications between utilities and maintains a mutual aid agreement for its members. As a member of the American Public Power Association (APPA), NCPA and its members can also authorize APPA mutual aid agreements.



## 4. WILDFIRE RISKS AND DRIVERS

NCPA electrical infrastructure consists of the following facilities that are in CAL FIRE Moderate to Very High Fire Hazard Severity Zones (2023) and/or CPUC Tier 2/3 Fire Threat Zones (2021). See Appendix 1.

NCPA Project	NCPA Facility	Fire Hazard Severity Zone (Cal Fire 2023)			Fire Threat Zone (CPUC 2021)	
		Moderate	High	Very High	Tier 2	Tier 3
North Fork Stanislaus Hydroelectric Project (Hydro)	Collierville Powerhouse 11523 Camp 9 Rd., Murphys, CA 38.144944, -120.380022	-	-	-	X	-
	New Spicer Meadows Powerhouse 38.393735, -119.999489	-	-	-	-	-
	McKay's Point Diversion Dam 38°14'3.70"N, 120°17'31.70"W	-	-	-	-	X
	McKay's Point 17-kV Service Line	-	-	1.68 miles	-	0.36 mile
	Beaver Creek 38°14'02.94" N 120°16'43.50" W	-	-	-	-	X
	Collierville-Bellota 230-kV Gen-Tie Line	5 miles	12 miles	18 miles	27 miles	-
Geysers Geothermal (Geo)	Plant 1, Middletown, CA 38.751915, -122.719932	-	-	-	-	X
	Plant 2, Middletown, CA 38.748348, -122.710913	-	-	-	-	X
	230-kV Gen-Tie Line	-	-	0.17 mile	-	2.5 miles
	Effluent Pump System and 21-kV Service Line	-	-	3 miles	-	3 miles
	Steam Field and Delivery (includes 480vac power)	-	-	8 miles	-	8 miles

NCPA is also a 6.13 percent co-tenant of the Castle Rock Junction-Lakeville 230-kV Transmission Line, operated and maintained by PG&E, in the Geysers area. This line is in a Tier 3 CPUC Fire Threat Zone. This line is included within the scope of the PG&E Wildfire Mitigation Plan.

There are no new wildfire risks associated with design and construction of new assets. NCPA is currently operating and maintaining original generating facilities, and fire hardening is being performed on the McKay's Point 17-kV Service Line as a maintenance project. No new construction is planned in the immediate future.

Note that NCPA does not have “Enterprise-wide” Safety Risks (as addressed under Section 4.B of the CMUA template) as the Agency does not possess general responsibility over assets and geography except for locations tied to our specific generation assets, as outlined above.

#### 4.A. RISKS ASSOCIATED WITH TOPOGRAPHIC AND CLIMATOLOGICAL FACTORS

Primary wildfire risk drivers are weather and climate. Weather and climate include extended drought periods, changing weather patterns, and high winds. These weather and climate factors affect vegetation conditions, including vegetation health, type, and density. Stressed vegetation is prone to disease, insect infestations, and increased mortality rates. Conversely, high levels of snow and rainfall also affect wildfire risk due to the potential for excessive vegetation growth and landslides, which could affect target trees or infrastructure. Vegetation and climate conditions are discussed in Section 5.

Physical conditions, such as terrain and high winds, affect fire risks. These factors influence fire movement and direction, and control migration rates. Generally, fires move upslope without strong winds, while high winds (e.g., Diablo winds) rapidly drive fires primarily in the same direction as the wind. Topographic features, such as steep canyons, create localized conditions that affect fire movement and rate of speed.

Several of the risk drivers are interrelated:

- **Extended drought:** Extended drought periods result in multiple stress factors for vegetation: dry trees and brush, higher susceptibility to disease and insects, easier ignition, faster burn rate, etc.
- **Excessive precipitation:** Excessive precipitation can affect vegetation density and susceptibility of trees to toppling in high winds.
- **Vegetation type:** Fire risk is partially dependent upon vegetation type. Some vegetation burns quickly (e.g., dry grass), while other types burn hotter (e.g., hardwood trees such as oak). Each vegetation type presents unique challenges for vegetation management and control.
- **Vegetation density:** Dense vegetation generally represents the highest hazard level, while sparse vegetation density is substantially lower risk. Vegetation density is often associated with weather conditions, local micro-climates, precipitation amount, and vegetation type.
- **Weather:** Weather conditions include precipitation, humidity, storms, and winds. Lightning strikes associated with thunderstorms or dry lightning are a natural cause of wildfires.
- **High winds:** High winds drive wildfires. They also down trees (a risk that rises with both drought and excessive rainfall) and sometimes down power lines. In turn, downed power lines are potential ignition sources and the documented cause of major wildfires in California.

- **Prevailing winds:** NCPA monitors prevailing wind directions and speeds differentiated by season, along with average weather conditions by season, using NCPA real-time observations noting disturbing local weather.
- **Terrain:** Fires generally burn uphill, especially within steep canyons typical of NCPA's Geothermal site. Wind-driven upslope and up-canyon fires spread rapidly and represent increased fire hazards.
- **Changing weather patterns (climate change):** Climate change alters vegetation habitat, causing species migration. It may result in increased or decreased precipitation, precipitation type changes (e.g., more rain than snow), higher maximum temperatures, extended heatwaves, or more frequent drought. In turn, these changes may cause increased tree mortality, increased stressed vegetation, and greater susceptibility to disease or insect infestation. See Section 5B for additional information.
- **Communities at risk:** The risk level around designated Communities at Risk may change from year to year based on overall weather conditions, as well as during the year, changing from the wet season through the dry summer and fall.
- **Fire Frequency:** Fire frequency is associated with vegetation changes. In addition to fires consuming existing vegetation, the new landscape is open to different vegetation types, both native and invasive. Since different vegetation types represent varied fire hazards, the risk level also evolves over time in conjunction with vegetation changes.

Wildfires have occurred in the general region of NCPA's Hydro and Geothermal facilities; however, NCPA facilities have not been associated with any ignition source. The 2017 Tubbs and 2019 Kincadee Fires affected areas nearby and immediately adjacent to the Geothermal Facility. The 2015 Valley Fire destroyed much of the 2-kV Service Line for the Effluent Pump System. Risks specific to NCPA's generation facilities are tied to both residual fuel load (snags) from previous fires and potential soil instability caused by previous damage to area vegetation. These hazards are addressed by enhanced inspection techniques described in Section 5.F

#### 4.B. RISKS RELATED TO DESIGN, OPERATION, AND MAINTENANCE

Risks and risk drivers related to design, construction, operation and maintenance that could create fire ignition sources are listed below. The methodology for identifying, monitoring, analyzing, planning, and evaluating safety-wide risks are defined in NCPA's Preventative Strategies and Programs in Section 5.A. These risks include:

- **Equipment/structure/facilities:** Inherent risk of facilities, primarily open wire transmission and distribution ignition events. This risk is also elevated by adjacent facilities (CALPINE, PG&E) that could act as sources of ignition.
- **Object to wire or equipment contact:** Trees, birds, balloons, downed conductors, lightning strikes, or high wind events resulting in contact of equipment
- **Wire to wire contact:** Wires touching one another, and dropping molten metal to the ground
- **Vehicle operations:** Maintenance, inspection, or vegetation clearing crew vehicles causing fires (i.e., catalytic converters contacting dry brush)
- **Vegetation clearing:** Chain saws and other mechanized equipment use
- **Hot Work:** Welding or other activity that could cause ignition in the work area

#### 4.C. CHANGES TO CPUC FIRE THREAT MAP

A key concern for NCPA is the historical risk of wildfires in the vicinity of the agency's facilities, particularly within potential fire hazard zones. Both CAL FIRE and the CPUC have developed maps to identify potential fire hazard zones, originally published in 2007 and 2018, respectively. The CPUC released an updated version of their Fire-Threat Map in August 2021. CAL FIRE's Statewide Responsibility Map was updated in September 2023. NCPA reviewed current CAL FIRE Hazard Severity Zone and CPUC Fire-Threat Maps with respect to agency facilities, as shown in Appendix 1.

CPUC Fire Threat Maps are static until new updates are released, based on data available at the time they were created. As noted below, wildfire risks evolve over time in response to the risk drivers listed above. NCPA will review available data and adjust fire threat hazard zones when applicable to NCPA facilities.

##### 4.C.1. MAP COMPARISONS AND UPDATES

Currently published wildfire hazard maps from CAL FIRE and the CPUC show different boundaries for the risk areas delineated. They also use different terminology for hazard zones. Several factors could account for these boundary differences between agency maps: publication dates, study methodology, vegetation changes over time, recent wildfires, and potential climate change effects. The zones delineated by the CAL FIRE and CPUC maps are discussed below.

#### CAL FIRE CALIFORNIA FIRE HAZARD SEVERITY ZONE MAP

CAL FIRE generated and published Fire Hazard Severity Zone Maps for the entire state of California in 2007, including separate maps for each county. The California Department of Forestry and Fire Protection's Fire and Resource Assessment Program and the Office of the State Fire Marshal updated Fire Hazard Severity Zones. The Statewide Responsibility Area Map was updated in September 2023. The final regulation and map for the State Responsibility Area were adopted on January 31, 2024, effective April 1, 2024. These maps delineate three hazard zone levels: moderate, high, and very high. The figures in Appendix 1 illustrate these Fire Hazard Severity Zones. There has been no new information or changes to the environment identified to warrant an expansion of the high-fire threat district.

#### CPUC FIRE-THREAT MAPS

The CPUC developed and published Fire-Threat Maps. These updated 2021 maps include Tier 2 (elevated fire risk) and Tier 3 (extreme fire risk) zones. Additionally, the CPUC uses a Tier 1 (zero to moderate fire risk) category, which includes a High-Hazard Zone (HHZ) designation based on a 2018 USFS-CAL FIRE joint map of tree mortality HHZs. This Tier 1 information addresses the hazard areas with large expanses of dead trees and associated fire risks.

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#### 4.C.2. FIRE ZONE REVIEW PROCESS

The existing fire zone review process, set forth by regulatory agencies such as CAL FIRE and CPUC, is an important tool for reducing wildfire risks and hazards. Preparing and executing adequate vegetation management plans is a critical component of this process. The current fire zone process incorporates lessons learned from past major wildfire events, with each new occurrence adding knowledge and forming the basis for improving the process.

Since differences exist between currently published CAL FIRE and CPUC wildfire hazard zone maps, NCPA uses the most conservative approach to vegetation management and asset protection, assuming the highest risk factor from the combined datasets.

## 5. WILDFIRE PREVENTATIVE STRATEGIES

### 5.A. PREVENTATIVE STRATEGIES AND PROGRAMS

NCPA's strategies to reduce wildfire risk involve continuous evaluation and improvement of its programs and procedures, including NCPA's: (1) facility maintenance program, (2) emergency operating procedures, (3) vegetation management programs, and (4) asset documentation programs. These programs include all details, such as goals, objective, or percentage; monitor ongoing work; accomplishments; internal and external audits; and detailed reports. There are no constraints such as budgets, availability of equipment, knowledge to effectively deploy, or qualified personnel to install and monitor effectively.

**(1) Facility Maintenance Program:** NCPA has a robust preventive maintenance program to maintain the safe and reliable operation of its transmission and distribution lines. Given the growing risk of wildfires, opportunities for improvement have been identified and are incorporated into each facility's improvement plan. Additionally, NCPA utilizes risk factors as identified in Section 4.B. during improvement plan evaluations. Improvements such as those listed below may be implemented based on workable solutions and relative priorities:

- **The Collierville-Bellota (CB) 230-kV Gen-Tie Line:** In 2020, NCPA made improvements on its longest transmission line. More than half of the line is within a Tier 2 fire threat zone. NCPA prioritized the safe and reliable operation of the line. The line is over 30 years old. Following a thorough review of the line and its attendant facilities, major improvements, including upgrading insulators, hardware, and conductor damping, were completed in 2020. This project was considered a major capital improvement and was prioritized for wildfire prevention. Avian deterrents and anti-nesting cones were also added in 2020.
- **McKay's Point 17-kV Service Line:** The three-span overhead section of distribution line is in a Tier 3 fire threat zone. This short line segment is maintained and is monitored consistently. Fire-hardening improvements were analyzed in 2023, with construction anticipated to be complete by Q4 2024.
- **Geothermal 230-kV Gen-Tie Transmission Line:** This nine-span line connects with PG&E's 230-kV system. The line is characterized by long dead-ended spans and thick vegetation. Vegetation is cleared to a 300-foot width across the right-of-way (ROW) following CAL FIRE recommendations. The line is consistently inspected and maintained.
- **PG&E/NCPA/Santa Clara/Department of Water Resources Cotenancy 230-kV line:** This line is operated and maintained by PG&E on behalf of the co-owners. It connects NCPA and adjacent CALPINE geothermal plant sites to PG&E's Fulton and Lakeville substations. Annual maintenance practices on this line were enhanced by implementing extended visual inspection techniques. These enhanced inspection techniques significantly reduce ignition hazards from potential line or connector failures. These practices are now subject to an annual coordination meeting between PG&E and NCPA on behalf of the other co-tenants.

- **Geothermal Effluent Pump System 21-kV Line:** This 6-mile distribution line is in a Tier 3 fire threat zone. This line was largely rebuilt following damage caused by the 2017 Valley Fire. The wood pole line has construction framing typical to distribution construction. In addition to typical maintenance and monitoring of the structural and foundational health, NCPA works with Cal Fire and Calpine to coordinate vegetation removal and clearance work, in excess of the requirements for rural distribution circuits. This activity includes clearing fire breaks along routes within the NCPA steam fields, resulting in reduced risk of fire spread.

**(2) Emergency Operating Procedures:** NCPA uses emergency operating procedures to safely react to wildfire events and help guide employees. In addition to annually evaluating training procedure effectiveness, NCPA improves its operational awareness and ability to respond to fire events by ensuring that Hydro and Geothermal plant personnel working adjacent to NCPA line facilities can communicate with plant operations personnel and coordinate emergency wildfire response.

**(3) Vegetation Management Program:** NCPA developed and implemented a Transmission Vegetation Management Program (TVMP) that establishes vegetation maintenance requirements for each facility to maintain generation interconnection system reliability. The NCPA document, Generation Services Common Procedure GS-305: Transmission Vegetation Management Program, defines NCPA procedures for vegetation management. The full description of this program is described in Section 5.E.

**(4) Wind Monitoring:** Live data regarding prevailing winds is used with the fire maps located in Appendix 1. PG&E's Weather Awareness website is a resource for real-time conditions: <https://www.pge.com/en/outages-and-safety/safety/wildfire-preparedness-support/weather-and-fire-detection.html>. This information is used in communication and aids to analyze wildfire situations. In addition, prevailing wind patterns and their effect on transmission conductors due to cyclic loading are taken into account during annual transmission asset inspections conducted in accordance with NCPA's NERC FAC-003 compliance procedure GS-305.

**(5) Asset documentation:** Current NCPA facility documentation includes geographically referenced facility locations (Appendix 1) and current facility drawings, materials lists, and design criteria. This documentation has been coordinated with adjacent asset owners (PG&E and Calpine) to ensure completeness of maintenance actions and track design features (lightning arrestors) that minimize risks of the lines causing an ignition.

NCPA directly participated in the development of the CPUC's Fire-Threat Map,<sup>1</sup> which designates a High Fire-Threat District. In the map development process, NCPA served as a territory lead and worked with utility staff and local fire and government officials to identify the areas of NCPA's service territory that are at an elevated or extreme risk of power line-ignited wildfire. NCPA incorporated the High Fire-Threat District into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

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<sup>1</sup> Adopted by CPUC Decision 17-12-024.

The CPUC defines a High Fire-Threat District consisting of three areas:

- Tier 1 HHZs from the USFS and CAL FIRE joint map of Tree Mortality HHZs
- Tier 2 consists of areas on the CPUC Fire-Threat Map where there is an elevated risk for utility-associated wildfires
- Tier 3 of the CPUC Fire-Threat Map where there is an extreme risk for utility-associated wildfires

NCPA facilities in relation to CPUC and CAL FIRE threat maps are shown in Appendix 1 of this report.

## 5.B. POTENTIAL CLIMATE CHANGE EFFECTS

Climate change affects vegetation in many ways. Droughts are longer and more severe. Large storm events are more common and intense. Summers are hotter and may include more thunderstorms. These climate change factors affect vegetation and the associated wildfire risks:

- Vegetation adapts, with plant migration into different areas
- Vegetation dries out during droughts, presenting increased fire danger
- Stressed vegetation is more susceptible to insect infestations, damaging trees, or accelerating mortality
- Thunderstorms present lightning strike risks along with strong wind events

Extended periods of intense rainfall also typically increase landslide risks. In turn, landslides could damage or topple structures, limit access, create safety hazards by damaging roads, or cause localized tree mortality by severing root systems. Note that heavy rainfall is not the only landslide trigger mechanism, but it is the one most closely associated with climate change.

## 5.C. POTENTIAL CLIMATE CHANGE RISK MANAGEMENT IMPACTS

Climate change affects the risks associated with wildfires, especially in fire hazard zones. Some specific climate change impacts that affect wildfire risks include:

- Tree and underbrush growth rates
- Vegetation type changes
- Vegetation migration from existing habitats
- Stress and disease contributing to higher tree mortality

As potential impacts shift over time, fire hazard management practices will evolve and adapt to changing risk management requirements.



## 5.D. TREE MORTALITY

It is estimated that over 100 million trees in California died from drought-related stress between 2012 and 2017. The extended drought period left millions of acres of forestland highly susceptible to insect attacks. Drought stress is aggravated in forests with high competition for limited water resources.

Dead, dying, and diseased trees represent potential wildfire risks for NCPA. Trees adjacent to power line ROW represent a hazard due to falling branches or potential toppling. This threat increases substantially with tall snags or trees with dead tops. Dead or highly stressed trees are also an easily ignitable fuel source. They ignite quicker and generally burn faster than healthy trees. NCPA's internal Transmission Vegetation Management Program specifies tree and snag clearances.

## 5.E. VEGETATION MANAGEMENT

NCPA developed and implemented a Transmission Vegetation Management Program (TVMP), establishing vegetation maintenance requirements for each facility to achieve generation interconnection system reliability. The NCPA document, Generation Services Common Procedure GS-305: Transmission Vegetation Management Program, defines NCPA procedures for managing all types of vegetation associated with utility infrastructure, including vegetation above and below electrical lines.

NCPA meets or exceeds the minimum industry standard vegetation management practices. For transmission-level facilities, NCPA complies with North American Electric Reliability Corporation (NERC) FAC-003-4. For both transmission and distribution-level facilities, NCPA meets: (1) Public Resources Code section 4292, (2) Public Resources Code section 4293, (3) General Order 95 Rule 35, and (4) General Order 95 Appendix E Guidelines to Rule 35.

The TVMP enhances reliability by preventing vegetation-related outages, maintaining required clearances between power lines and vegetation within or adjacent to the ROW, reporting vegetation-related system outages to the Western Electricity Coordinating Council, and documenting the process for an annual vegetation work plan. This program satisfies requirements for vegetation management specified in NERC FAC-003-4, which requires a Generator Owner to have documented maintenance strategies, procedures, processes, or specifications to prevent the encroachment of vegetation into the Minimum Vegetation Clearance Distance of applicable lines as specified in requirement R3.

NCPA uses a combination of its own staff and qualified consultants (such as scientific experts in ecology, fire ecology, fire behavior, geology, and meteorology) with experience in line design, line construction, NERC Standards compliance, and vegetation management to develop and maintain the TVMP.

The TVMP specifies technical requirements for staff and contractors to comply with or verify compliance with California Division of Occupational Safety and Health (Cal/OSHA) standards, and NCPA Electrical Safety Procedure GS-103 ensures Cal/OSHA and Minimum Approach Distances.

Objectives of the TVMP are:

- Adhere to the Power Line Fire Prevention Field Guide published by CAL FIRE in November 2008 and used by California power utilities for the care and maintenance of trees, shrubs, and other woody plants when pruning vegetation near electric facilities.
- Maintain defined clearance distances between the generation interconnection facilities and all trees, brush, and other vegetation that could grow too close to electrical facilities, including conductors, poles, guy wires, and other structures. Since the clearances specified in the Power Line Fire Prevention Field Guide published by Cal FIRE in November 2008 are more stringent than the MVCD described in FAC-003-4, NCPA adheres to the CAL FIRE field guide.
- Where appropriate and necessary, develop site-specific, environmentally sensitive, cost-effective, and socially responsible solutions to vegetation control near the NCPA generation interconnection facilities. Document the process in NCPA's computerized maintenance management system's annual Preventive Maintenance process for the annual vegetation work plan for applicable power lines and other facility infrastructure (steam lines, switchyards, firebreaks).
- Maintain public and worker safety, maintain compliance with NERC standards and other regulatory and legal requirements, provide reliable electric service that allows for operational flexibility, and promote environmental stewardship and habitat enhancement.

Potential improvements to its programs include increasing the frequency and scope of aerial lidar surveys on its transmission and distribution facilities and a continued emphasis on identification and timely removal of danger and hazard trees that threaten overhead lines. NCPA's asset management system allows evaluating potential improvements as observations are recorded.

#### 5.F. INSPECTIONS

NCPA performs annual inspections of its transmission and distribution facilities, in accordance with General Order 95 and General Order 165. The following additional inspections have been performed on the Collierville-Bellota 230-kV line:

- Lidar vegetation flights
- Corona scans of insulators
- Infrared "hot-spot" inspections of conductor, conductor splices, and dead-end hardware.

In addition to its annual ground-based inspection, NCPA may augment inspections with aerial drone and/or helicopter surveys.

These inspections are documented and issued by NCPA's computerized maintenance management system, and records of those inspections are maintained.

Strategic improvements to the inspection program are listed below.

- Increasing inspection frequency and scope
- Using drone-based visual inspections

- Considering new technology
- Improving inspection methodology approach
- Considering fire threat zones in inspection programs

NCPA's asset management system also allows these improvements to be evaluated as observations and comments are made when work orders for maintenance items are executed.

The TVMP establishes requirements for the type and schedule of ROW vegetation inspections. Specific hazards addressed in the TVMP include identifying encroachments into the clearance area (Section 6.3.7) and additional inspection activities to identify deadfall and brush in the ROW that could provide fuel for wildfire spread (Section 6.3.9). The TVMP also provides explicit direction to treat emergent conditions associated with a potential hazard as an immediate mitigation priority and address extent of condition without delay (Section 6.4.4).

## 5.G. FIRE PREVENTION, SAFETY, EMERGENCY RESPONSE TRAINING

Section 4.B. of this WMP outlines the unique risks for which NCPA performs inspections.

NCPA implemented work rules and complementary training programs for its workforce to help reduce the likelihood of fire ignition. Trainings for employees to cover fire hazards and NCPA's Fire Prevention Plan cover the following topics.

- Fire extinguisher use
- Fire prevention
- Hazardous materials handling
- Emergency response

These trainings are conducted by an outside vendor and/or NCPA supervisors or environmental health and safety specialists.

NCPA employees also receive training on emergency response plans when the employee is assigned initially to the job, when the plan changes, and when the employee's responsibilities or designated actions under the plans change.

Each facility manager is responsible for conducting site-specific training to ensure that the purpose and function of NCPA safety procedures are understood by employees, and that knowledge and skills required for safe operation are acquired by employees. Refresher training is performed and documented on an annual basis and retraining is conducted when:

- An annual audit reveals there are deviations from or inadequacies in the employee's knowledge of the procedure or changes in the regulations
- There is a new or revised control method of a system or piece of equipment

The following procedures provide additional guidance for employee training specific to the areas described in these NCPA documents:

- Generation Services Common Procedure GS-101: Lock Out Tag Out Try Procedure
- Generation Services Common Procedure GS-103: Electrical Safety Procedure

- Generation Services Common Procedure GS-107: Proper Handling of Hazardous Waste
- Generation Services Common Procedure GS-111: Hot Work Procedure
- Generation Services Common Procedure GS-115: Welding Safety Procedure
- Generation Services Common Procedure GS-126: Fire Protection and Prevention Plan
- Power Management Common Procedure PM-108: Operating Instructions and Emergency Assistance
- Power Management Common Procedure PM-201: Emergency Operating Guidelines, Collierville Power House Bellota-Collierville 230-kV Lines

## 5.H. RECLOSING POLICY

NCPA does not own or use automatic reclosers on its 230-kV transmission lines. Relaying equipment on the 21-kV Bear Canyon line at the Geothermal facility is also set to a “zero-reclose to lockout”, requiring physical inspection of the line prior to restoration. This is a typical approach for utility operations in remote terrain, for both personnel and fire hazard safety reasons.

In the event of a planned or emergency line trip, close coordination with NCPA generation services and dispatch, as well as with PG&E's grid control center, is mandatory. Lines are only re-energized after extensive line patrol visual confirmation. If the lines are tripped due to a forecasted or imminent wildfire or if a wildfire is believed to be caused by downed lines, close coordination with CAL FIRE's onsite representative and control center are required before NCPA's generation services attempts to energize the line.

## 5.I. DE-ENERGIZATION

NCPA plant managers are responsible for determining de-energizations. NCPA's Geothermal plant manager relies on PG&E to determine de-energization. NCPA's Hydro plant manager has the authority to preemptively shut off power due to fire-threat conditions; however, this option will only be used in extraordinary circumstances. Step-by-step PSPS procedures for both the Hydro and Geothermal facilities are provided in Attachment D.

NCPA also maintains transmission line trip procedures to significantly reduce fire risk, including requiring patrols prior to restoring transmission lines. Requiring patrols during high fire risk scenarios is typical and recommended of California utilities.

### 5.J.1. IMPACTS TO PUBLIC SAFETY

NCPA does not service retail customers and de-energizing agency facilities will not directly affect retail customers, who will be notified of PSPS by their specific utility providers.

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## 5.J.2. CUSTOMER NOTIFICATION PROTOCOLS

NCPA provides wholesale power to cities and utilities, typically known as NCPA members, only via the utility grid. Since NCPA does not have retail customers, no customer notification protocols are in place. However, NCPA is the primary point of contact between PG&E PSPS and its member utilities. Formal procedures are currently in place, NCPA-PM-501, to notify NCPA member utilities of de-energization activities. The primary and backup points of contact for each NCPA member utility are contacted by phone.

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## 7. RESTORATION OF SERVICE

After a de-energization event, NCPA will restore service in coordination with PG&E's restoration efforts. NCPA will follow steps to restore service, such as inspecting, repairing, testing, and finally restoring.

### 7.A. METRICS AND ASSUMPTIONS FOR MEASURING PLAN PERFORMANCE

NCPA tracks three metrics to measure performance of this WMP. Metrics are evaluated yearly: (1) number of fire ignitions, (2) number of NCPA wires down, and (3) hazard tree fall ignitions.

#### METRIC 1: FIRE IGNITIONS

NCPA tracks fire ignitions in their territory as follows:

- Self-ignited or human-caused
- An NCPA facility failure was associated with the fire
- An NCPA electrical facility wire-to-wire contact was associated with the fire
- The ignition was a result of an extreme weather event

**2020 Metric Summary: GEO – 0 ignitions, Hydro – 0 ignitions**

**2021 Metric Summary: GEO – 0 ignitions, Hydro – 0 ignitions**

**2022 Metric Summary: GEO – 0 ignitions, Hydro – 0 ignitions**

**2023 Metric Summary: GEO – 0 ignitions, Hydro – 0 ignitions**

#### METRIC 2: WIRES DOWN

The second metric is the number of NCPA distribution and transmission wires downed. A wire down event includes any instance where an electric transmission or primary distribution conductor falls to the ground or onto a foreign object. NCPA divides the wires down metric between wires down inside and outside of High Fire Threat Districts. All wires down events are documented.

**2020 Metric Summary: GEO – 0 Wire Down, Hydro – 0 Wire Down**

**2021 Metric Summary: GEO – 0 Wire Down, Hydro – 0 Wire Down**

**2022 Metric Summary: GEO – 0 Wire Down, Hydro – 0 Wire Down**

**2023 Metric Summary: GEO – 0 Wire Down, Hydro – 0 Wire Down**

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### METRIC 3: FALL IN HAZARD TREES IGNITIONS

NCPA added a metric that measures an element that could lead to a wildfire ignition:

- Fall in trees (trees of height sufficient to represent a contact hazard to the Distribution Line if destabilized due to soil instability at the tree base) without adequate clearance to the ROW in areas previously affected by fire.

**2023 Metric Summary: GEO – 10 Locations, 0 Fall Ins; Hydro – 2 Locations, 0 Fall Ins.**

#### 7.B. IMPACT OF METRICS ON PLAN

NCPA continues to track these metrics and document overall WMP success at identifying and containing risk. Additional metrics may be added to the WMP, as warranted, to identify which lines are most susceptible to risk factors from unexpected outages (human, animal, or vegetation induced), time-of-year risks (drought or excessive rainfall), shifting fire threat district risks, or impact of maintenance deferment on existing lines. Through this metric review, NCPA will identify lines and other facility assets that are disproportionately impacted and could benefit by focused risk reduction measures that represent potential improvements to the plan.

**2020 through 2023 WMP Impact Due to Metrics – The metrics above show zero incidents and indicate success.**

Within the context of California's exposure to wildfire ignition risk resulting from "wires down" or "wire/tree interaction", NCPA operates an asset base in high fire risk territory that consists of roughly 35 miles of 230-kV transmission and 6 miles of 21-kV distribution. By contrast, PG&E operates in excess of 99,000 miles of transmission and distribution circuits within its service territory, experiencing an incident rate of 308 "wires down" or "wire/tree interaction" during 2022, for a rate of 0.3 percent per mile year (PG&E 2023-2025 WMP Revision 1 Figure PG&E-6.1.1-2, page 136). Assuming NCPA's incident rate is equivalent to PG&E, NCPA should expect to experience 0.12 incident per mile year, or about one incident in 8.5 years. A "zero" metric would be indicative of success under NCPA's WMP program metrics and should be sustainable for a period in excess of 10 years.

The Agency considered adding a metric to track total inspection observations for each overhead line asset but determined this would not add value as a new metric. Instead, NCPA will continue to perform inspections through its maintenance program.

#### 7.C. MONITORING AND AUDITING THE PLAN

This WMP is presented to the NCPA Commission on an annual basis along with metrics and a summary of updates. Additionally, a qualified independent evaluator will present a report on this plan to the NCPA Commission. See Section 8.



## 7.D. IDENTIFYING AND CORRECTING DEFICIENCIES IN THE PLAN

NCPA may correct deficiencies and implement plan improvements as needed. Some of these activities and their alignment to the Agency's Strategic Priorities are defined in Section 2.C. In support of these priorities, the annual WMP review provides a framework for evaluating the effectiveness of the Agency's plan, both in terms of the internal results achieved and the potential for shifting hazards resulting from ongoing drought (e.g., additional areas being designated as high fire threat) and weather-induced changes (e.g., increased fire load as a result of higher than historic rainfall totals). The Agency's strategy involves an ongoing process of assessing risk and developing cost-effective means to address those risks within the WMP (e.g., cooperative effort with Calpine to maintain fire breaks, use of WAPA for transmission line conductor repair and replacement). Improvements will be documented in the annual report to the NCPA Commission.

## 7.E. MONITORING THE EFFECTIVENESS OF INSPECTIONS

Line inspections for NCPA fall into two categories:

1. Line patrol and evaluation of line facilities on a structure-by-structure basis. This is either ground or aerial (drone or helicopter) based.
2. Vegetation monitoring and evaluation, either ground based on a structure-by-structure and span-by-span basis or by lidar aerial methods.

Measuring the effectiveness of these inspections can be performed by professionals independent of the inspection documentation and analysis. Baseline comparison of results from adjacent drought and excessive rainfall years will inform earlier inspection timing and/or enhanced scope of the inspections. Developing metrics surrounding identified and mitigated risks will help reinforce a "zero-tolerance" approach for vegetation management and equipment failure-induced outages. Baseline of inspection practices with adjacent owners (PG&E and Calpine) will also be used to evaluate effectiveness. An NCPA representative will ride along with inspection personnel to review their methodology and reporting. Lastly, an independent review of similar facilities can be performed and compared with inspection personnel. NCPA currently conducts ride alongs with both Cal-Fire staff and internal NCPA staff. Additional objectives are stated in Section 2.C. above.

## 8. INDEPENDENT AUDITOR

In 2019, NCPA anticipated that the CPUC would provide a list of qualified independent evaluators. In lieu of such a list, NCPA drew from a list it compiled following a Request for Qualifications issued in June 2019. The selection was based on competitive bid.

In 2020, NCPA competitively bid and contracted with a qualified independent evaluator, Dudek, with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of this WMP. The independent evaluator issued a report (Appendix 2) and posted to the NCPA website. The independent evaluation and report were completed on April 30, 2020.

In 2021, 2022, and 2023, NCPA competitively bid and contracted with a qualified independent evaluator, Dudek, to review this WMP using the recommendations provided by the Wildfire Safety Advisory Board's (WSAB) "Guidance Advisory Opinion for the 2021 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives". Per the WSAB, "The guidance document should be viewed as offering an efficient way to meet the WMP requirements in Public Utilities Code Section 8387(b)(2), not as adding to the statutory requirements." The independent evaluator issued reports for each year (Appendices 3, 4, and 5) and posted to the NCPA website.

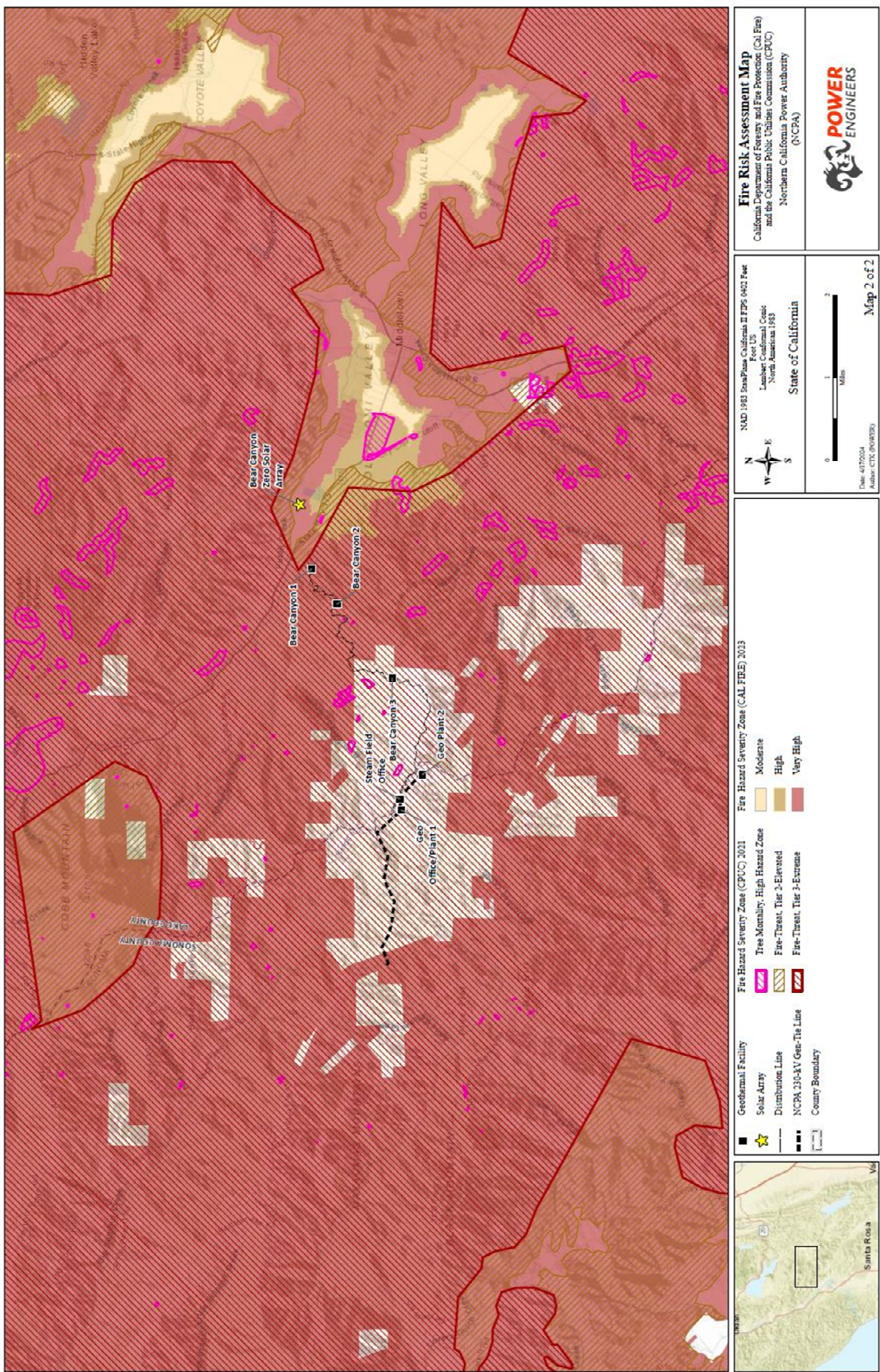
In 2024, NCPA competitively bid and contracted with a qualified independent evaluator, POWER Engineers, Inc., to review this WMP using the recommendations provided by the WSAB's "Guidance Advisory Opinion for the 2021 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Cooperatives". Per the WSAB, "The guidance document should be viewed as offering an efficient way to meet the WMP requirements in Public Utilities Code Section 8387(b)(2), not as adding to the statutory requirements." The independent evaluator issued a report for 2024 (Appendix 6) and posted to the NCPA website.

## 9. REFERENCES

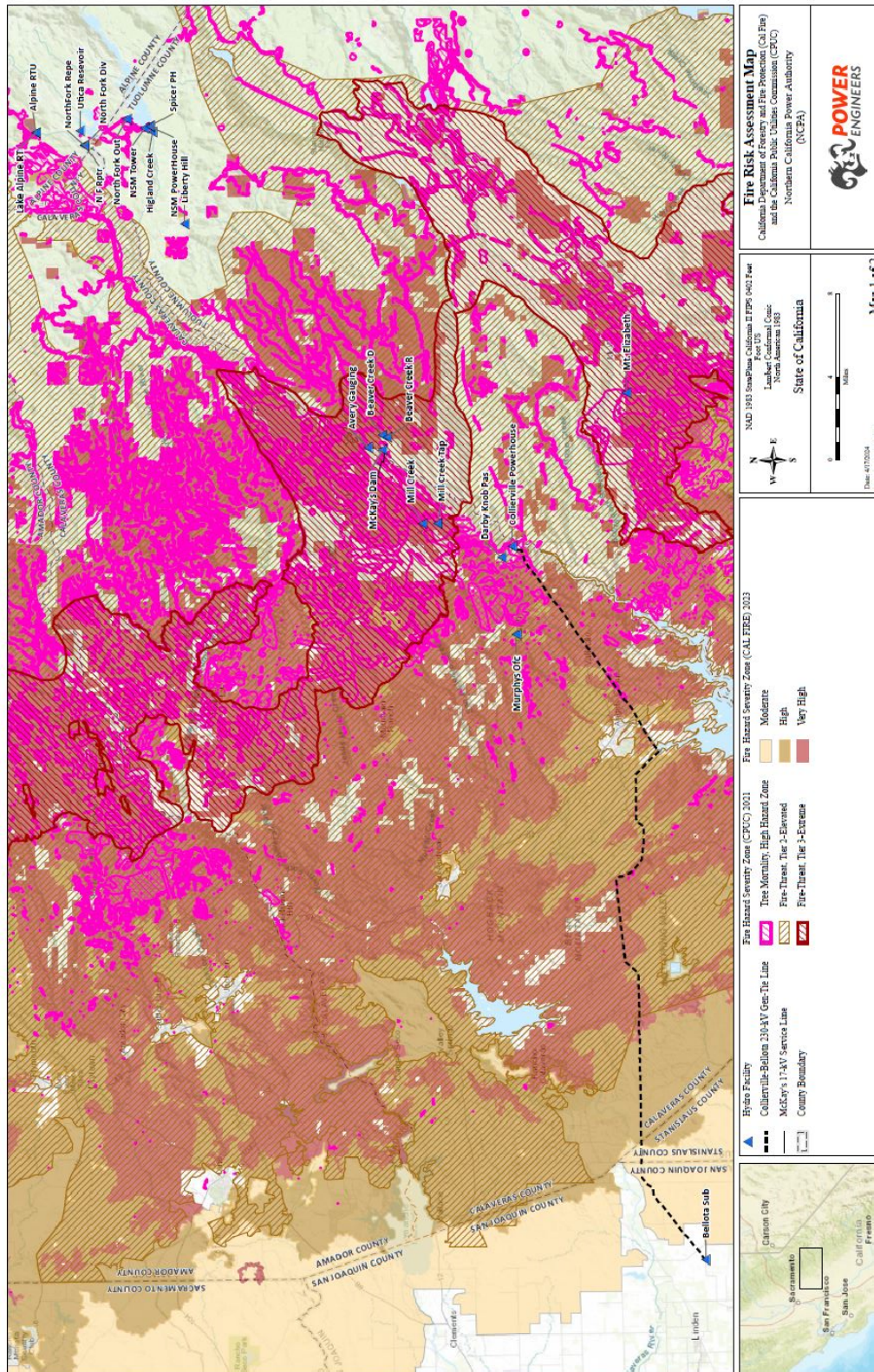
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- California Public Utilities Commission. 2021. Fire-Threat Maps and Fire-Safety Rulemaking.  
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## APPENDIX 1 – FIRE RISK ASSESSMENT MAPS







## APPENDIX 2 – INDEPENDENT EVALUATOR REPORT 2020

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T 530.887.8500 F 530.887.1250

April 30, 2020

12108.02

Mr. Jeremy Lawson  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

**Subject:** *Evaluation of Northern California Power Agency Wildfire Prevention and Mitigation Plan*

Dear Mr. Lawson:

Dudek conducted an evaluation of the City of Northern California Power Agency (NCPA) Wildfire Mitigation Plan (WMP), as required under California Public Utilities Code (CPUC) Section 8387(b). CPUC Section 8387(b), as modified by Senate Bill (SB) 901, and the Administrative Law Judge's Ruling issued on January 17, 2019 in CPUC Docket No. R.18-10-007 (ALJ Ruling), applies to publicly-owned electric utilities and requires preparation of a Wildfire Mitigation Plan before January 1, 2020. CPUC Section 8387(c) requires that an independent evaluator review and assess the comprehensiveness of a publicly-owned utility's WMP and issue a summary report.

Dudek, as an independent plan evaluator, conducted an initial review of NCPA's Draft WMP (version 1.0). On April 21, 2020, Dudek provided a summary matrix with recommendations for Draft WMP modifications. The focus of the evaluation was to determine whether the Draft WMP addressed all required elements under CPUC Section 8387(b)(2) (included in Attachment A). The following summarizes the recommended clarifications/modifications identified during the initial review of the Draft WMP (version 1.0), by required element:

- 8387(b)(A): Provide clarification and detail regarding plan implementation responsibility.
- 8387(b)(E): Identify previous plan metrics, as available.
- 8387(b)(L): Provide details regarding risk drivers, risk impacts, and how NCPA will identify, monitor, analyze, plan/evaluate and respond to risks.
- 8387(b)(N)(i): Clarify monitoring efforts associated with WMP implementation and clearly identify performance monitoring details in the plan. Clarify plan auditing and review procedures.
- 8387(b)(N)(ii): Provide clarification and detail regarding plan implementation, review, and plan deficiency correction responsibility.
- 8387(b)(N)(iii): Clarify line/equipment inspection responsibility, timeframes, work plan approach, and target inspection goals, and performance metrics.

Subsequently, NCPA elected to modify its Draft WMP that incorporated Dudek's recommended modifications. The Revised WMP (version 1.1) was provided to Dudek on April 29, 2020. Dudek reviewed the Revised WMP and determined that it appropriately addressed all elements required under CPUC Section 8387(b)(2).

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April 2020



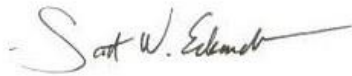
Mr. Jeremy Lawson

Subject: Evaluation of Northern California Power Agency Wildfire Prevention Mitigation Plan

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Should you have any questions or require additional information, please do not hesitate to contact me at (530) 863-4650.

Sincerely,



---

Scott Eckardt, RPF  
Project Manager

Att.: A. Required WMP Elements under PUC Section 8387(b)  
cc: Michael Huff, Dudek  
Jason Neuman, Dudek

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April 2020

**Required WMP Elements under PUC Section 8387(b)**

PUC 8387(b)(2) Section	Description
<b>A</b>	An accounting of the responsibilities of the persons responsible for executing the plan.
<b>B</b>	The objectives of the wildfire mitigation plan.
<b>C</b>	Description of the preventative strategies and programs to be adopted by the publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.
<b>D</b>	A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions made that underlie the use of those metrics.
<b>E</b>	A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.
<b>F</b>	Protocols for disabling reclosers and de-energizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure
<b>G</b>	Appropriate and feasible procedures for notifying a customer who may be impacted by the de-energizing of electric lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.
<b>H</b>	Plans for vegetation management.
<b>I</b>	Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.
<b>J</b>	A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory. The list shall include, but not be limited to, both of the following:
<b>J(i)</b>	Risks and risk drivers associated with design, construction, operations, and maintenance of the local publicly owned electric utility or electrical cooperative's equipment and facilities.
<b>J(ii)</b>	Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned utility's or electrical cooperative's service territory.
<b>K</b>	Identification of any geographic area in the local publicly owned electric utility's or electrical cooperative's service territory that is a higher wildfire threat than is currently identified in a commission fire threat map, and identification of where the commission should expand the high fire threat district based on new information or changes to the environment.
<b>L</b>	A methodology for identifying and presenting enterprise-wide safety risk and wildfire-related risk.
<b>M</b>	A statement of how the local publicly owned electric utility will restore service after a wildfire.
<b>N</b>	A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following:
<b>N(i)</b>	Monitor and audit the wildfire mitigation plan.
<b>N(ii)</b>	Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies.
<b>N(iii)</b>	Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, and other applicable statutes, or commission rules.



## APPENDIX 3 – INDEPENDENT EVALUATOR REPORT 2021

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May 3, 2021

Mr. Jeremy Lawson  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

*Subject: Independent Evaluation Report of Northern California Power Agency's Wildfire Mitigation Plan Ver. 1.2*

### I. INTRODUCTION

Northern California Power Agency (NCPA) contracted with Dudek to engage in an independent evaluation of its Wildfire Mitigation Plan (WMP). This independent evaluation report (Report) describes the technical review and evaluation of the WMP prepared by Dudek, performed in April 2021 and completed on April 26, 2021.

Dudek conducted an evaluation of NCPA's WMP, as required under California Public Utilities Code (PUC) §8387(b). PUC §8387(b), as modified by Senate Bill (SB) 901, and the Administrative Law Judge's Ruling issued on January 17, 2019 in California Public Utilities Commission (CPUC) Docket No. R.18-10-007 (ALJ Ruling), applies to local publicly owned electric utilities and required preparation of a WMP before January 1, 2020, and revising/updating the WMP in 2020 and annually thereafter.

The WMP requirements are codified in PUC §8387(b)(2) for local publicly owned electric utilities (POUs). PUC §8387(c) requires that an independent evaluator review and assess the comprehensiveness of a POU's WMP and issue a summary report.

Dudek conducted an initial review of NCPA's WMP (version 1.2) and provided recommendations for clarifications/modifications on April 8, 2021. The focus of the evaluation was to determine whether the WMP included all elements required under PUC §8387(b)(2) (listed in Attachment A). The following summarizes the recommended clarifications/modifications identified during the initial review, by required element. Required elements not identified below were determined to satisfactorily meet code requirements in the WMP.

- 8387(b)(2)(A): While the organizational structure, responsible department and responsible position are identified, it is not clear what the responsible position's responsibilities are for executing the WMP.
- 8387(b)(2)(C): Add description of programs. Reference is made to the line maintenance program. No definitive description is provided for the proposed programs.
- 8387(b)(2)(E): Include discussion of application of previous metrics. No reference is included regarding the impacts on the WMP from past metrics.
- 8387(b)(2)(F): Enhance section to clarify role as wholesaler vs. retailer. Reclosers are not employed. Impacts to Public Safety is addressed; any impacts would be addressed by providers of Public Safety Power Shutoffs (PSPS). Any de-energization is coordinated with CAL FIRE and PG&E.

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May 2021

- 8387(b)(2)(G): Enhance section to clarify role as wholesaler vs. retailer. As a wholesale provider NCPA has no retail customers; any impacts would be addressed by providers of PSPS.
- 8387(b)(2)(J): Add list of risks and risk drivers related to design, construction, operation and maintenance; they currently are not addressed.
- 8387(b)(2)(K): Not addressed. Rather than referring solely to the High Fire-Threat District, include description of the local geography, any specific areas of concern and identification of any changes to be made.
- 8387(b)(2)(M): Needs clarification and details. Statement is very limited with no details, only that restoration will occur in coordination with PG&E and General Order (GO)-646 procedures. The section should be enhanced to include details on PG&Es restoration efforts and the GO-646 procedure.
- 8387(b)(2)(N): The section should be enhanced to include details on how the monitoring will occur throughout the year. It is not clear how deficiencies are identified. Clarification is needed whether or not the proposed effectiveness inspection methods are actually taking place, and if so, by whom.

Following updates to all of the above, the WMP was found to meet all the requirements of PUC §8387(b)(2).

In addition, though not required to do so, NCPA requested Dudek to conduct an evaluation of the WMP for compliance with the Wildfire Safety Advisory Board 2020 WMP guidance recommendations. Following updates, the WMP was found to meet all the recommendations of the Guidance Advisory Opinion for 2021 WMPs (See Attachment B for Compliance Matrix).

## II. WILDFIRE MITIGATION PLAN REQUIREMENTS

### A. Senate Bill 901

Per Senate Bill (SB) 901, all Publicly Owned Utilities (POUs) are required to adopt a Wildfire Mitigation Plan (WMP), which shall be reviewed by an independent third-party evaluator. SB 901 requires the governing board to determine whether any portion of the geographical area where the utility's overhead electrical lines and equipment are located has a significant risk of catastrophic wildfire resulting from those electrical lines and equipment. The bill directs electrical utilities to annually prepare WMPs that include several mitigation and response elements in each utility's strategies, protocols, and programs. Each electric utility is to prepare and adopt a comprehensive WMP before January 1, 2020. The requirements for POUs are presented in PUC §8387. In addition, the WMP shall be reviewed by an approved, independent, third-party evaluator to review and assess the comprehensiveness of, and the POU's compliance with, this Plan.

### B. AB 1054 & AB 111

Per Assembly Bill (AB) 1054, POUs must annually submit a WMP to the California Wildfire Safety Advisory Board, which will review the WMP and provide recommendations on mitigating wildfire risk. AB 1054 contains similar WMP requirements to SB 901 but allows WMPs of a three-year, rather than one-year duration.

AB 111 establishes the Wildfire Safety Division within the Public Utilities Commission.

### C. Northern California Power Agency WMP Requirements

PUC §8387(b)(2) lists the statutory requirements for WMPs. These are the specific elements that the independent evaluator must review in order to make its determination for this report. The specific elements that must be addressed in NCPA's WMP are included in Table A (see Attachment A) and are summarized here for reference.

- The responsibilities of persons responsible for executing the plan.
- The objectives of the wildfire mitigation plan.
- The preventive strategies and programs to be adopted to minimize the risk of its electrical lines and equipment causing catastrophic wildfires.
- The metrics to use to evaluate the wildfire mitigation plan's performance.
- How the application of previously identified metrics has informed the wildfire mitigation plan.
- Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts.
- Procedures for notifying a customer who may be impacted by the deenergizing of electrical lines.
- Plans for vegetation management.
- Plans for inspections of the electrical infrastructure.
- Description of all wildfire risks, and drivers for those risks, throughout the service territory, including design, construction, operation, and maintenance of equipment and facilities, and topographic and climatological risk factors.
- Identification of any geographic area in the service territory that is a higher wildfire threat than is identified in a commission fire threat map.
- Identification of enterprise-wide safety risk and wildfire-related risks.
- How the service will be restored after a wildfire.
- The processes and procedures used to monitor and audit the implementation of the wildfire mitigation plan, identify any deficiencies, and the effectiveness of electrical line and equipment inspections.

### III. DESCRIPTION OF NORTHERN CALIFORNIA POWER AGENCY

NCPA is a Joint Powers Agency, which owns and operates electrical generation facilities. NCPA is governed by a Commission comprised of one representative for each of its public power utility members.

The WMP applies to a geothermal facility and a hydro facility that are located in two different geographical areas. These two facilities contain electrical equipment in high fire threat locations. The geothermal plant is located around the Geyser territory in Lake County and the Hydro Electric Facility is located in the North Fork Stanislaus River watershed (Calaveras County).

NCPA electrical infrastructure consists of facilities that are in Moderate to Very High Fire Hazard Severity Zones (CAL FIRE) and/or Tier 2/3 CPUC Fire Threat Zones.

NCPA has taken appropriate actions to help prevent and respond to the increasing risk of devastating wildfires by following all applicable design, construction, operation, and maintenance requirements that reduce safety risks associated with its electric system.

#### IV. INDEPENDENT EVALUATION

##### A. Independent Evaluator Requirement

PUC §8387 requires each POU to “contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan.” Additionally, the independent evaluator’s assessment of the comprehensiveness of the POU’s WMP must be issued in a report that is both posted to the POU’s website and presented at a public meeting of the POU’s governing board.

##### B. Dudek’s Qualifications

According to PUC §8387(c), the qualified independent evaluator that performs the assessment of NCPA’s WMP must have “experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan.” NCPA has determined that Dudek is the independent evaluator who adequately understands the local conditions and fire risks of the service area.

##### C. Evaluation Methodology

Dudek evaluated the comprehensiveness the NCPA WMP on the following measures:

- Statutory Compliance: Dudek ensured that each required element specified in PUC §8387 is either addressed in NCPA’s WMP or that NCPA has sufficiently described why that element is not applicable due to NCPA’s size, geography, system or other relevant factor.
- Industry Comparison: Dudek is familiar with existing industry practices and has reviewed the local POU WMPs previously filed with the CPUC. Dudek has compared NCPA’s WMP against existing practices and any comparable actions planned by the POUs.

##### D. Metrics

The NCPA WMP uses the following metrics to measure performance of its wildfire mitigation measures: (1) number of fire ignitions, and (2) wires down events. Dudek has determined that these are appropriate metrics for this WMP. Dudek will continue to monitor the metrics selected in the CPUC’s current Wildfire Mitigation Plan rulemaking for utilities (per R.18-10-007) and determine if any additional metrics are applicable to POUs and should be incorporated into future WMPs.

#### V. EVALUATION OF THE NORTHERN CALIFORNIA POWER AGENCY WILDFIRE MITIGATION PLAN

##### A. Minimizing Wildfire Risks

PUC §8387(a) requires the following: Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.

The WMP describes the safety-related measures that NCPA follows to reduce its risk of causing wildfires. Dudek has determined that NCPA complies with this standard due to the construction of NCPA’s equipment and resources.

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## B. Evaluation of WMP Elements

Dudek found that NCPA's WMP meets the statutory requirements of comprehensiveness per PUC §8387. The review of the WMP's elements is summarized relative to the application of the WMP. The table in Attachment A lists each required element for NCPA's WMP and provides Dudek's assessment of the comprehensiveness of that element within the WMP.

Below is a brief summary of WMP elements as required by PUC §8387, including restating sections of the WMP where applicable.

### 8387(b)(2)(A): Responsibilities of Persons Responsible for Executing the Plan.

Under the direction of the Assistant General Manager for Generation Services, the plant managers are responsible for implementation and execution of the WMP with respect to their facilities.

### 8387(b)(2)(B): Objectives of the Wildfire Mitigation Plan

The objective of the WMP is to reduce the risk of wildfires that could be ignited or propagated by NCPA electrical equipment or facilities in high fire threat locations.

### 8387(b)(2)(C): Prevention Strategies and Programs

NCPA's strategies to reduce wildfire risk include continuous evaluation and improvement of its programs and procedures: including NCPA's (1) facility maintenance program, (2) emergency operating procedures, (3) vegetation management programs, and (4) asset documentation programs. These programs include all details such as goals, objective or percentage, monitor ongoing work, accomplishments, internal and external audits, and detailed reports.

### 8387(b)(2)(D): Metrics and Assumptions for Measuring WMP Performance

The NCPA WMP uses two metrics to measure performance of its wildfire mitigation measures: (1) number of fire ignitions, and (2) wires down events. Dudek has determined that these are appropriate metrics for this WMP.

### 8387(b)(2)(E): Impact of Previous Metrics on WMP

The metrics show zero incidents and indicate success; no WMP changes due to metrics.

### 8387(b)(2)(F): Reclosing Protocols

NCPA does not own or use automatic reclosers on its 230 kV within the scope defined in this WMP.

### 8387(b)(2)(G): De-energization Notification Procedures

In the event of active fire situations, NCPA may be directed by CAL FIRE to de-energize the lines for firefighter and/or aircraft protection. If CAL FIRE requests de-energizing both of the lines, the NCPA Dispatch Center will shut down units before de-energizing these lines.

### 8387(b)(2)(H): Vegetation Management

NCPA has developed and implemented a Transmission Vegetation Management Program (TVMP) to establish the vegetation maintenance requirements for each facility to achieve reliability of its generation interconnection system. The NCPA document defines procedures for vegetation management. NCPA's

TVMP is the plan for all types of vegetation associated with utility infrastructure, from the ground to the sky, which includes vegetation above and below electrical lines.

**8387(b)(2)(I): Inspections**

NCPA performs annual inspections of its transmission and distribution facilities in accordance with General Order 95 and General Order 165. In addition to its annual ground-based inspection, NCPA may augment inspections with aerial drone and/or helicopter surveys.

**8387(b)(2)(J)(i): Risks and Risk Drivers Associated with Design and Construction Standards**

Risks and risk drivers related to design, construction, operation and maintenance include equipment/structure/facilities, object to wire or equipment contact, wire to wire contact, vehicle operations, vegetation clearing, and hot work.

**8387(b)(2)(J)(ii): Risks and Risk Drivers Associated with Topographic and Climatological Risk Factors**

Risks and risk drivers related to Topographic and Climatological Risk Factors include extended drought, vegetation type, vegetation density, weather, high winds, prevailing winds, terrain, changing weather patterns and communities at risk.

**8387(b)(2)(K): Geographical Area of Higher Wildfire Threat**

To identify the areas of NCPA's service territory that are at an elevated or extreme risk of power line-ignited wildfire, NCPA has incorporated the High Fire-Threat District into its construction, inspection, maintenance, repair, and clearance practices, where applicable.

**8387(b)(2)(L): Enterprise-wide Safety Risks**

NCPA regularly evaluates enterprise safety risks, which include severe operating conditions and contingencies. NCPA also performs regular analysis of risks to improve the ability to manage the risks effectively.

**8387(b)(2)(M): Restoration of Service**

After a de-energization event, NCPA will restore service in coordination with PG&E's restoration efforts. NCPA will follow PM-201 and Geothermal Facilities Maintenance Procedure (GEO-646) which specifically address restoration for Hydro and Geothermal facilities respectively.

**8387(b)(2)(N)(i): Monitoring and Auditing WMP Implementation**

The WMP is presented to the NCPA Commission on an annual basis along with metrics and a summary of updates.

**8387(b)(2)(N)(ii): Identifying and correcting WMP deficiencies**

NCPA may correct deficiencies and implement plan improvements as needed. Improvements will be documented in the annual report to the NCPA Commission.

**8387(b)(2)(N)(iii): Monitoring and Auditing the effectiveness of inspections**

NCPA uses General Orders 95 and 165 as guides to inspect its electric supply system.

**CONCLUSION**

Dudek concludes that the Northern California Power Agency Wildfire Mitigation Plan comprehensively addresses all of the applicable statutorily required elements for a Publicly Owned Utilities' WMP as specified in California

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Public Utilities Code Section 8387, and has been updated to include modifications from the previous year's WMP. Dudek further finds that NCPA has taken reasonable actions to minimize the risk that its lines or equipment will cause a wildfire.

Prepared by,



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Douglas V. Nickles, RPF  
Fire Protection Specialist

Att.: A. WMP Required Element Compliance Matrix under PUC Section 8387  
B. Wildfire Safety Advisory Board 2020 Guidance Recommendations Compliance Matrix  
cc: Scott Eckardt, Dudek

WMP Required Element per PUC Sec 8387(b)(2)	NCPA WMP Section	IE's Assessment of WMP based on PUC Sec. 8387 Requirements	Responsible Party Revisions	IE's 2nd Assessment of WMP
(A): An accounting of the responsibilities of persons responsible for executing the plan.	Sec. 3.A Utility Governance Structure. Generation Services Assistant General Manager.	Needs clarification of responsibilities. While the organizational structure, responsible department and responsible position are identified, it is not clear what the responsible position's responsibilities are for executing the WMP.	NCPA - Complete. Added "and responsible for executing the WMP"	Meets requirements as modified.
(B): The objectives of the wildfire mitigation plan.	Executive Summary and Sec. 1.B. Purpose of the WMP. 2. Goals.	Meets requirements.	NA	Meets requirements.
(C): A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Sec. 5.A. Preventative Strategies and Programs. Sec. 5.C. Potential Climate Change Effects. Sec. 5.D. Potential Climate Change Risk Management Impacts.	Add description of programs. Reference is made to the line maintenance program. No definitive description is provided for the proposed programs.	NCPA - Complete. Revised NCPA's (1) facility maintenance program, (2) emergency operating procedures, (3) vegetation management programs, and (4) asset documentation programs.	Meets requirements as modified.
(D): A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions that underlie the use of those metrics.	Sec. 7.A. Metrics and Assumptions for Measuring Plan Performance.	Meets requirements.	NA	Meets requirements.



WMP Required Element per PUC Sec 8387(b)(2)	NCPA WMP Section	IE's Assessment of WMP based on PUC Sec. 8387 Requirements	Responsible Party Revisions	IE's 2nd Assessment of WMP
(E): A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	Sec. 7.B. Impact of Metrics on Plan.	Include discussion of application of previous metrics. No reference is included regarding the impacts on the WMP from past metrics.	NCPA - Complete. Added "2020 WMP Impact Due to Metrics" along with establishing metric summaries to review.	Meets requirements as modified.
(F): Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	Sec. 5.I. Reclosing Policy. Sec. 5.J. De-Energization. Sec. 5.J.1. Impacts to Public Safety.	Enhance section to clarify role as wholesaler vs. retailer. Reclosers are not employed. Impacts to Public Safety is addressed; any impacts would be addressed by providers of PSPS. Any de-energization is coordinated with Cal Fire and PG&E.	NCPA - Complete. Changed "employ" to "own."	Meets requirements as modified.
(G): Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall direct notification to all public safety offices, critical first responders, health care facilities, and operators of telecommunications infrastructure with premises within the footprint of potential deenergization for a given event.	Sec. 5.J.2. Customer Notification Protocols.	Enhance section to clarify role as wholesaler vs. retailer. As a wholesale provider NCPA has no retail customers; any impacts would be addressed by providers of PSPS.	NCPA - Complete. Added wholesaler vs retailer clarification.	Meets requirements as modified.
(H): Plans for vegetation management.	Sec. 5.F. Vegetation Management.	Meets requirements.	NA	Meets requirements.

WMP Required Element per PUC Sec 8387(b)(2)	NCPA WMP Section	IE's Assessment of WMP based on PUC Sec. 8387 Requirements	Responsible Party Revisions	IE's 2nd Assessment of WMP
(I): Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Sec. 5.G. Inspections.	Meets requirements.	NA	Meets requirements.
(J): A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory. The list shall include, but not be limited to, both of the following: (i) Risks and risk drivers associated with design, construction, operation, and maintenance of the local publicly owned electric utility's or electrical cooperative's equipment and facilities. (ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.	Sec. 4. Wildfire Risks and Drivers. Sec. 4.A. Risks Associated with Topographical and Climatological Factors.	Add list of risks and risk drivers related to design, construction, operation and maintenance; they currently are not addressed.	NCPA - Complete. Clarified 4.B. are Risks and risk drivers related to design, construction, operation and maintenance that could create fire ignition sources.	Meets requirements as modified.

WMP Required Element per PUC Sec 8387(b)(2)	NCPA WMP Section	IE's Assessment of WMP based on PUC Sec. 8387 Requirements	Responsible Party Revisions	IE's 2nd Assessment of WMP
(K): Identification of any geographic area in the local publicly owned electric utility's or electrical cooperative's service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high-fire threat district based on new information or changes to the environment.		Not addressed. Rather than referring solely to the High Fire-Threat District, include description of the local geography, any specific areas of concern and identification of any changes to be made.	NCPA - Complete. Addressed in 4.c. "NCPA has reviewed current CAL FIRE hazard severity zone and CPUC fire-threat maps with respect to agency facilities, as shown in Appendix 1. These maps have not been adjusted since the noted publication dates nor have any local agencies imposed any expansions to the maps."	Meets requirements as modified.
(L): A methodology for identifying and presenting enterprise-wide safety risk and wildfire-related risk.	Sec. 4.B. Enterprise-wide Safety Risks.	Meets requirements.	NA	Meets requirements.
(M): A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	Sec. 7. Restoration of Service.	Needs clarification and details. Statement is very limited with no details, only that restoration will occur in coordination with PG&E and GO-646 procedures. The section should be enhanced to include details on PG&E's restoration efforts and the GO-646 procedure.	NCPA - Complete. Revised this plan to include the statement NCPA will follow PM-201 and Geothermal Facilities Maintenance Procedure (GO-646) specifically address restoration for Hydro and Geothermal facilities respectively. These procedures contain the steps that must be taken to restore such as inspecting, repairing, testing, and finally restoring.	Meets requirements as modified.

WMP Required Element per PUC Sec 8387(b)(2)	NCPA WMP Section	IE's Assessment of WMP based on PUC Sec. 8387 Requirements	Responsible Party Revisions	IE's 2nd Assessment of WMP
(N): A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following: (i) Monitor and audit the implementation of the wildfire mitigation plan. (ii) Identify any deficiencies in the wildfire mitigation plan or its implementation, and correct those deficiencies. (iii) Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes, or commission rules.	Sec. 7.C. Monitoring and Auditing the Plan. Sec. 7.D. Identifying and Correcting Deficiencies in the Plan. Sec. 7.E. Monitoring the Effectiveness of Inspections.	The section should be enhanced to include details on how the monitoring will occur throughout the year. It is not clear how deficiencies are identified. Clarification is needed whether or not the proposed effectiveness inspection methods are actually taking place, and if so, by whom.	NCPA - Complete. Added yearly metrics summary including impact to the plan from the metrics summary.	Meets requirements as modified.

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
<b>1. Plan Structure – risk profile</b>				
a) The WMP and Independent Evaluator Reports should be prominently displayed and easily located on the POU websites.	NA	Reports are displayed on POU website.	NCPA - Complete. <a href="http://www.ncpa.com/bidding-opportunities-and-public-notifications/environmental-documents/">http://www.ncpa.com/bidding-opportunities-and-public-notifications/environmental-documents/</a>	Meets WSAB recommendation.
b) Include an index or table that shows where each section of the statute is addressed in the WMP.	Not included.	Include the statute compliance spreadsheet developed by Dudek as Appendix.	Dudek	Meets WSAB recommendation.
c) Include context-setting information at the beginning of each POU plan about each POU's risk profile in accordance with the statutory requirements Public Utilities Code Section 8387(b)(2)	Not included.	Prepare the requested context-setting information and include in Section 1.	NCPA - Complete. Added "NCPA is a Joint Powers Agency, which owns and operates electrical generation. The scope of this plan applies the Geothermal Facility and the Hydro Facility that are located in two different geological areas. These two facilities contain electrical equipment in high fire threat locations. The Geothermal Plant is located around the Geyser territory in Lake County and the Hydro Electric Facility is located in around North Fork Stanislaus."	Meets WSAB recommendation.

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B-1

12108.04  
May 2021

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
d) Apply the Board developed template for review of POU WMPs	Not included.	Prepare the requested template and include in Section 1 (attached below).	NCPA. Complete created new table section 1.	Meets WSAB recommendation.
<b>2. Plan Structure – approval process</b>				
a) Provide a paragraph describing the public review process of the plan and how it is approved, if required	Not included.	Prepare the requested paragraph and include in Section 1.	NCPA. Completed. Added to the purpose of the plan to help fill in the overall story. Very ending paragraph to the appending process. "In 2020, This WMP was presented and recorded at a public Brown Act Meeting and is posted on a public website domain..."	Meets WSAB recommendation.
b) Include additional data on monitoring and auditing and how that information is presented	Not included.	Prepare the requested additional data regarding how the information is presented and include in Section 7.C.	NCPA. Complete. Revised to "This WMP is presented to the NCPA Commission on an annual basis along with metrics and a summary of updates."	Meets WSAB recommendation.

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
c) Provide a brief explanation on each funding mechanism to be used to perform wildfire mitigation	Not included.	Prepare the requested explanation for each wildfire mitigation funding mechanism and include in the respective section (i.e., 3.B., 3.C., 5.A., 5.F, 5.G, 5.H).	NCPA - Complete. The following statement applies to all funding authority "NCPA is governed by a Commission comprised of one representative for each member. The Commission is responsible for the general management of the affairs, property, and business of the Agency. Under the direction of the General Manager, the staff of the Agency is responsible for providing various administrative, operating and planning services for the Agency. This establishes all funding and is applied to all wildfire funding mechanisms in this plan (i.e., 3.B., 3.C., 5.A., 5.F, 5.G, 5.H)."	Meets WSAB recommendation.
<b>3. Plan Structure – independent evaluations</b>				
a) IEs should perform a robust evaluation of the contents and substance of the POUs WMP	NA	Dudek to perform the requested evaluation.	Dudek	Meets WSAB recommendation.
b) Include evaluations of how each POU compares to the IE's assessment of industry standards	NA	Dudek to perform the requested evaluation.	Dudek	Meets WSAB recommendation.
<b>4. Plan structure – Utility groupings</b>				

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B-3

12108.04  
May 2021

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
a) 2021 POU WMPs and/or updates should be based on the guidelines		WMP to be updated in accordance with the recommended guidelines.	NCPA - Complete. This evaluation serves as a WMP updated based on Dudek's and WSAB recommendations.	Meets WSAB recommendation.
b) The industry should create a revised template that reflects the learnings from the 2020 initial effort	NA	NA	NA	NA
<b>5. Customer Impacts – PSPS shutoffs</b>				
a) Utilities should provide the context-setting information	Sec. 5.J.2. Customer Notification Protocols	The context-setting information should be enhanced in this section to reference customer impacts as well as customer notification (re-emphasize role as wholesaler vs. retail provider). Consider adding a separate Customer Impacts section.	NCPA - Complete. Revised as "NCPA provides wholesale power to City's and utilities typically known as NCPA members. Since NCPA does not have retail customers, like commercial or private residences, no customer notification protocols are in place."	Meets WSAB recommendation.
b) Include a detailed protocol to address these concerns to understand the strategic direction and effectiveness of each POU	Sec. 5.J.2. Customer Notification Protocols	See 5.a) above.	NCPA - Complete. Revised as "NCPA provides wholesale power to City's and utilities typically known as NCPA members. Since NCPA does not have retail customers, like commercial or private residences, no customer notification protocols are in place."	Meets WSAB recommendation.
<b>6. Customer impacts – communication plans</b>				



WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
a) Describe the specific methods, content, and timing used to communicate with customers	Sec. 5.J.2. Customer Notification Protocols	The communication information should be enhanced in this section to reflect the context-setting information requested as noted above in 5.a).	NCPA - Complete. Revised as "NCPA provides wholesale power to City's and utilities typically known as NCPA members. Since NCPA does not have retail customers, like commercial or private residences, no customer notification protocols are in place."	Meets WSAB recommendation.
b) Provide an evaluation of whether the current method of emergency communication appears sufficient and, if not, what can be done to improve it, especially protocols for notifying customers, essential service providers, and other critical facilities of IOU or self-triggered PSPS events	Sec. 5.J.2. Customer Notification Protocols	See 5.a) above.	NCPA & Duke - Complete. "Complete. Revised as "NCPA provides wholesale power to City's and utilities typically known as NCPA members. Since NCPA does not have retail customers, like commercial or private residences, no customer notification protocols are in place."	Meets WSAB recommendation.
<b>7. The Grid – hardening</b>				
a) Provide information on existing and planned system upgrades	Sec. 2.B. Resiliency of the Electric Grid	Enhance this section to provide specific examples of upgrades as requested.	NCPA - Complete. NCPA is a relatively smaller utility with a small asset count. The list is updated and on 5.A. (1)	Meets WSAB recommendation.
b) Provide details of each utility's system hardening and grid design programs described in the WMP filing	Sec. 2.A. Minimizing Sources of Ignition	Enhance this section to provide details of programs as requested.	NCPA - Complete. Organized programs and procedures 5.A.	Meets WSAB recommendation.

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B-5

12108.04  
May 2021

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
c) Indicate the goals of the programs and the risk any particular program is designed to mitigate	Sec. 2 Goals	Enhance this section to show nexus between goals, programs and mitigation as requested.	NCPA - Complete. Revised and organized programs and procedure in Section 5.	Meets WSAB recommendation.
d) Provide the approach to PSPS mitigation and prevention	Sec. 3.C. Wildfire Response and Recovery; Sec. 5.J.1. Impacts to Public Safety; Sec. 5.J.2. Customer Notification Protocols	The PSPS information should be enhanced to reference mitigation and prevention as requested (re-emphasize role as wholesaler vs. retail provider). Consider adding a separate "PSPS" section.	NCPA - Complete. Added NCPA's wholesaler information to first paragraph for clarification.	Meets WSAB recommendation.
e) Identify any supply shortages	NA	Identify any supply shortages as requested. See 7.d) above.	NCPA - Complete. Updates to include "no supply shortages" in relation to PSPS.	Meets WSAB recommendation.
<b>8. The Grid – inspections</b>				
a) Describe the unique risks a utility is inspecting for, such as insect, wildfire incursion, wood split, woodpeckers, purposeful insulator destruction, termites, etc., to be included in the WMP	Sec. 5.G. Inspections	Enhance this section to describe the unique risks as requested.	NCPA - Complete. Added "Section 4.8. of this WMP outlines the unique risks NCPA inspects for. "	Meets WSAB recommendation.
b) Describe whether and how system inspections lead to system improvements	Sec. 5.G. Inspections	Enhance this section to describe the resulting system improvements as requested.	NCPA - Complete. Added "NCPA's asset management system also allows these improvements to be evaluated as observations and comments are made when work orders for	Meets WSAB recommendation.

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B-6

12108.04  
May 2021

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
			maintenance items are executed."	
<b>9. The Grid – risks</b>				
a) Consider different options for surfacing, for further consideration and remediation, previously unidentified risks that could lead to catastrophic wildfires	Sec. 4 Wildfire Risks and Drivers	Enhance this section to describe the different options considered as requested.	NCPA - Updated Section 5.A. (1) to add "NCPA's aggressive approach to reduce transmission tie-line risk by completely upgrading insulators on this asset, NCPA's longest line, of 40 Miles. This project was considered a major cost in capital and prioritized for wildfire prevention."	Meets WSAB recommendation.
<b>10. Risk assessment – construction</b>				
a) State the particular wildfire risks associated with system design and construction such as topography and location near a HFTD of another utility	Not included. Wildfire risks are identified in Sec. 4.A., but there is no reference to design and construction.	Include risks associated with design and construction as requested.	NCPA - Complete. Added "There are no new wildfire risks associated to design and construction of new assets. NCPA is currently Operating and Maintain original generating facilities. No new construction in the immediate future."	Meets WSAB recommendation.

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
b) Provide information about G.O. 95 exempt assets, and possible updates to G.O. 95, that could facilitate more resilient utility transmission and distribution assets	Not included.	Include information about exempt assets and updates as requested, possibly in Sec. 2. B.	NCPA - Complete. Leave as stated in Section 5.E.. "NCPA meets: (1) Public Resources Code section 4292; (2) Public Resources Code section 4293; (3) General Order 95 Rule 35; and (4) General Order 95 Appendix E Guidelines to Rule 35."	Meets WSAB recommendation.
<b>11. Risk assessment – situational awareness</b>				
a) Include context setting information in the WMPs including information about the prevailing wind directions and speeds, differentiated by season, along with average weather conditions by season	Sec. 4.A. Risks Associated with Topographical and Climatological Factors.	Enhance this section with context setting information as requested, including the detailed wind information.	NCPA - Complete. "Prevailing Winds: Using live data, NCPA monitors prevailing winds directions and speeds, differentiated by season, along with average weather conditions by season using NCPA real-time observations noting disturbing local weather. Live data is used with the fire maps located in Appendix 1. PG&E's Weather Awareness website is a resource for real-time conditions: <a href="https://www.pge.com/en_US/safety/emergency-preparedness/natural-disaster/wildfires/psps-weather-">https://www.pge.com/en_US/safety/emergency-preparedness/natural-disaster/wildfires/psps-weather-</a>	Meets WSAB recommendation.

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
			map.page?WT.mc_id=Vanity_weather"	
b) Include information on how and why situational awareness technology is installed, and where on the system	Sec. 5.A. Preventative Strategies and Programs.	Enhance this section with information on technology installation as requested.	NCPA - Complete. Added for clarity. "This information is used in communication and aids to analyze wildfire situations."	Meets WSAB recommendation.
c) Provide insight into decisions that are made not to install situational awareness technology	Sec. 5.A. Preventative Strategies and Programs.	See 11.c) above.	NCPA	Meets WSAB recommendation.
d) Are there constraints such as budgets, availability of equipment, knowledge to effectively deploy, or qualified personnel to install and monitor effectively?	Sec. 5.A. Preventative Strategies and Programs.	Enhance this section to address the constraints listed as requested.	NCPA - Complete. Added to 5.A. "There are no constraints such as budgets, availability of equipment, knowledge to effectively deploy, or qualified personnel to install and monitor effectively."	Meets WSAB recommendation.
e) Provide information about whether this modeling data is received from or	Sec. 5.A. Preventative	Enhance this section to provide information regarding modeling data as requested.	NCPA - Complete. Data source is shared and comes from PGE.	Meets WSAB recommendation.

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B-9

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May 2021

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
shared with other agencies, utilities, or fire professionals	Strategies and Programs.			
<b>12. Vegetation Management – utility requirements</b>				
a) Describe treatment plans for all types of vegetation associated with utility infrastructure, from the ground to the sky, which includes vegetation above and below electrical lines	Sec. 5.F. Vegetation Management	Enhance this section to describe the treatment plans as requested (reference is made to the TVMP - provide details).	NCPA - Added clarity that section 5.E. is "NCPA's plan for all types of vegetation associated with utility infrastructure, from the ground to the sky, which includes vegetation above and below electrical lines. "	Meets WSAB recommendation.
<b>13. Vegetation management – personnel qualifications</b>				
a) List the qualifications of any experts relied upon, such as scientific experts in ecology, fire ecology, fire behavior, geology, and meteorology	Sec. 5.F. Vegetation Management	Enhance this section to list the qualifications as requested.	NCPA - Complete added to section 5.E. "NCPA uses a combination of its own staff (manager, supervisor or competent designee) and the retention of qualified consultants (such as scientific experts in ecology, fire ecology, fire behavior, geology, and meteorology) with experience in line design, line construction, NERC Standards compliance, and vegetation management to develop and maintain the TVMP."	Meets WSAB recommendation.

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B-10

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May 2021

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
b) Specify the level of expertise of the POU staff that manages the contractors performing vegetation management	Sec. 5.F. Vegetation Management	Enhance this section to specify the level of expertise as requested.	NCPA - Complete. "NCPA uses a combination of its own staff (manager, supervisor or competent designee) and the retention of qualified consultants (such as scientific experts in ecology, fire ecology, fire behavior, geology, and meteorology) with experience in line design, line construction, NERC Standards compliance, and vegetation management to develop and maintain the TVMP."	Meets WSAB recommendation.
c) Describe measures taken to ensure that POU staff and contractors comply with or verify compliance with Cal/OSHA standards on Minimum Approach Distances (MAD)	Sec. 5.F. Vegetation Management	Enhance this section to describe the measures as requested.	NCPA - Complete. The TVMP specifies technical requirements for staff and contractors to comply with or verify compliance with Cal/OSHA standards and NCPA Electrical Safety Procedure GS-103 ensures Cal/Osha and Minimum Approach Distances (MAD).	Meets WSAB recommendation.
14. Vegetation management - innovation				

WSAB 2020 WMP Guidance Recommendations	NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
a) Describe whether the POU has considered innovative and alternative approaches to vegetation management such as, but not limited to, requiring property owners to manage vegetation a certain distance from structures or utility lines, and pilot programs in home hardening	Sec. 5.F. Vegetation Management	Enhance this section to describe the approaches considered as requested.	NCPA - No innovative ideas to note.	Meets WSAB recommendation.

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B-12

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May 2021



## APPENDIX 4 – INDEPENDENT EVALUATOR REPORT 2022



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April 14, 2022

12108.07

Mr. Jeremy Lawson  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

**Subject: Independent Evaluation Report of Northern California Power Agency's 2022 Wildfire Mitigation Plan**

### 1 Introduction

The Northern California Power Agency (NCPA) contracted with Dudek to engage in an independent evaluation of its Wildfire Mitigation Plan (WMP). This independent evaluation report (Report) describes the technical review and evaluation of the WMP prepared by Dudek, performed in February through April 2022, and completed on April 14, 2022.

Dudek conducted an evaluation of NCPA's WMP, as required under California Public Utilities Code (PUC) §8387(b). PUC §8387(b), as modified by Senate Bill (SB) 901, and the Administrative Law Judge's Ruling issued on January 17, 2019 in California Public Utilities Commission (CPUC) Docket No. R.18-10-007 (ALJ Ruling), applies to publicly owned electric utilities and required preparation of a WMP before January 1, 2020, and revising/updating the WMP in 2020 and annually thereafter.

The WMP requirements are codified in PUC §8387(b)(2) for local publicly owned electric utilities (POUs). PUC §8387(c) requires that an independent evaluator review and assess the comprehensiveness of a POU's WMP and issue a summary report.

Dudek conducted an initial review of NCPA's WMP (version 1.3) and provided recommendations for clarifications/modifications on March 3, 2022. The focus of the evaluation was to determine whether the WMP included all elements required under PUC §8387(b)(2) (listed in Attachment A). The evaluation determined that the NCPA's 2022 Wildfire Mitigation Plan does include all the PUC §8387(b)(2) requirements.

In addition to evaluating the elements required by the Public Utility Code, Dudek evaluated the WMP for compliance with the Wildfire Safety Advisory Board (WSAB) Publicly Owned Utilities (POUs) WMP guidance recommendations and to address any deficiencies in the WSAB review of the 2022 WMP that was published on their website. Dudek worked NCPA staff to revise the WMP to meet the recommendations of the Guidance Advisory Opinion for 2022 WMPs that are relevant to the NCPA's service territory (See Attachment B for Compliance Matrix). This included more detailed explanations of the wildfire risks in the utility's service territory and the wildfire prevention programs that are designed to address these risks.

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## 2 Wildfire Mitigation Plan Requirements

### A. Senate Bill 901

Per Senate Bill (SB) 901, all Publicly Owned Utilities are required to adopt a Wildfire Mitigation Plan (WMP), which shall be reviewed by an independent third-party evaluator. SB 901 requires the governing board to determine whether any portion of the geographical area where the utility's overhead electrical lines and equipment are located has a significant risk of catastrophic wildfire resulting from those electrical lines and equipment. The bill directs electrical utilities to annually prepare WMPs that include several mitigation and response elements in each utility's strategies, protocols, and programs. Each electric utility is to prepare and adopt a comprehensive WMP before January 1, 2020. The requirements for POU's are presented in PUC §8387. In addition, the WMP shall be reviewed by an approved, independent, third-party evaluator to review and assess the comprehensiveness of, and the POU's compliance with, this Plan.

### B. AB 1054 & AB 111

Per Assembly Bill (AB) 1054, POU's must annually submit a WMP to the California Wildfire Safety Advisory Board, which will review the WMP and provide recommendations on mitigating wildfire risk. AB 1054 contains similar WMP requirements to SB 901 but allows WMPs of a three-year, rather than one-year duration. AB 111 establishes the Wildfire Safety Division within the Public Utilities Commission.

### C. Northern California Power Agency WMP Requirements

PUC §8387(b)(2) lists the statutory requirements for WMPs. These are the specific elements that the independent evaluator must review to make its determination for this report. The specific elements that must be addressed in NCPA's WMP are included in Table A (see Attachment A) and are summarized here for reference.

- The responsibilities of persons responsible for executing the plan.
- The objectives of the wildfire mitigation plan.
- The preventive strategies and programs to be adopted to minimize the risk of its electrical lines and equipment causing catastrophic wildfires.
- The metrics to use to evaluate the wildfire mitigation plan's performance.
- How the application of previously identified metrics has informed the wildfire mitigation plan.
- Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts.
- Procedures for notifying a customer who may be impacted by the deenergizing of electrical lines.
- Plans for vegetation management.
- Plans for inspections of the electrical infrastructure.
- Description of wildfire risks, and drivers for those risks, throughout the service territory.
- Identification of any geographic area in the service territory that is a higher wildfire threat than is identified in a commission fire threat map.
- Identification of enterprise-wide safety risk and wildfire-related risks.
- How the service will be restored after a wildfire.
- The processes and procedures used to monitor and audit the implementation of the wildfire mitigation plan, identify any deficiencies, and the effectiveness of electrical line and equipment inspections.

### 3 Description of the Northern California Power Agency

NCPA is a Joint Powers Agency, which owns and operates electrical generation facilities. NCPA is governed by a Commission comprised of one representative for each of its public power utility members.

The WMP applies to the NCPA's geothermal facility and a hydro facility plus transmission and distribution lines. These two facilities contain electrical equipment in high fire threat locations and power lines that traverse high fire threat areas. The geothermal facility is located around the Geyser territory in Lake County and consists of five geothermal facilities spread over 30 square miles. The Hydro Electric facility is in the North Fork Stanislaus River watershed (Calaveras County) and consists of eight generator/water diversion stations and an office located along the river. There are approximately 40 miles of power lines between the generation facilities and their tie-in points with PG&E transmission wires. NCPA electrical infrastructure consists of facilities that are in Moderate to Very High Fire Hazard Severity Zones (CAL FIRE) and/or Tier 2/3 CPUC Fire Threat Zones.

NCPA has taken appropriate actions to help prevent and respond to the increasing risk of devastating wildfires by following all applicable design, construction, operation, and maintenance requirements that reduce safety risks associated with its electric system.

### 4 Independent Evaluation

#### A. Independent Evaluator Requirement

PUC §8387 requires each POU to "contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan." Additionally, the independent evaluator's assessment of the comprehensiveness of the POU's WMP must be issued in a report that is both posted to the POU's website and presented at a public meeting of the POU's governing board.

#### B. Dudek's Qualifications

According to PUC §8387(c), the qualified independent evaluator that performs the assessment of NCPA's WMP must have "experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its wildfire mitigation plan." NCPA has determined that Dudek is the independent evaluator who adequately understands the local conditions and fire risks of the service area.

#### C. Evaluation Methodology

Dudek evaluated the comprehensiveness of the NCPA's 2022 WMP on the following measures:

- Statutory Compliance: Dudek ensured that each required element specified in PUC §8387 is either addressed in NCPA's WMP or that NCPA has sufficiently described why that element is not applicable due to NCPA's size, geography, system, or other relevant factor.
- Fulfillment of Wildfire Safety Advisory Board Guidance: Dudek reviewed WSAB guidance publications for Publicly Owned Utilities for recommendations that were relevant to the NCPA's WMP and then compared the Board's recommendation to the content of the WMP.



- **Industry Comparison:** While the NCPA differs from many nearby utilities in that they provide power to other utility agencies and not consumers, they do use similar equipment and operational procedures as nearby POUs that serve consumers. Dudek compared the elements of the NCPA's WMP, their operations, and the equipment to those used by other agencies to minimize wildfire ignition and spread. Where there was no other agency(s) to compare to (e.g., geothermal plants), Dudek used industry standards.

#### D. Metrics

The NCPA's Wildfire Mitigation Plan uses the following metrics to measure performance of its wildfire mitigation measures: (1) number of fire ignitions, and (2) wires down events. Dudek has determined that these are appropriate metrics for this WMP and that the WSAB has concluded that these two metrics, are generally acceptable metrics for a WMP.

Dudek recommended that the NCPA consider adding a new metric or revising one of the current metrics to integrate a metric that shows the actions NCPA is taking in their service territory to reduce wildfire ignition risk. NCPA staff acted on Dudek's recommendation, evaluating their current operations and their service territory for other useful indicators of wildfire risk. Fire weakened trees and slopes are hazard to NCPA's transmission wires where they pass through fire scars. NCPA is incorporating a third metric into their WMP that measures fall in trees, trees of height sufficient to represent a contact hazard to the Distribution Line if destabilized due to soil instability at the tree base,

## 5 Evaluation of the Northern California Power Agency Wildfire Mitigation Plan

#### A. Minimizing Wildfire Risks

PUC §8387(a) requires the following: "Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment."

The WMP describes the safety-related measures that NCPA follows to reduce its risk of causing wildfires. Dudek has determined that NCPA complies with this standard through the design of its system and the construction of its equipment and resources.

#### B. Evaluation of WMP Elements

Dudek found that NCPA's WMP meets the statutory requirements of comprehensiveness per PUC §8387. The review of the WMP's elements is summarized relative to the application of the WMP. The table in Attachment A lists each required element for NCPA's WMP and provides Dudek's assessment of the comprehensiveness of that element within the WMP.

Below is a summary of the WMP elements as required by PUC §8387, including restating sections of the WMP where applicable.

8387(b)(2)(A): Responsibilities of Persons Responsible for Executing the Plan.

**Under the direction of the Assistant General Manager for Generation Services, the plant managers are responsible for implementation and execution of the WMP with respect to their facilities. The NCPA dispatch center in Roseville has responsibility for the generator tie-in lines.**

8387(b)(2)(B): Objectives of the Wildfire Mitigation Plan

**The objectives of the WMP are to: minimize the probability that NCPA's system is the origin or contributing source for a wildfire ignition, improve the resiliency of the electric grid, specifically to reduce the likelihood of an interruption of service and an improvement in the restoration of service after an interruption, and to improve the effectiveness of their wildfire prevention strategies by modifying or replacing elements of their wildfire prevention program that are ineffective**

8387(b)(2)(C): Prevention Strategies and Programs

**NCPA's strategies to reduce wildfire risk include continuous evaluation and improvement of its programs and procedures: including NCPA's (1) facility maintenance program, (2) emergency operating procedures, (3) vegetation management programs, and (4) asset documentation programs. These programs include all details such as goals, objective, or percentage, monitor ongoing work, accomplishments, internal and external audits, and detailed reports. Additional programs such as coordination with CAL FIRE and wildfire prevention training for NCPA staff complement their core fire prevention programs. Attachment C in the WMP contains a table which describes identified risk drivers within NCPA service territory and preventative strategies implemented by the utility. The table includes controls NCPA has implemented to address each risk or risk driver listed.**

8387(b)(2)(D): Metrics and Assumptions for Measuring WMP Performance

**The NCPA WMP uses two metrics to measure performance of its wildfire mitigation measures: (1) number of fire ignitions, and (2) wires down events. Dudek has determined that these are appropriate metrics for this WMP.**

8387(b)(2)(E): Impact of Previous Metrics on WMP

**The metrics show zero incidents and indicate success; no WMP changes due to metrics.**

8387(b)(2)(F): Reclosing Protocols

**NCPA does not own or use automatic reclosers on its 230 kV within the scope defined in this WMP. This is a typical industry standard for distribution and transmission wires in rugged and remote terrain.**

8387(b)(2)(G): De-energization Notification Procedures

**In the event of active fire situations, NCPA may be directed by CAL FIRE to de-energize the lines for firefighter and/or aircraft protection. NCPA de-energization notification procedures depend on which lines and facilities are being de-energized. If the Hydro facilities and 230 kV lines are de-energized then NCPA personnel will work with CAL FIRE and their dispatch center in Roseville to notify fire fighters, NCPA facility**

staff, PG&E, and NCPA members. For the geothermal facilities relies on PG&E to make the determination whether these facilities and their lines are to be de-energized. NCPA dispatch would communicate PG&E direction to NCPA personnel and NCPA members.

8387(b)(2)(H): Vegetation Management

NCPA has developed and implemented a Transmission Vegetation Management Program (TVMP) to establish the vegetation maintenance requirements for each facility to achieve reliability of its generation interconnection system. The NCPA document defines procedures for vegetation management. NCPA's TVMP is the plan for all types of vegetation associated with utility infrastructure, from the ground to the sky, which includes vegetation above and below electrical lines.

8387(b)(2)(I): Inspections

NCPA performs annual inspections of its transmission and distribution facilities in accordance with General Order 95 and General Order 165. Enhanced inspections are performed on the Collierville-Bellota 230 kV line including lidar vegetation flights, corona scans of insulators, infrared inspections of lines and equipment. In addition to its annual ground-based inspection, NCPA may augment inspections with aerial drone and/or helicopter surveys.

8387(b)(2)(J)(i): Risks and Risk Drivers Associated with Design and Construction Standards

Risks and risk drivers related to design, construction, operation, and maintenance include equipment/structure/facilities, object to wire or equipment contact, wire to wire contact, vehicle operations, vegetation clearing, and hot work. Attachment C in the WMP contains a table which describes identified risk drivers within NCPA service territory and preventative strategies implemented by the utility. The list includes risk drivers and risks related to design and construction standards.

8387(b)(2)(J)(ii): Risks and Risk Drivers Associated with Topographic and Climatological Risk Factors

Risks and risk drivers related to Topographic and Climatological Risk Factors include extended drought, vegetation type, vegetation density, weather, high winds, prevailing winds, terrain, changing weather patterns and communities at risk. Communities at risk is a design and construction standard and it is recommended that it is moved to that section. The plan discussed prevailing wind patterns in the service territory and the impact the winds have on the conductors. Also discussed is the impact that previous large fires in their service territory have on risks associated with topographic and climatological factors. Attachment C in the WMP contains a table which describes identified risk drivers within NCPA service territory and preventative strategies implemented by the utility. The list includes risk drivers and risks related to topographic factors within NCPA's service territory.

8387(b)(2)(K): Geographical Area of Higher Wildfire Threat

To identify the areas of NCPA's service territory that are at an elevated or extreme risk of power line-ignited wildfire, NCPA has incorporated the High Fire-Threat District into its construction, inspection, maintenance, repair, and clearance practices, where applicable.



8387(b)(2)(L): Enterprise-wide Safety Risks

**NCPA regularly evaluates enterprise safety risks, which include severe operating conditions and contingencies. NCPA also performs regular analysis of risks to improve the ability to manage these risks effectively.**

8387(b)(2)(M): Restoration of Service

**After a de-energization event, NCPA will restore service in coordination with PG&E's restoration efforts. NCPA will follow PM-201 and Geothermal Facilities Maintenance Procedure (GEO-646) which specifically address restoration for Hydro and Geothermal facilities respectively.**

8387(b)(2)(N)(i): Monitoring and Auditing WMP Implementation

**The WMP is presented to the NCPA Commission on an annual basis along with the metrics and a summary of updates.**

8387(b)(2)(N)(ii): Identifying and correcting WMP deficiencies

**NCPA may correct deficiencies and implement plan improvements as needed. Improvements will be documented in the annual report to the NCPA Commission.**

8387(b)(2)(N)(iii): Monitoring and Auditing the effectiveness of inspections

**NCPA uses General Orders 95 and 165 as guides to inspect its electric supply system. The effectiveness of ground inspections is typically monitored by 'ride-a-longs' performed by NCPA staff and CAL FIRE staff with inspection personnel. Independent professionals are contracted to review lidar data and other inspection data that is collected remotely.**

## 6 Wildfire Safety Advisory Board Recommendations

The Wildfire Safety Advisory Board produces guidance documents for publicly owned utilities annually. These documents describe elements that should be revised or expanded in future WMPs to better organize the plan, clarify where PUC required information can be found, and to provide a more comprehensive description of the utility's wildfire prevention programs. Dudek reviewed the WSAB most recent guidance document and compared contents of the NCPA's 2022 WMP to each recommended element.

### 1. Plan Structure, Staffing, and Evaluations

A. Context Setting Information: The WSAB recommended that POU's use an upfront table that contains information about the utility including number of customers, the size of its service areas, the service area within a high fire threat area, asset mix, and more. The intent was to provide a reviewer of the plan with a plain and accessible summary of the utility. The WSAB provided a template for this table in 2021. **NCPA's WMP uses the WSAB template and has the completed table in the Overview section of their plan.**

B. General WMP Objectives: Many POU's use two general objectives; 1. Minimizing sources of ignition and 2. Improving the resiliency of the grid. These are valid objectives but the WSAB believes that they may lead

to limited approach by a utility to wildfire prevention. The WSAB recommends that POU's take a broader approach to their objectives and consider objectives that mitigate other risks associated with wildfire such as minimizing wildfire spread. **NCPA's WMP objectives include these two general objectives; however, their WMP does describe wildfire prevention programs that go beyond minimizing new ignitions and hardening their equipment against wildfire. For example, their vegetation management program TVMP inspects and manages surface vegetation near their assets as well as trees near their power lines.**

C. Staff Responsibilities and Approval Protocols: The WSAB requested that future WMPs include additional context information regarding the public input and approval processes for the WMP of each POU. **The WMP contains a description in the Overview section of the NCPA's WMP approval process that begins with a presentation of the WMP to the NCPA Facilities Committee for comment, then is routed for final approval to the NCPA Commission, public meeting and NCPA commission meeting. Past WMP's are available on the NCPA website.**

D. Metric Development and Evaluation: Many POU's use two basic metrics; 1. New ignitions and 2. Wires down. These are valid metrics but the WSAB recommends that POU's consider adding or replacing these metrics with ones that better apply to their service territory and metrics that show progress towards an outcome as opposed to a metric that shows the outcome. **The WMP contains the two basic metrics, and these are relevant metrics to the NCPA's assets. NCPA is evaluating adding a third metric to evaluate the effectiveness of their plan in reducing the risk posed to their wires by fire weakened trees and slopes. The NCPA does track their two current metrics and the results are published in the WMP.**

## 2. Grid Design, System Hardening, Operations and Inspections:

A. In 2021 the WSAB requested POUs answer several questions about their system design and construction. The questions: 1. Are there design or construction issues related to the utility's specific topography or geographic location that the Board should be aware of? 2. How will the utility address risks associated with facilities requiring power that about a Tier 2 or Tier 3 HFTD? 3. How does the utility assess its risks associated with system design and construction? 4. In what areas does the utility consider going above and beyond G.O. 95 or other General Order standards related to design and construction? **Chapter 5 Section A of the WMP provides general overview to these four questions, followed by a description of several example programs NCPA has incorporated on their transmission and generation assets.**

B. The WSAB observed that the many POU WMPs state that they meet or exceed the CPUC GO 95 standards for their inspections. The WSAB comment is that the WMPs do not state if the POU are meeting the minimum standards of GO 95 or exceeding it where circumstances merit it. The WSAB is recommending that WMPs include a description of whether their inspection programs go beyond the GO 95 standards, why they do, and how they do. **The NCPA's WMP does not use the statement "meet or exceed" and the plan does describe the inspections it performs on its assets that exceed the requirements of GO 95 including how they exceed the standard. The reasons for the inspections that go beyond the CPUC standards are summarized in the WMP with references to the NCPA documents or policies with more detailed explanations**

C. The WSAB would like POUs to include in their WMPs a description of the new ideas or enhanced protocols the utility is considering in the design, building, and maintaining their system to mitigate the wildfire risk in the future. **The WMP includes descriptions of the ongoing improvements to NCPA assets (upgrading**



equipment on their power lines) and enhancements they are making to their inspection process by upgrading frequency or the scope of inspections or where they are incorporating new techniques, such as using UAVs.

### 3. Vegetation Management and Inspections:

The WSAB requested that POUs describe their vegetation management practices and evaluate their impact on reducing wildfire related risk as well as the ecological impacts of the treatment options chosen. **The NCPA's WMP provides a general description of their vegetation management program and references their TVMP. The TVMP contains a detailed description of the utility's vegetation practices including what types of vegetation are treated, where they treated, and how often. The WMP also describes how their vegetation management standards exceed the GO 95 and which standard they use as their guidelines for their enhanced vegetation management program (CAL FIRE Power Line Fire Prevention Field Guide).**

## 7 Comparison of Industry Standards to the Operations and Equipment in use by the Northern California Power Agency

Dudek compared operational procedures and equipment used by the NCPA to mitigate wildfire risk in their service territory with mitigation measures in approved Wildfire Mitigation Plans from a similar utilities and electrical industry standards.

### Avian Deterrents

The NCPA has installed avian deterrents and anti-nesting cones on its 230 kV Collierville-Bellota line, a 40-mile-long transmission line that traverses remote and mountainous terrain. Large birds are a common hazard for power line poles and towers, installing these devices on the towers along this line prevents large birds from using the towers as perches and nesting sites. This is a typical industry practice and a CALFIRE recommended practice to prevent equipment failure and wildfire ignitions due to electrocuted birds or the accumulation of bird droppings on electrical equipment.

### Insulator Replacement

The NCPA has upgraded the insulators on its 230 kV Collierville-Bellota line, a 40-mile-long transmission line that traverses remote and mountainous terrain. The line is over 30 years old, and the insulators were replaced as part of a larger program to improve the safety and reliability of the line. This is a typical industry practice and replacing aging insulators reduces the risk of equipment failure, flash-over or arcing, or electrical current discharging into the ground through the pole.

### Conductor Damping

The NCPA has installed mass dampers on its 230 kV Collierville-Bellota line, a 40-mile-long transmission line that traverses remote and mountainous terrain. Conductor damping is a typical industry practice to minimize wear or conductor fatigue near the hardware attachments. While this upgrade is not specific to preventing wildfire ignition it does reduce the risk of conductor or equipment failure, an event which could ignite a wildfire.

### Disabling Reclosing Operations

The NCPA does not use automatic reclosers on its 230kV transmission line due to its location in rugged and remote terrain. This is a typical industry practice for both life safety and fire hazard reasons. In place of an automatic reclosers, NCPA coordinates re-energization of a tripped line with their dispatch office in Roseville, NCPA generation services, and PG&E. Lines are not re-energized until they have been visually inspected.

## 8 Conclusion

Dudek concludes that the Northern California Power Agency Wildfire Mitigation Plan comprehensively addresses all the applicable statutorily required elements for a Publicly Owned Utilities' WMP as specified in California Public Utilities Code Section 8387. Dudek finds that NCPA has taken reasonable actions to minimize the risk that its lines or equipment will cause a wildfire. Finally, Dudek finds that the NCPA has reviewed the guidance documentation provided by the WSAB and is incorporating recommended improvements to their WMP and their wildfire prevention programs.

Sincerely,



Jeremy Cawn  
Fire Protection Planner/Urban Forestry Specialist

## Attachment A: CPUC 8387(b)(2) Requirement Chart

2022			
2022 WMP Required Element per PUC Sec 8387(b)(2)	2022 NCPA WMP section	IE's Assessment of WMP based on PUC Sec. 8387 Requirements	Responsible Party Revisions
(A): An accounting of the responsibilities of persons responsible for executing the plan.	Sec. 3.A Utility Governance Structure. Generation Services Assistant General Manager.	Acceptable	
(B): The objectives of the wildfire mitigation plan.	Executive Summary and Sec. 1.B. Purpose of the WMP. 2. Goals.	Acceptable	
(C): A description of the preventive strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Sec. 5.A. Preventative Strategies and Programs. Sec. 5.C. Potential Climate Change Effects. Sec. 5.D. Potential Climate Change Risk Management Impacts.	Acceptable. Section 5 provides a comprehensive overview of the different wildfire prevention programs.	Section 5A. Any changes or updates to the maintenance projects and programs? Moved from 2021 to 2023 due to PGE... Section 5F. Any aerial drone or helicopter surveys worth noting? Geothermal Drone. NCPA works with Cal Fire to manage and phase maintenance work to the line. NCPA Update: Metrics reflect up to date. Good performance.
(D): A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the wildfire mitigation plan's performance and the assumptions that underlie the use of those metrics.	Sec. 7.A. Metrics and Assumptions for Measuring Plan Performance.	Acceptable	
(E): A discussion of how the application of previously identified metrics to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	Sec. 7.B. Impact of Metrics on Plan.	Acceptable. Consider selecting a new metric that measures an element that could lead to a wildfire ignition, such as trees without adequate clearance or equipment malfunctions detected.	NCPA has implemented enhanced inspection processes for its distribution lines that include identification of hazard trees that although outside of the normal radius of VMP clearing, still may represent a fall in hazard to wildfire ignition if toppled. NCPA has added this metric to both the WMP and to the VMP.

2022			
2022 WMP Required Element per PUC Sec 8387(b)(2)	2022 NCPA WMP section	IE's Assessment of WMP based on PUC Sec. 8387 Requirements	Responsible Party Revisions
(F): Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	Sec. 5.I. Reclosing Policy. Sec. 5.J. De-Energization. Sec. 5.J.1. Impacts to Public Safety.	Acceptable	
(G): Appropriate and feasible procedures for notifying a customer who may be impacted by the deenergizing of electrical lines. The procedures shall direct notification to all public safety offices, critical first responders, health care facilities, and operators of telecommunications infrastructure with premises within the footprint of potential de-energization for a given event.	Sec. 5.J.2. Customer Notification Protocols.	Acceptable.	
(H): Plans for vegetation management.	Sec. 5.F. Vegetation Management.	Section 5E. Any changes or updates to the Generation Services Common Procedure GS-305? Link. Acceptable. The WMP does a good job at describing general Veg Mgmt. The TVMP plan provides most of the required details to meet this sections requirements, consider adding elements of the TVMP to the WMP	NCPA added the following to Section 5.F: "Specific hazards addressed in the TVMP include identification of encroachment into the Clearance area (section 6.3.7), and additional inspection activities to identify deadfall and brush in the ROW that could provide fuel for wildfire spread (section 6.3.9). The TVMP also provides explicit direction to treat emergent conditions of a potential hazard as an immediate mitigation priority (section 6.4.4), including addressing extent of condition."
(I): Plans for inspections of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	Sec. 5.G. Inspections.	Acceptable. The WMP does a good job of describing general inspection process. Details regarding the types of	



2022			
2022 WMP Required Element per PUC Sec 8387(b)(2)	2022 NCPA WMP section	IE's Assessment of WMP based on PUC Sec. 8387 Requirements	Responsible Party Revisions
(J): A list that identifies, describes, and prioritizes all wildfire risks, and drivers for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory. The list shall include, but not be limited to, both of the following: (i) Risks and risk drivers associated with design, construction, operation, and maintenance of the local publicly owned electric utility's or electrical cooperative's equipment and facilities. (ii) Particular risks and risk drivers associated with topographic and climatological risk factors throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.	Sec. 4. Wildfire Risks and Drivers. Sec. 4.A. Risks Associated with Topographical and Climatological Factors.	inspections performed and when they are performed would be beneficial. Acceptable. The WMP does a good job of describing general risks to the service territory both climate and terrain as well as operational and equipment. The risks specific to NCPA service territory are not described and it would be beneficial to add some NCPA specific risk drivers	NCPA has added to Section 4.A: "Risks specific to NCPA's generation facilities are tied to both residual fuel load (snags) from previous fires and potential soil instability caused by previous damage to area vegetation. These hazards are addressed by enhanced inspection techniques described in Section 5.F".
(K): Identification of any geographic area in the local publicly owned electric utility's or electrical cooperative's service territory that is a higher wildfire threat than is identified in a commission fire threat map, and identification of where the commission should expand a high-fire threat district based on new information or changes to the environment.	Sec. 4.C. Changes to CPUC Fire Threat Map	Acceptable	
(L): A methodology for identifying and presenting enterprise wide safety risk and wildfire-related risk.	Sec. 4.B. Enterprise-wide Safety Risks.	Acceptable. Consider creating a section in the WMP that collects the enterprise wide safety elements described throughout the plan.	Attachment C has been added to provide an index of risks and their associated controls evaluations within the sections of the WMP.
(M): A statement of how the local publicly owned electric utility or electrical cooperative will restore service after a wildfire.	Sec. 7. Restoration of Service.	Acceptable	

2022			
2022 WMP Required Element per PUC Sec 8387(b)(2)	2022 NCPA WMP section	IE's Assessment of WMP based on PUC Sec. 8387 Requirements	Responsible Party Revisions
(N): A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following: (i) <b>Monitor and audit the implementation</b> of the wildfire mitigation plan. (ii) <b>Identify any deficiencies</b> in the wildfire mitigation plan or its implementation, and correct those deficiencies. (iii) <b>Monitor and audit the effectiveness</b> of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes, or commission rules.	Sec. 7.C. Monitoring and Auditing the Plan. Sec. 7.D. Identifying and Correcting Deficiencies in the Plan. Sec. 7.E. Monitoring the Effectiveness of Inspections.	Acceptable	Updated: NCPA currently conducts ride-alongs with both Cal-Fire staff and internal NCPA staff.

## Attachment B: WSAB Guidance Recommendations Chart

WSAB 2022 WMP Guidance Recommendations	2022 NCPA WMP section	2022		
		IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
the Board recommended use of an upfront template containing key information about a utility's service area, including size, number of customers, type of customers, basic topography and weather data, asset mix (in terms of underground versus overhead lines), and interaction with High Fire Threat Districts (HFTD) and Public Safety Power Shutoffs (PSPS).	Section 1	Fully completed.	n/a	Complete
An index that showed where each of the statutory requirements were addressed in the WMP	N/A	Add index table to WMP in suggested location	See Attachment A	Complete
The WSAB is encouraging POU's to <u>revaluate</u> their WMP objectives to take a broader approach beyond the typical minimizing sources of ignition and improving resiliency of the grid.	N/A	The NCPA's describes the typical objectives of minimizing ignitions and improving resiliency of the grid in their WMP.	See Attachment B	Complete
Describe the vegetation management practices and evaluate their impact on reducing wildfire related risk, as well as the ecological impact of the treatment options chosen	Section 5	The WMP provides a general overview of the NCPA's program. The details the WSAB is looking for are found in the TVMP plan.	See Attachment B	Complete



2022				
WSAB 2022 WMP Guidance Recommendations	2022 NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
Information about the installation of and use of situational awareness technologies to better understand wildfire risk drivers, particularly through collaborative activities and shared data.	N/A	There is no description in the WMP about the installation or use of situational awareness technology in NCPA's service territory.	See Attachment B	Complete
Information about facilities that would not be directly subject to the protocols of the CPUC's G.O. 95 due to their construction prior to the G.O. first being adopted.	Section 5	The WMP does not specifically identify facilities that are not subject to GO 95. NCPA applies wildfire prevention strategies to all their assets in high fire threat areas	See Attachment B	Complete
The WSAB would also like information about any circumstances where the G.O. 95 standards are not followed, and what replaces them and why.	Section 5	NCPA vegetation management program follows the stricter CAL FIRE guidelines for vegetation maintenance along the interconnects between generation facilities.	See Attachment B	Complete
Are there design or construction issues related to the utility's specific topography or geographic location that the Board should be aware of?	N/A	Section 4 contains a general overview of risk drivers present but no specific terrain or location issues are discussed.	See Attachment B	Complete
How will the utility address risks associated with facilities requiring power that about a Tier 2 or Tier 3 HFTD?	N/A	Not specifically addressed in the WMP	See Attachment B	Complete

2022				
WSAB 2022 WMP Guidance Recommendations	2022 NCPA WMP section	IE's Initial Assessment of WMP based on WSAB Guidance Recommendations	Responsible Party - revisions	IE's 2nd Assessment of WMP
How does the utility assess its risks associated with system design and construction?	Section 4 & 5	The WMP has a general overview of how NCPA evaluates its assets based on the identified wildfire risk drivers.	See Attachment B	Complete
In what areas does the utility consider going above and beyond G.O. 95 or other General Order standards related to design and construction?	Section 5	In the Facility Maintenance Program of section 5 the WMP describes the upgrades under consideration to the tie-in and transmission	See Attachment B	Complete
WMP Metrics measure something that is helpful for progress when met as expected, and when not meeting the metric creates tension for improvement.	Section 7	The WMP uses the basic metrics of new ignitions and wires down. These metrics are appropriate to NCPA's service territory. It is recommended that NCPA choose a new metric or replace one of the existing metrics that shows the utility's progress toward reducing wildfire risk.	See Attachment B	Complete
the WSAB requested that WMPs include a small amount of additional context information regarding public input and approval processes for each utility.	Section 1	The WMP includes a short description of who approves the plan and that the plan is open for public review. A description of the approval process is not included in this WMP.	See Attachment B	Complete

### DUDEK

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Subject: Independent Evaluator's Report of the Northern California Power Agency 2023 Wildfire Mitigation Plan

## 1 Introduction

The Northern California Power Agency (NCPA) contracted with Dudek to engage in an independent evaluation of its 2023 Wildfire Mitigation Plan (WMP). This independent evaluation report describes the technical review and evaluation of the WMP prepared by the NCPA. The WMP requirements are codified in California Public Utilities Code (PUC) Section 8387(b)(2) for local publicly owned electric utilities (POUs). PUC Section 8387(c) requires that an independent evaluator review and assess the comprehensiveness of a POU's WMP and issue a summary report. The year 2023 is important for POUs because they are required by PUC Section 8387(b)(1) to comprehensively revise their WMPs "at least once every three years."

Dudek conducted a review of NCPA's 2023 WMP from February 27 to May 5, 2023. The focus of the evaluation was to determine the comprehensiveness of WMP and ensure it included all elements required under PUC Section 8387(b)(2) (listed in Attachment A).

In addition to evaluating the elements required by the PUC, Dudek reviewed the Wildfire Safety Advisory Board's (WSAB's) specific guidance for the NCPA published in their Guidance Advisory Opinion for the 2023 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electrical Cooperatives (WSAB 2022).

This Independent Evaluator's report contains the following elements: (1) an overview of the NCPA, (2) A review of the statutory requirements in PUC Section 8387(b)(2) for local POUs, (3) A review of the specific recommendations published by the WSAB for the NCPA 2022 WMP, (4) 2022 wildfire mitigation and prevention accomplishments of the NCPA, (5) an overview of the metrics used the NCPA's WMP, and (6) a comparison of wildfire risk reduction strategies used by the NCPA with those used by similar utilities and municipal utility industry standards.

## 2 An Overview of the Northern California Power Agency

The NCPA's service territory consists of several geothermal and hydroelectric generating stations plus the tie-in lines that connect the NCPA facilities to their customers. NCPA's geothermal generating facilities are in the Coastal

Ranges, specifically the Mayacamas Mountains in Lake County, California. There are four facilities plus two 230 kV tie-in lines; one that is operated by the NCPA and that connects the NCPA's geothermal generating facilities to PG&E lines to the west, and a second that is not operated by the NCPA and connects to the CALPINE facilities and extends PG&E substations to the east. The lands surrounding the geothermal facilities are undeveloped except for access roads and are covered with continuous areas of forest, brush, and mixed forest-shrubland cover. It is worth noting that CALPINE's facilities, a group of geothermal generating plants, are also situated on the same geyser field as NCPA's. These two facilities have similar wildfire risks in terms of surrounding vegetation, terrain, and firefighter access. All NCPA's geothermal facilities and the related tie-in lines are in a tier 3 High Fire Threat District.

The NCPA's hydroelectric facilities are situated on the west facing slopes of the Sierra Nevada Mountains with the generating stations located in drainages at the near the bases of several dams in Calaveras and Tuolumne Counties. There are four facilities plus one 230 kV tie-in line and a 17kV service line. The lands surrounding the hydroelectric facilities are undeveloped except for access roads and the related water infrastructure (e.g., dams, spillways, etc.). Surrounding lands are covered with continuous areas of grasslands, brush, and mixed forest-shrubland cover. NCPA's hydroelectric facilities are located both inside and outside of the High Fire Threat Districts. Two facilities plus the 17kV service line are located within a Tier 3 area, one facility is located within a Tier 2 area, and one facility is not located in a High Fire Threat District. The 230 kV tie-in line extends from Collierville powerhouse to the east through Tier 3 and Tier 2 areas as well as passing through areas outside of the High Fire Threat districts in the Central Valley near Linden, CA.

Including all facilities, tie-in lines, and service lines, 46% NCPA's service territory lies within a Tier 2 area and 26% lies within a Tier 3 area. Since NCPA is a generator of electrical power not a distributor and their facilities are in remote areas away from urban or developed areas, none of their service territory is classified as Wildland Urban Interface (WUI).

The NCPA 's service territory experiences a fire season that lasts from May to October during a typical year. During exceptionally dry years, the fire season can begin in April and extend into November. Both the hydroelectric facilities and the geothermal facilities have a fire history that includes several wildfire perimeters burning within 1 mile of NCPA facilities or lines. The 2004 Geysers fire perimeter includes NCPA's geothermal generating facilities (CAL FIRE 2020).

### 3 Statutory Requirements for Wildfire Mitigation Plans

PUC Section 8387(b)(2) lists the statutory requirements for WMPs. These are the specific elements that the independent evaluator must review to make its determination for this report. The specific elements that must be addressed in NCPA 's WMP are included in Attachment A and are summarized here for reference.

- Staff responsibilities
- General objectives
- Wildfire risk reduction program descriptions
- The metrics used to evaluate the WMP's performance.
- How the application of previously identified metrics has informed the WMP.
- Protocols for reclosers, de-energization, and public safety power shut-off.



- Procedures for community notification and outreach
- Vegetation management plans
- Electrical equipment and infrastructure inspection plans
- Description of wildfire risks and drivers for those risks throughout the service territory, including design, construction, operation, and maintenance of equipment and facilities and topographic and climatological risk factors
- Identification of any geographic area in the service territory that is a higher wildfire threat than is identified in a commission fire threat map.
- Identification of enterprise-wide safety risk and wildfire-related risks
- How the service will be restored after a wildfire
- The processes and procedures used to monitor and audit the implementation of the WMP and identify any deficiencies, and the effectiveness of electrical line and equipment inspections.

## 4 Public Utility Code Requirements

Dudek found that NCPA 's WMP meets the statutory requirements of comprehensiveness per PUC Section 8387. The review of the WMP's elements is summarized relative to the application of the WMP. Dudek's assessment is in **bold text** beneath the description of the requirement. The table in Attachment A lists each PUC required element for the NCPA 's WMP and provides Dudek's initial and final assessments of the comprehensiveness of that element.

### Minimizing Wildfire Risks

PUC Section 8387(a) requires the following: "Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment."

The NCPA 's WMP and the appendices referenced in the WMP comprehensively describe the safety-related measures that the NCPA follows to reduce its risk of causing wildfires. Dudek has determined that NCPA complies with this requirement through the design of its system, its operations, and the implementation of wildfire risk reduction and wildfire response strategies.

### Evaluation of WMP Elements

Below is a summary of the WMP elements as required by PUC Section 8387, including restating sections of the WMP where applicable.

8387(b)(2)(A): Responsibilities of Persons Responsible for Executing the Plan.

**Chapter 3 of the NCPA WMP comprehensively describes staff responsibilities and functions in the implementation of their WMP.**

8387(b)(2)(B): Objectives of the Wildfire Mitigation Plan

Chapter 2 of the NCPA WMP comprehensively describes the utility's WMP three objectives.

8387(b)(2)(C): Prevention Strategies and Programs

Chapter 5 in the NCPA WMP describes the utility's wildfire prevention strategies. It is very comprehensive, covering existing programs. System hardening/facilities upgrade information provided by facility.

8387(b)(2)(D): Metrics and Assumptions for Measuring WMP Performance

Chapter 7 section A contains a description of the three metrics used by the NCPA in their WMP. Also included is 2020-2021 data for each metric.

8387(b)(2)(E): Impact of Previous Metrics on WMP

Chapter 7 section B describes the NCPA's plans to continue tracking the three metrics described in in section A. Section B also provides a frame of reference for 'O' event metrics by comparing the NCPA's incident rate for wires down to PG&E's (NCPA's tie-in lines connect to PG&E lines).

8387(b)(2)(F): Reclosing Protocols

Chapter 5 section H states that the NCPA does not use automatic reclosers on 230 kV lines (their tie-in lines).

8387(b)(2)(G): De-energization Notification Procedures

Chapter 5 section J.2 describes the NCPAs customer notification protocols. This section contains an explanation of the notification methods and referenced NCPA policies (PM-501). Attachment D in the WMP has PM-501.

8387(b)(2)(H): Vegetation Management

Chapter 5 section E contains a comprehensive description of the NCPAs vegetation management program including fuel breaks installed around their geothermal facilities. Appendix 5 in the WMP an example of the firebreaks NCPA has installed at their geothermal facilities. Based on conversations with NCPA staff, NCPA does not install fuel breaks at their hydroelectric sites because the hydroelectric sites are located on smaller, less accessible sites.

8387(b)(2)(I): Inspections

Chapter 5 section F of the NCPA WMP comprehensively describes the utility's inspection program including the type and frequency of inspections.

**8387(b)(2)(J)(i): Risks and Risk Drivers Associated with Design and Construction Standards**

Chapter 4 section B in the NCPA WMP provides an overview of wildfire risk drivers in of risk drivers associated with design and construction standards.

**8387(b)(2)(J)(ii): Risks and Risk Drivers Associated with Topographic and Climatological Risk Factors**

Chapter 4 Section A in the NCPA WMP provides a comprehensive description of the geographic and climatological factors present across the NCPA service territory.

**8387(b)(2)(K): Geographical Area of Higher Wildfire Threat**

Chapter 4 Section C in the NCPA WMP describes the utility's review of the CPUC fire threat map and their conclusions about the geographical area of the high fire threat areas.

**8387(b)(2)(L): Enterprise-wide Safety Risks**

The introduction to chapter 4 describes that the NCPA does not have an agency-wide enterprise-risk identification and presentation. In its place is a safety policy for each type of generation asset (e.g., geothermal plant) that includes a risk-assessment process specific to that asset.

**8387(b)(2)(M): Restoration of Service**

Chapter 7 of the NCPA WMP has a general overview of how the utility will restore service after an outage. Two NCPA policies are referenced PM-201 and GEO-646 that specifically address restoration of service.

8387(b)(2)(N)(i): Monitoring and Auditing WMP Implementation, 8387(b)(2)(N)(ii): Identifying and correcting WMP deficiencies, 8387(b)(2)(N)(iii): Monitoring and Auditing the effectiveness of inspections.

Chapter 7 section C, D, and E of the NCPA WMP describes the utility's processes for monitoring and auditing WMP implementation, correcting WMP deficiencies, and monitoring the effectiveness of inspections. NCPA uses an ongoing process to identify risks and inefficiencies, and to develop means to address the identified issues.



## 5 Wildfire Safety Advisory Board Guidance Advisory Opinions

In November 2022, the WSAB published a report with a description of general recommendations for improving the WMPs for POUs and rural electrical cooperatives. At the end of the report the WSAB provided specific recommendations for each utility that submitted a WMP for review by the board. Dudek reviewed the WSAB's report, and the section below contains a summary of each recommendation the WSAB had for the NCPA's 2022 WMP and whether the 2023 WMP has addressed the WSAB's recommendation (WSAB 2022). The materials published by the WSAB and the recommendations within are for guidance and are not statutory requirements.

1. The text on page 6 that indicates that the current WMP was initiated in 2019 and on page 7 a statement that this WMP was presented at an NCPA committee meeting – this is confusing as the 2022 updated is a complete WMP in itself. In the comprehensive revision in 2023, the WSAB expects that text like this will be resolved.

The dates on page 6 & 7 have updated to 2022 and the current version of the WMP.



## 6 Northern California Power Agency 2022 Progress in Implementing Wildfire Mitigation Plan Wildfire Prevention Strategies

This section describes the NCPA's accomplishments in 2022 for the wildfire prevention program and strategies described in the WMP.

### Vegetation Management

#### Geothermal

- Completed annual maintenance of BLM firebreaks around Plant # 1 & # 2 in March 2022.
- Completed vegetation management and line clearance work along 230 kV tie-in lines and around all nine tower bases in June 2022.
- Completed annual maintenance of vegetation around Plant #1 & #2 perimeters plus along access roads in 2022.

#### Hydroelectric

- Completed annual maintenance of vegetation around powerhouses and substations in 2022.
- Completed vegetation management and line clearance work along 230 kV tie-in lines and around tower bases in April 2022.

### Inspections

#### Geothermal

- 230 kV transmission line inspection completed July 21, 2022.
- 21 kV line inspection completed July 21, 2022.
- 230 kV Drone line inspection completed October 24, 2022. Conducted by PG&E, damaged conductor found by PG&E and repaired by WAPA.
- 230 kV Physical Inspections completed October 24, 2022

#### Hydroelectric

- 230 kV transmission line inspection completed March 15, 2022

- 17 kV line Wood pole inspections completed June 15, 2022
- 230 kV line daycore corona and IR inspection completed June 1, 2022
- 230 kV LiDAR transmission line inspection completed August 1, 2022
- NSM-Cabbage Patch 21 kV cable tests completed September 16, 2022

## 7 Wildfire Mitigation Plan Metric Overview

Metrics help POUs determine if their wildfire prevention strategies are effective for reducing the risk of a wildfire ignited by their electrical equipment. In 2020 the California Municipal Utilities Association published a WMP template for POUs to use in the preparation of their WMPs. This template included two metrics: number of fire ignition events and wires down events.

The NCPA adopted the two metrics suggested by the CMUA in the first and second iterations of their WMP. In 2022 the NCPA adopted an additional metric, Fall in Hazard Trees Ignitions. These three metrics: fire ignitions, wires down, and fall in hazard tree ignitions are utilized in the 2023 WMP.

The NCPA records metric data in monthly outage reports. For each event NCPA records date and time of the event, a description of the event and the cause of the event (if known), if the event was the result of an external cause, whether the outage was forced or planned, and how long the event lasted. If the event occurred along one the tie-in lines, then the location of the event along the line is described.

For the three metrics the NCPA recorded the following data in table 1 from 2020 to April 2023.

Table 1 Metric Event Record in 2020-2023

Metric	Geothermal	Hydroelectric
Fire Ignitions	0	0
Wire Down	0	0
Fall in Hazard Tree Ignitions	10 locations, 0 fall-ins	2 locations, 0 fall-ins

These three metrics with the supplemental data regarding date and time of the event, and cause of the event are useful for informing the NCPA about the effectiveness of their wildfire prevention strategies. Comparing their outage event rate on their transmission lines to PG&E's outage event rate for their transmission lines provides a good perspective on why the "0" metric events for the wire down metric is indicative of success and not an indicator of an ineffective metric.

The NCPA is considering adding metrics in future versions of the WMP including a performance-based metric that tracks overhead line inspection and includes location plus date & time data.

## 8 Comparison of Industry Standards and Similar Utility Wildfire Prevention Strategies

As part of this review of the NCPA's 2023 WMP, Dudek compared the wildfire prevention strategies described in the WMP to the strategies being implemented by POU's and accepted electrical industry practices for reducing wildfire risk. The NCPA is unique in that they are primarily a producer of electrical power whose transmission lines are limited to tie-ins with electrical utilities who provide the distribution of electrical power to retail customers. NCPA's service territory is unique in that their facilities including generators and tie-lines are dispersed in areas with no development save for infrastructure related to their operations. This is particularly important in that places a greater risk to their facilities from wildfire and greater responsibility for vegetation management/defensible space to protect their facilities. Therefore, there are no comparable POU's in the state and it is more appropriate to compare their wildfire prevention programs to a relevant industry standard such as the National American Electric Reliability Corporation (NERC), California Public Utility Code General Order 95 (GO 95), Public Resource Code 4292-4293, and CAL FIRE's California Power Line Fire Prevention Field Guide

### 8.1 Vegetation Management

The NCPA's vegetation management can be categorized as the vegetation management work done along their tie-in lines and the vegetation management work done around their facilities. For their transmission tie-ins the NCPA maintains the vegetation within the right-of-way of its transmission tie-in lines to NERC FAC-003-4. There is at least 30 feet of vertical clearance between the trees and vegetation along the tie-in lines and the wires. The corridors containing the transmission wires are typically one hundred feet in width except where terrain makes it unsafe to maintain the full 100-foot width. For their generation facilities the NCPA meets PRC 4292 & 4293 requirements as well as PUC GO 95 requirements, typically maintains a 50- to 100-foot-wide perimeter around structures.

### 8.2 System Hardening

#### Equipment Maintenance and Upgrades

All NCPA transmission line towers are entirely constructed of lattice or tubular steel and so are inherently noncombustible. Conductors and other electrical equipment attached to NCPA towers are also constructed of metal or other non-combustible materials. Transformers, circuits, and other types of electrical equipment located at substations are also constructed entirely of non-combustible materials and surrounded by a large area of bare ground. No system hardening or equipment upgrades would result in significant improvements to fire resistance of NCPA equipment. The NCPA inspects its transmission towers on a regular basis, issues with towers or tower equipment that is discovered during the inspection is repaired at the same time.

The NCPA utilizes wood poles for the 17kV distribution line at the McKay's point facility and a 21 kV lines at the NCPA's geothermal facilities. The NCPA recently rebuilt the 21 kV line and is in the process of upgrading the equipment on the 17kV.



### Construction Standards

The NCPA has construction standards designed to reduce the risk of fire ignited by the failure of their electrical equipment, which include the use of animal deterrents, lightning arresters, and arc suppression fusing. The NCPA does not use expulsive fuses on any of its lines that pass over areas of vegetation.

### Recloser Policy

The NCPA does not have reclosers on its 230 kV transmission lines. Relaying equipment on their 21kV Bear Canyon line is set to a zero-reclose to lockout scheme.

## 8.3 Situational Awareness

### Patrols and Visual Inspections

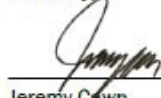
The NCPA has a Transmission Maintenance and Inspection Program (TMIP) that meets the standards described in NERC FAC-501-WECC-3. NCPA regularly performs visual inspections of its equipment and lines including those in remote areas. Regular and thorough inspections particularly for transmission lines is a nationally accepted best practice for early equipment fault detection and hazardous vegetation identification.

## 9 Conclusion

The NCPA has prepared a comprehensive WMP for 2023. The plan meets all statutory requirements described in PUC Section 8387(b)(2) for a POU. The NCPA has also considered the recommendations of the Wildfire Safety Advisory Board and revised their WMP appropriately. The NCPA 's WMP with the provided appendices describes a wildfire mitigation program that accurately assesses the risks and risk drivers present in their service territory and implements preventative strategies that are effective at reducing the wildfire risk of these risks and risk drivers.

Based on the wildfire prevention programs described in the WMP and the progress the NCPA has made in its wildfire prevention programs, the NCPA is taking an active role in minimizing the risk its equipment starts a wildfire and minimizing the risk a wildfire near their facilities can impact their operations.

Sincerely,



Jeremy Cawn  
Fire Protection Planner

## 10 References

- Carlson, A.R., Helmers, D.P., Hawbaker, T.J., Mockrin, M.H., and Radeloff, V.C., 2022, Wildland-urban interface maps for the conterminous U.S. based on 125 million building locations: U.S. Geological Survey data release, <https://doi.org/10.5066/P94BT6Q7>.
- CAL FIRE. (2022, October 1). *Fire Perimeters through 2021*. Retrieved from Fire and Resource Assessment Program: <https://frap.fire.ca.gov/mapping/gis-data/>
- WSAB (California Wildfire Safety Advisory Board). 2022. Guidance Advisory Opinion for the 2023 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electric Cooperatives Draft. Office of Energy Infrastructure Safety. October 17, 2022. Sacramento, California. Retrieved from: Wildfire Safety Advisory Board | Office of Energy Infrastructure Safety ([ca.gov](https://www.ca.gov))

## Attachment A

### Northern California Power Agency WMP Review Summary Tables

#### CPUC Requirement

Public Utility Code 8387(b)(2)	Description of Required Element	Final Review Comment	Initial Review Comment
A	Staff Responsibilities	Good. Describes WMP responsibilities down to oversight of prevention strategies	Good.
B	General Objectives	Good.	Good.
C	Program Descriptions	Good.	Good.
D	Evaluation Metrics	Good.	Good.
E	Lessons learned, metrics application	Need to update text. WSAB expects that utilities will have a good understanding of whether their metrics are useful. Elaborate why '0' events means success.	Updated with a description of the use of metric data and plans to incorporate new metrics. Good.
F	Protocols for reclosers, de-energization, and PSPS mitigation	No reclosers. De-energization & PSPS-good.	Good.
G	Community Notification	Good. Either attached NCPA-PM-501 or briefly describe how NCPA communicates with PG&E and member agencies.	Updated with an explanation of notification methods. Good.
H	Vegetation Management	Good.	Good.
I	Infrastructure Inspections	Good.	Good.
J(i)	Grid Design, construction, and operation risks	Good. Include CALPINE facilities as a risk driver for your GEO operations.	Updated, added risk drivers for adjacent facilities. Good.
J(ii)	Vegetation, topographic, and climate risks	Comprehensive. Add in NCPA territory specific details. For example: Where do Diablo winds impact NCPA equipment or facilities? Is there a specific vegetation cover type that is high risk to the NCPA?	Updated, added detail about site or area specific risk drivers related to vegetation cover for geothermal and hydroelectric operations.

TO: JAMES MEANS

SUBJECT: INDEPENDENT EVALUATOR'S REPORT OF THE NORTHERN CALIFORNIA POWER AGENCY'S 2023 WILDFIRE MITIGATION PLAN

K	Identification and expansion of higher wildfire threat areas	Good.	Good.
L	Identify enterprise-wide risk	Missing	Resolved. NCPA does not utilize an enterprise-wide risk assessment process. Instead relies on location specific safety plans. Provides an equivalent level of safety
M	Restoration of Service	Good. Attach PM-201 and GE-646 to WMP if relevant.	Good.
N(i)	Monitoring and auditing of WMPs	Good. If NCPA evaluates the accomplishments or progress made with wildfire prevention strategies during the year, describe them here.	Good. NCPA staff provided spreadsheets with inspection and Veg. mgmt. accomplishments
N(ii)	Identifying and correcting deficiencies	Good. If NCPA adjusts wildfire prevention strategies during the year, describe them here.	Good. Detail added that NCPA use an ongoing process to review program accomplishments and changes in program priorities or goals due to changing conditions (e.g., weather)
N(iii)	Monitoring asset inspections	Good.	Good.

**NCPA Specific WSAB Recommendations**

WSAB 2023 POU WMP Guidance Advisory Opinion	Description of the WSAB Recommendation	Final Review Comment	Initial Review Comment
A3-40	The text on page 6 that indicates that the current WMP was initiated in 2019 and on page 7 a statement that this WMP was presented at an NCPA committee meeting – this is confusing as the 2022 updated is a complete WMP in itself. In the comprehensive revision in 2023, the WSAB expects that text like this will be resolved.	Update the text on page 6 that states " <i>In 2019, NCPA initiated the development of this current WMP</i> ". NCPA completed the development of the initial WMP in 2020. It would be more accurate to state when you began your internal review and revision of the 2022 WMP. For example, " <i>In November of 2022, NCPA initiated the development of this current WMP</i> ". Update the text on page 7 that states " <i>In 2019, this WMP was presented at the NCPA Commission Meeting, a public meeting, and is posted on NCPA's public website domain</i> " to state that the " <i>2023 WMP will be adopted by the NCPA Commission and presented at the NCPA Commission Meeting, a public meeting, and after adoption by the commission this 2023 WMP will be posted on NCPA's public website domain.</i> "	Dates have been updated. Good.

**NCPA WMP Comments**

Location	Page	Initial Review Comment	Final Review Comment
5.A	20	Consider removing the 2020 accomplishments from this section or shortening the statement to "Major improvements and system hardening upgrades were made to this line in 2020".	Updated. Good.
5.H	25	This sentence is missing the word 'line' ".... or use automatic reclosers on its 230 kV within the scope...."	Corrected.



## APPENDIX 6 – Independent Evaluator Report 2024



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May 28, 2024

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Subject: Independent Evaluator's Report of the  
Northern California Power Agency's 2024 Wildfire Mitigation Plan

### 1. Introduction

POWER Engineers, Inc. (POWER) conducted an independent review of Northern California Power Agency's (NCPA) 2024 Wildfire Mitigation Plan (WMP). This independent evaluator's report describes the technical review of the 2024 WMP and its compliance with Public Utilities Code §8387 (PUC §8387). This independent evaluator's report contains the following elements: (1) an overview of NCPA, (2) a review of the statutory requirements in PUC §8387(b)(2) for WMPs, (3) an evaluation of the WMP for compliance with PUC §8387(b)(2), (4) a review of the specific recommendations published by the Wildfire Safety Advisory Board (WSAB) for the NCPA's 2024 WMP, (5) a discussion of NCPA's progress in implementing wildfire prevention strategies, (6) an overview of the metrics used in the WMP, and (7) a comparison of wildfire prevention industry standards.

Pursuant to California Senate Bill 901 enacted September 21, 2018, and Assembly Bill 1054 enacted July 12, 2019, a WMP must be updated annually and comprehensively every three years to comply with PUC §8387. The WMP requirements are codified in PUC §8387(b)(2) for local publicly owned electric utilities (POUs). PUC §8387(c) requires that an independent evaluator review and assess the comprehensiveness of a POU's WMP and issue a summary report.

In response to this legislation, POWER conducted this independent evaluation of NCPA's 2024 WMP to determine compliance with the comprehensive requirements established by PUC §8387(c) and ensure it includes all of the elements required under PUC §8387(b)(2).

In addition to evaluating the elements required by the PUC, POWER evaluated the WMP for compliance with the WSAB's guidance for POUs published in WSAB's *Guidance Advisory Opinion for the 2024 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electrical Cooperatives* (WSAB 2023).

### 2. Overview of Northern California Power Agency

NCPA is a Joint Powers Agency, which owns and operates electrical generation facilities. NCPA is governed by a Commission comprised of one representative for each of its public power utility members.

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May 28, 2024

The WMP applies to NCPA’s Geothermal Facility and Hydroelectric Facility, including transmission and distribution lines. The Geothermal and Hydroelectric facilities contain electrical equipment in high fire threat locations and power lines that traverse high fire threat areas. The Geothermal Facility is located near the Geysers in Lake County and consists of five Geothermal facilities spread over 30 square miles. The Hydroelectric Facility is located in the North Fork Stanislaus River watershed (Calaveras County) and consists of eight generator/water diversion stations and an office located along the river. There are approximately 40 miles of power lines between the generation facilities and their tie-in points with Pacific Gas and Electric (PG&E) transmission lines. NCPA’s electrical infrastructure consists of facilities that are in the California Department of Forestry and Fire Protection’s (CAL FIRE’s) Moderate to Very High Fire Hazard Severity Zones and/or the California Public Utilities Commission’s (CPUC’s) Tier 2 or 3 Fire Threat Zones.

NCPA has taken appropriate actions to help prevent and respond to the increasing risk of devastating wildfires by following all applicable design, construction, operation, and maintenance requirements that reduce safety risks associated with its electrical system.

3. Wildfire Mitigation Plan Statutory Requirements

PUC §8387(b)(2) lists the statutory requirements for WMPs. These are the specific elements that the independent evaluator must review to make its determination for this report. The specific elements that must be addressed in NCPA’s WMP are listed in Table 1.

Table 1 Statutorily Required Contents for WMPs Pursuant to Public Utilities Code §8387(b)(2)	
PUC §8387(b)(2)	Required Contents of WMPs
(A)	Staff responsibilities
(B)	General objectives
(C)	Program descriptions
(D)	Evaluation of metrics
(E)	Lessons learned, metrics
(F)	Protocols for disabling reclosers and de-energizing electrical distribution system
(G)	Community de-energization notification
(H)	Vegetation management
(I)	Inspections
(J)	Risks and risk drivers
(K)	Identification of higher wildfire threat areas
(L)	Identify enterprise-wide risk
(M)	How service will be restored after a wildfire or shutdown event
(N)	The processes and procedures used to 1) monitor and audit the implementation of the WMP, 2) identify any deficiencies, and 3) monitor asset application & inspections

May 28, 2024

#### 4. Public Utility Code Requirements Evaluation

##### 4.1 Minimizing Wildfire Risks

PUC §8387(a) requires the following: “Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.”

POWER has determined that NCPA complies with this standard through the design of its system, its operational procedures, and the implementation of wildfire risk reduction and wildfire response strategies.

##### 4.2 Evaluation of WMP Elements

POWER found that NCPA’s WMP is comprehensive and meets the statutory requirements of PUC §8387. The review of the WMP’s elements is summarized below relative to the application of the WMP. POWER’s assessment is in bold text beneath the description of the requirement.

8387(b)(2)(A): Responsibilities of Persons Responsible for Executing the Plan

- Chapter 3 describes staff responsibility and functions in the implementation of the **WMP**.

8387(b)(2)(B) Objectives of the Wildfire Mitigation Plan

- Chapter 2 describes the **WMP** goals and objectives. Chapter 1 describes the purpose of the plan.

8387(b)(2)(C): Prevention Strategies and Programs

- Chapter 5 describes NCPA’s comprehensive wildfire prevention strategies and programs, including its 1) facility maintenance program, (2) emergency operating procedures, (3) vegetation management programs, and (4) asset documentation programs.

8387(b)(2)(D): Metrics and Assumptions for Measuring WMP Performance

- Chapter 7 Section A contains a description of the three metrics used by the NCPA in their WMP. These metrics are evaluated yearly: (1) number of fire ignitions, (2) number of NCPA wires down, and (3) fall in hazard tree ignitions. Data for the years 2020 through 2023 are included for each metric.

8387(b)(2)(E): Impact of Previous Metrics on WMP

- Chapter 7 Section B describes NCPA’s plans to continue tracking the three metrics described in Section A. Section B also describes 2020 through 2023 impact due to metrics.

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PAGE 3 OF 10

May 28, 2024

8387(b)(2)(F): Reclosing Protocols

- Chapter 5 Section H describes NCPA's reclosing policy. NCPA does not own or use automatic reclosers on their 230-kilvolt (kV) transmission lines.

8387(b)(2)(G): De-energization Notification Procedures

- Chapter 5 Section J.2 describes NCPA's customer notification protocols. This section contains an explanation of the notification methods. Policies are currently in place, NCPA-PM-501, to notify NCPA member utilities of de-energization activities.

8387(b)(2)(H): Vegetation Management

- Chapter 5 Section E contains a comprehensive description of NCPA's vegetation management program. NCPA developed and implemented a Transmission Vegetation Management Program establishing vegetation maintenance requirements for each facility to achieve generation interconnection system reliability.

8387(b)(2)(I): Inspections

- Chapter 5 Section E describes NCPA's inspection program, including the type and frequency of inspections.

8387(b)(2)(J): Risks and Risk Drivers

- Chapter 4 provides a comprehensive description of wildfire risk and risk drivers associated with topographic and climatological factors and design and construction standards.

8387(b)(2)(K): Geographical Area of Higher Wildfire Threat

- Chapter 4 Section C describes NCPA's review of the CPUC's fire threat map and CAL FIRE's Fire Zones and conclusions about the geographical area of the high fire threat areas.

8387(b)(2)(L): Enterprise-wide Safety Risks

- Chapter 4 describes that NCPA does not have enterprise-wide safety risks as NCPA does not possess general responsibility over assets and geography except for locations tied to its specific generation assets, as defined in the table in Chapter 4.

8387(b)(2)(M): Restoration of Service

- Chapter 7 describes how NCPA will restore service after a de-energization event in coordination with PG&E's restoration efforts.

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LAX (2024-05-28) KC

PAGE 4 OF 10



May 28, 2024

8387(b)(2)(N)(i) Monitoring and Auditing WMP implementation, (ii) identifying and correcting WMP deficiencies, (iii) Monitoring and Auditing the effectiveness of inspections.

- **Chapter 7 describes NCPA's processes for monitoring and auditing WMP implementation, correcting WMP deficiencies, and monitoring the effectiveness of inspections. NCPA uses an ongoing process to identify risks and inefficiencies, and to develop means to address the identified issues.**

## **5. Wildfire Safety Advisory Board Guidance Advisory Opinions**

The WSAB published the California Safety Advisory Boards *Guidance Advisory Opinion for the 2024 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electrical Cooperatives* (WSAB 2023), which provides guidance for development of the POU's 2024 WMP updates and future comprehensive WMPs. The WSAB provided specific recommendations for each utility that submitted a WMP for review by the board.

POWER reviewed the WSAB's report and the recommendations; these recommendations provide guidance and are not statutory requirements. Based on review of the 2024 WPM and WSAB's report, POWER has determined that NCPA complies with the recommendations below through the design of its system, its operational procedures, and the implementation of wildfire risk reduction and wildfire response strategies outlined in the WMP.

### **WSAB's 2024 Recommendations**

Based on WSAB's evaluation of the POU's 2023 WMPs, the WSAB's advisory opinion is that each POU initiate a collaborative approach to improve POU reporting on its wildfire prevention efforts and WSAB's ability to comprehend and advise on those reports.

The WSAB recommends POU's and the Joint Associations participate in meetings or workshops as requested by the WSAB to engage with the WSAB and to exchange information and ideas through discussions on topics, including:

1. POU progress and achievements by including more detailed information for each project in the following WMPs
2. Performance metrics
3. QA/QC program
4. Independent evaluator reports
5. Executive summaries
6. Late WMP submissions
7. Revision log
8. Digital accessibility
9. Other items that come up through meetings or workshops

## **6. Northern California Power Agency 2023 Progress in Implementing Wildfire Mitigation Plan Wildfire Prevention Strategies**

This section describes NCPA's accomplishments in 2023 for the wildfire prevention program and strategies described in the WMP.

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PAGE 5 OF 10

May 28, 2024

## 6.1 Vegetation Management

### Geothermal

- Completed annual maintenance of firebreaks around Plants #1 and #2 in February 2023.
- Completed vegetation management and line clearance work along the 230-kV tie-in lines and around all nine tower bases in June 2023.
- Completed annual maintenance of vegetation around Plants #1 and #2 perimeters plus along access roads in August 2023.

### Hydroelectric

- Completed annual maintenance of vegetation around powerhouses and substation in May 9, 2023.
- Completed vegetation management and line clearance work along 230-kV tie-in lines and around tower bases in September 1, 2023.
- McKay's Point 17-kV Service Line: Fire-hardening improvements were analyzed in 2023, with construction anticipated to be complete by Q4 2024.

## 6.2 Annual Inspections

### Geothermal

- 230-kV physical transmission line inspections and insulation and hardware replacement in March 2024 (this superseded a drone inspection).
- 21-kV line inspection completed in August 2023.

### Hydroelectric

- 230-kV transmission line inspection completed July 10, 2023.
- 17-kV line wood pole inspections completed November 29, 2023.
- 230-kV line daycore corona and IR inspection completed June 12, 2023.
- 230-kV LiDAR transmission line inspection completed December 28, 2023.
- NSM-Cabbage Patch 21-kV cable tests completed June 18, 2022.

## 7. Wildfire Mitigation Plan Metric Overview

In 2020 the California Municipal Utilities Association (CMUA) published a WMP template for POU's to use in the preparation of their WMPs. Metrics help POU's determine if their wildfire prevention strategies are effective for reducing the risk of a wildfire ignited by their electrical equipment. This template included two metrics: number of fire ignition events and wires down events.

NCPA adopted the two metrics suggested by the CMUA in the first and second iterations of their WMP. In 2023, NCPA adopted an additional metric: "Fall in Hazard Trees Ignitions." These three metrics: fire ignitions, wires down, and fall in hazard tree ignitions are included in the 2024 WMP.

NCPA records metric data in monthly outage reports. For each event, NCPA records date and time, an event description, and the cause (if known). This information includes if the event was the result of an external cause, whether the outage was forced or planned, and how long the event lasted. If the event occurred along one of the tie-in lines, then the location of the event along the line is described.

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May 28, 2024

NCPA recorded the following data for the three metrics in Table 2 for the years 2020 to 2023.

**Table 2 Metric Event Record in 2020-2023**

Metric	Geothermal	Hydroelectric
Fire Ignitions	0	0
Wire Down	0	0
Fall in Hazard Tree Ignitions*	10 Locations, 0 Fall Ins	2 Locations, 0 Fall Ins

\*2023 metric summary only.

These three metrics, with the supplemental data regarding the event date and time and event cause, are useful for apprising NCPA about the effectiveness of their wildfire prevention strategies. Comparing their outage event rate on their transmission lines to PG&E's outage event rate for their transmission lines provides a good perspective on why the "0" metric events for the wire down metric is indicative of success and not an indicator of an ineffective metric.

Additional metrics may be added to the WMP, as needed, to identify which lines are most susceptible to risk factors from unexpected outages (human, animal, or vegetation induced), time-of-year risks (drought or excessive rainfall), shifting fire threat districts, or impact of maintenance deferment on existing lines.

## 8. Comparison of Industry Standards and Similar Utility Wildfire Prevention Strategies

As part of this review, POWER compared the wildfire prevention strategies described in the WMP to the strategies being implemented by POU's and accepted electrical industry practices for reducing wildfire risk. NCPA is unique in that they are primarily a producer of electrical power whose transmission lines are limited to tie-ins to the electrical utilities who provide the distribution of electrical power to retail customers. NCPA's service territory is also unique in that their facilities, including generators and tie-lines, are dispersed in areas with no development except for infrastructure related to their operations. This is particularly important in that they have a greater responsibility for vegetation management/defensible space to protect their facilities than other POU's. Therefore, there are no comparable POU's in the state and it is more appropriate to compare their wildfire prevention programs to a relevant industry standard such as the National American Electric Reliability Corporation (NERC), California Public Utility Code General Order 95 (GO 95), Public Resource Code (PRC) 4292 and 4293, and CAL FIRE's California Power Line Fire Prevention Field Guide.

### 8.1 Vegetation Management

NCPA performs vegetation management work along their tie-in lines and around their facilities. NCPA maintains the vegetation within the right-of-way of its transmission tie-in lines to NERC FAC-003-4. There is at least 30 feet of vertical clearance between the trees and vegetation and the wires. The corridors containing the transmission wires are typically 100 feet wide except where terrain makes it unsafe to maintain the full 100 feet. For the generation facilities, NCPA meets PRC 4292 and 4293 requirements as well as PUC GO 95 requirements, typically maintaining a 50- to 100-foot perimeter around structures.

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PAGE 7 OF 10

May 28, 2024

## 8.2 System Hardening

### Equipment Maintenance and Upgrades

All NCPA transmission line towers are entirely constructed of lattice or tubular steel and so are inherently noncombustible. Conductors and other electrical equipment attached to NCPA towers are also constructed of metal or other non-combustible materials. Transformers, circuits, and other types of electrical equipment located at substations are constructed entirely of non-combustible materials and surrounded by a large area of bare ground. No system hardening or equipment upgrades would result in significant improvements to fire resistance of NCPA equipment. NCPA inspects its transmission towers on a regular basis and issues with towers or tower equipment discovered during the inspection are repaired immediately.

NCPA utilizes wood poles for the 17-kV distribution line at the McKay's Point facility and the 21-kV line at NCPA's Geothermal Facility. NCPA recently rebuilt the 21-kV line and is in the process of fire hardening the McKay's Point 17-kV distribution line.

### Construction Standards

NCPA construction standards are designed to reduce the risk of fire ignited by the failure of electrical equipment, which includes the use of animal deterrents, lightning arresters, and arc suppression fusing. NCPA does not use explosive fuses on any of its lines that pass over areas of vegetation.

### Recloser Policy

NCPA does not have reclosers on their 230-kV transmission lines. Relaying equipment on their 21-kV Bear Canyon line is set to a zero-reclose to lockout scheme.

## 8.3 Situational Awareness

NCPA has a Transmission Maintenance and Inspection Program that meets the standards described in NERC FAC-501-WECC-3. NCPA regularly performs visual inspections of their equipment and lines, including those in remote areas. Regular and thorough inspections, particularly for transmission lines, is a nationally accepted best practice for early equipment fault detection and hazardous vegetation identification.

## 9. Conclusion and Recommendations

NCPA prepared a comprehensive 2024 WMP. The plan meets all statutory requirements described in PUC §8387(b)(2). NCPA also considered WSAB recommendations. NCPA's WMP, with appendices, describes a wildfire mitigation program that accurately assesses the risks and risk drivers present in their service territory and implements preventative strategies that are effective at reducing wildfire risks.

NCPA may consider creating a prevailing wind map. Maps are useful to illustrate wind direction in relation to NCPA's facilities within high fire threat zones.

NCPA may also consider reviewing and updating the Public Safety Power Shutoff plan for the Hydroelectric Facility.

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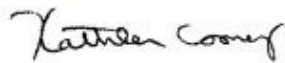
PAGE 8 OF 10

May 28, 2024

NCPA may consider updating the amount of the Geothermal effluent pump system and 21-kV service line and steam field and delivery that are within the CAL FIRE Fire Hazard Severity Zones and CPUC Tier 2/3 Threat Zones based on the updated CAL FIRE and CPUC fire hazard maps.

Based on the wildfire prevention programs described in the WMP and the progress NCPA has made in its wildfire prevention programs, NCPA is taking an active role in minimizing the risk of its equipment starting a wildfire and minimizing the risk of a wildfire near their facilities that could impact their operations.

Sincerely,



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May 28, 2024

#### References

WSAB. 2023. *Guidance Advisory Opinion for the 2024 Wildfire Mitigation Plans of Electric Publicly Owned Utilities and Rural Electrical Cooperatives*. December 4, 2023. Sacramento, CA. Accessed online: [wsab-2024-wmp-pou-advisory-opinion.pdf \(ca.gov\)](https://www.wsab.ca.gov/wp-content/uploads/2024/05/WSAB-2024-WMP-POU-Advisory-Opinion.pdf)

## REVISION HISTORY

*Version 1.0 - NCPA Commission approved on December 5, 2019 per Resolution 19-100*

*Version 1.1 – NCPA Commission approved on May 29, 2020 per Resolution 20-43. This WMP includes the qualified Independent Evaluators (IE) report in Appendix 2.*

*Version 1.2 – NCPA Commission approved on May 27, 2021 per Resolution 21-56. This WMP includes the qualified Independent Evaluators (IE) report in Appendix 3.*

*Version 1.3 – NCPA Commission approved on May 26 2022 per Resolution 22-58. This WMP includes the qualified Independent Evaluators (IE) report in Appendix 4.*

*Version 2.0 - NCPA Commission approved on May 25, 2023 per Resolution 23-46. This WMP includes the Qualified Independent Evaluators (IE) report in Appendix 5.*

## ATTACHMENT A - PUC 8387 (B) REQUIREMENTS TABLE

Attachment A: Index of Required Element Location in WMP

2024 WMP Required Element per PUC Sec 8387(b)(2)	2024 NCPA WMP section
(A): An accounting of the <b>responsibilities of persons responsible</b> for executing the plan.	3.B., 3.C.
(B): The <b>objectives</b> of the wildfire mitigation plan.	1.B.
(C): A <b>description of the preventive strategies and programs</b> to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical <b>lines and equipment</b> causing catastrophic wildfires, including consideration of dynamic <b>climate change</b> risks.	5.A., 5.B., 5.C.
(D): A <b>description of the metrics</b> the local publicly owned electric utility or electrical cooperative plans to use to <b>evaluate the wildfire mitigation plan's performance</b> and the assumptions that underlie the use of those metrics.	7.A.
(E): A discussion of how the application of <b>previously identified metrics</b> to previous wildfire mitigation plan performances has informed the wildfire mitigation plan.	7.B.
(F): <b>Protocols for disabling reclosers</b> and deenergizing portions of the electrical distribution system that consider the <b>associated impacts</b> on public safety, as well as protocols related to <b>mitigating the public safety impacts</b> of those protocols, including impacts on critical first responders and on health and communication infrastructure.	N/A – NCPA does not own or use automatic reclosers on its 230 kV lines (5.H.)
(G): Appropriate and feasible <b>procedures for notifying a customer</b> who may be impacted by the deenergizing of electrical lines. The procedures shall direct notification to all public safety offices, critical first responders, health care facilities, and operators of telecommunications infrastructure with premises within the footprint of potential deenergization for a given event.	5.J.2.

(H): Plans for <b>vegetation management</b> .	5.E.
(I): Plans for <b>inspections</b> of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	7.E.
(J): A <b>list that identifies, describes, and prioritizes all wildfire risks, and drivers</b> for those risks, throughout the local publicly owned electric utility's or electrical cooperative's service territory. The list shall include, but not be limited to, both of the following: (i) <b>Risks and risk drivers associated with design, construction, operation, and maintenance</b> of the local publicly owned electric utility's or electrical cooperative's equipment and facilities. (ii) Particular <b>risks and risk drivers associated with topographic and climatological risk factors</b> throughout the different parts of the local publicly owned electric utility's or electrical cooperative's service territory.	(J) : 4 (i) : 4.B. (ii) : 4.A.
(K): <b>Identification of any geographic area</b> in the local publicly owned electric utility's or electrical cooperative's service territory that is a <b>higher wildfire threat</b> than is identified in a commission fire threat map, and identification of where the commission should expand a high-fire threat district based on new information or changes to the environment.	N/A – At this time, NCPA does not identify any needed changes to the current boundaries as identified in current maps included in Appendix 1 – Fire Risk Assessment Maps.
(L): A <b>methodology for identifying and presenting enterprise wide safety risk</b> and wildfire-related risk.	4.B.
(M): A statement of <b>how the local publicly owned electric utility or electrical cooperative will restore service</b> after a wildfire.	7.
(N): A <b>description of the processes</b> and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following: (i) <b>Monitor and audit the implementation</b> of the wildfire mitigation plan. (ii) <b>Identify any deficiencies</b> in the wildfire mitigation plan or its implementation and correct those deficiencies. (iii) <b>Monitor and audit the effectiveness</b> of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes, or commission rules.	(i) : 7.C. (ii) : 7.D. (iii) : 7.E

## ATTACHMENT B – WSAB RECOMMENDED ELEMENTS TABLE

Table 2: Index of WSAB Recommended Element Location in WMP

2023 WSAB Recommended Elements	2023 NCPA WMP section
(A): The WSAB has requested that public owned utilities include a table that describes each of the PUC requirements and where each requirement can be found in the WMP. <b>This table should be incorporated into the WMP as Attachment A.</b>	The table describing how each of the PUC requirements have been addressed by NCPA's WMP has been added as Attachment A
(B):The WSAB has requested that publicly-owned utilities re-evaluate their general WMP objectives to take on a broader approach that goes beyond minimizing ignitions. <b>It is recommended that NCPA re-evaluate their objectives for the following strategies: objectives that minimize the risk of fire spread or intensity and objectives that allow NCPA to restore services/return to full capacity after a wildfire spreads impacts their assets.</b>	NCPA has evaluated and updated its strategies in section 5.A. of the WMP to address methods of minimizing the risk of fire spread. The strategies for restoration of services contained in section 5.H. of the WMP have been evaluated and will not be revised at this time based on the minimal impact to customers related to potentially delayed restoration of service.
(C): The WSAB has requested that future WMP's contain a description of the public input and approval process for the WMP. <b>It is recommended that NCPA add a small paragraph describing the utility's public approval process for their plan and where the WMP is posted for review by the public.</b>	A paragraph describing NCPA's public document accessibility, review and approval process, and method for incorporation of public comments into the WMP plan has been added to section 3.B. of the WMP.
(D): The board has recommended that public owned utilities re-evaluate their metrics to determine if they are useful for informing them on the effectiveness of the plan. <b>It is recommended that NCPA consider adding a new metric or replacing an existing metric with a performance-based metric like equipment inspections or trees trimmed as well as another leading metric such as number of vegetation contacts with wires discovered or equipment faults detected.</b>	NCPA has considered the recommendation to consider adding a new metric or replacing an existing metric with a performance-based metric. A residual risk is related to the potential for soil instability in areas previously affected by wildfire to result in a "fall in" by trees of sufficient height to contact Distribution lines. Section 7.A. has been updated to add this new metric.

<p>(E): The WSAB recommends that the Independent Evaluators report contain a comparison of the utility’s operations and equipment to relevant industry standards. <b>It is requested that NCPA provide a list of specific operational practices and equipment that NCPA employs to reduce the risk of wildfire within the service territory.</b></p>	<p>NCPA has addressed specific equipment and operational practices to reduce the risk of wildfire within the service territory in section 5.A.of the WMP.</p>
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# ATTACHMENT C – WILDFIRE RISK ELEMENTS AND CONTROLS

Table 3 – Index of Wildfire Risks and Controls Evaluations within the WMP

Identify and Assess Wildfire Event Elements Fuel Ignition Design Controls			Implement Controls	Evaluate Controls (WMP Section)
Free contact or downed conductor during wind centered events Dead limbs or trees contacting distribution lines Increased tree mortality Trees encroaching on right-of-way distances to transmission facilities Fallen trees resulting from landslides or trunk failures			Design and maintain Distribution and Transmission facilities in accordance with PG&E approved practices for wildfire fire prevention. De-energize facilities when needed during high winded flag conditions.	3.C. Wildfire Response Communication and Recovery and 5.A.(4) Asset Recovery and 5.A.(4) Asset documentation.
	X	X	Identify and remove dead and dying trees or limbs from area adjacent to line	PG&E Greenbook Design Standards, Public Safety Power Shutoff (PSPS) and PUPFG
	X	X	Identify and remove dead and dying trees from areas adjacent to line	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
	X	X	Identify and remove encroaching trees. De-energize facilities upon CAL FIRE request	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
	X	X	Routine inspections and non-routine incidental observation.	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Fuses or conductor dropping molten metal	X		Use of non-explosion type fuses in high fire risk areas (HFLA), protection of Transmission and Distribution circuits in accordance with design standards, advising of line prior to re-energization.	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Unintended fire department response	X		Emergency Action Plan (EAP) training and coordination with local agencies	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Undetected equipment damage or failures	X		Routine inspections and non-routine incidental observation	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Uncoordinated wildfire response	X		Personnel training and notification to Dispatch center for coordinated response.	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Staff unaware of wildfire risk or response	X		Personnel training and seasonal awareness reminders.	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Extended timeframe for fire event recovery	X		Leverage additional line personnel and resources via mutual aid agreements.	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Underbrush damage from fire	X		Routine inspections and non-routine incidental observation.	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Vegetation stress or species changes	X		Awareness and response.	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Lightning strikes	X		Awareness and periodic personnel training	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Vehicles operating in dry vegetation areas	X		Awareness and periodic personnel training	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Vegetation clearing operations	X		Awareness and periodic personnel training	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Hot Work	X		Awareness and periodic personnel training	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Undetected fire risk change	X		Periodic review of the risk categories.	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546
Protective device delayed clearing	X		Annual review of protective equipment calibration and testing records. Periodic (every 6 years) verification of protective device operating time IAW NERC NERC-005	PG&E Greenbook Design Standards, PSPS, PM-201 & GEC-546







# **NCPA**

# **Wildfire Mitigation Plan**

# **Annual Review**

NCPA Generation Services  
June 5, 2024

## WMP Background

### ■ CPUC Requirement

- Publicly owned electric utility shall update its plan annually and submit the update to the California Wildfire Safety Advisory Board by July 1 of each year per Section 8387 (b) (1)



### ■ NCPA Actions

- Yearly review and update as needed.
- Every three-year comprehensive review and update as needed.
- Yearly Independent Evaluation (IE)

## WMP Updates

- POWER Engineers conducted an Independent Evaluation of NCPA's 2024 WMP.
  - for compliance with PUC §8387(b)(2)
  - specific recommendations published by the WSAB
  - NCPA's progress in implementing wildfire prevention strategies
  - metrics used in the WMP
  - a comparison of wildfire prevention industry standards

# Independent Evaluation Notes

## ■ Geothermal 2023 Updates

- Completed annual maintenance of firebreaks around Plants #1 and #2
- Completed line clearance work along the 230-kV tie-in lines and around all towers
- Completed the 230-kV physical transmission line inspections and insulation and hardware replacement

## ■ Hydroelectric 2023 Updates

- Completed annual maintenance of vegetation around powerhouses and substation
- Completed vegetation management and line clearance work along 230-kV tie-in lines and around tower bases
- Completed 230-kV line corona and IR inspection
- Completed 230-kV LiDAR transmission line inspection
- Future: McKay's Point 17-kV Fire-hardening improvements were analyzed in 2023, with construction anticipated to be complete by Q4 2024.

## WMP Evaluation Summary

- Metrics for the years 2020 to 2023.

Table 2 Metric Event Record in 2020-2023

Metric	Geothermal	Hydroelectric
Fire Ignitions	0	0
Wire Down	0	0
Fall in Hazard Tree Ignitions*	10 Locations, 0 Fall Ins	2 Locations, 0 Fall Ins

\*2023 metric summary only.

- In summary NCPA prepared a comprehensive 2024 WMP. The plan meets all statutory requirements described in PUC §8387(b)(2).

## Proposal

- Staff is seeking a recommendation from the Facilities Committee for the Commission approval of the NCPA 2024 Wildfire Mitigation Plan Three Year Revision, with updated revisions based on the qualified independent evaluators assessment and recommendations.





# Commission Staff Report

**COMMISSION MEETING DATE:** June 27, 2024

**SUBJECT:** Shared Use and Occupancy Agreement between NCPA and Signatory Members

**AGENDA CATEGORY:** Consent

**FROM:** Monty Hanks  
Assistant General  
Manager/CFO  
  
**Division:** Administrative Services  
  
**Department:** Accounting & Finance

**METHOD OF SELECTION:**

N/A

**IMPACTED MEMBERS:**

- |                                                                          |                                                     |                                                     |
|--------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------|
| <b>All Members</b> <input checked="" type="checkbox"/>                   | <b>City of Lodi</b> <input type="checkbox"/>        | <b>City of Shasta Lake</b> <input type="checkbox"/> |
| <b>Alameda Municipal Power</b> <input type="checkbox"/>                  | <b>City of Lompoc</b> <input type="checkbox"/>      | <b>City of Ukiah</b> <input type="checkbox"/>       |
| <b>San Francisco Bay Area<br/>Rapid Transit</b> <input type="checkbox"/> | <b>City of Palo Alto</b> <input type="checkbox"/>   | <b>Plumas-Sierra REC</b> <input type="checkbox"/>   |
| <b>City of Biggs</b> <input type="checkbox"/>                            | <b>City of Redding</b> <input type="checkbox"/>     | <b>Port of Oakland</b> <input type="checkbox"/>     |
| <b>City of Gridley</b> <input type="checkbox"/>                          | <b>City of Roseville</b> <input type="checkbox"/>   | <b>Truckee Donner PUD</b> <input type="checkbox"/>  |
| <b>City of Healdsburg</b> <input type="checkbox"/>                       | <b>City of Santa Clara</b> <input type="checkbox"/> | <b>Other</b> <input type="checkbox"/>               |

*If other, please specify*

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**RECOMMENDATION:**

Northern California Power Agency (NCPA) Commission approve Resolution 24-XX authorizing a Shared Use and Occupancy Agreement between NCPA and a Signatory Member or Members by which assigned personnel of a Signatory Member or Members may occupy and use available office space of property owned by NCPA from time to time on a first come, first serve basis.

**BACKGROUND:**

NCPA has prepared a Shared Use and Occupancy Agreement between NCPA and those members of NCPA who execute the Agreement (Signatory Members) by which the assigned personnel of a Signatory Member may occupy and use available office space at NCPA's Disaster Recovery Center (DRC or the Property).

With the difficulty of hiring staff due to the high cost of living in certain Members' territories, NCPA can offer available office space at NCPA's Disaster Recovery Center for use by Signatory Members' personnel. A Signatory Member can hire or offer staff that may live outside of the general vicinity of their headquarters, a location that's considered a satellite office for non-telecommuting days, subject to the utility's internal approval. Office space at the DRC will be used and occupied by the assigned employee(s) of a Signatory Member for the sole purpose of conducting a Signatory Member's business. Any incremental expenses incurred by NCPA as a result of occupation will be billed to the Signatory Member(s) on a pro-rata basis.

**FISCAL IMPACT:**

Signatory Members will be billed a monthly Occupancy Charge that represents the increased cost incurred by NCPA for utility-related expenses and increased frequency of janitorial services for the use of the Property. The Occupancy Charge will be split evenly amongst the Signatory Members on a pro-rata basis based on the total number of Signatory Member assigned personnel who occupy space(s) at the Property and will be billed monthly on each Signatory Member's All Resources Bill. NCPA does not anticipate the monthly Occupancy Charge to exceed \$1,000 per month.

**ENVIRONMENTAL ANALYSIS:**

This activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary.

**COMMITTEE REVIEW:**

Pending.

Respectfully submitted,

RANDY S. HOWARD  
General Manager

Attachments: Resolution 24-XX  
Shared Use and Occupancy Agreement

# NORTHERN CALIFORNIA POWER AGENCY SHARED USE AND OCCUPANCY AGREEMENT

## PREAMBLE

This Shared Use and Occupancy Agreement ("Agreement") is entered into as of the \_\_\_\_ day of \_\_\_\_\_, 2024 ("the Effective Date") by and between the Northern California Power Agency, a joint powers agency of the State of California ("NCPA" or "Agency"), and those members of NCPA who execute this Agreement (each a "Signatory Member" and together the "Signatory Members"). NCPA and each Signatory Member are referred to individually as a "Party" and together as "Parties".

## RECITALS

WHEREAS, NCPA and NCPA's members ("Members") desire to establish a shared use and occupancy agreement by which Signatory Members may occupy and use available office space of property owned by NCPA from time to time on a first come, first served basis as further detailed herein; and

WHEREAS, the shared use and occupancy includes available workspaces and other amenities located at NCPA's Disaster Recovery Center located at the Property (defined below); and

WHEREAS, each Signatory Member shall maintain a primary place of business separate and apart from the Property and has accepted the shared use and occupancy of the Property for the Signatory Member's convenience and staffing needs, as more fully set forth herein; and

WHEREAS, the primary purpose of this Agreement is to protect NCPA and its Members from any exposure to liability of any kind that might result from any act or omission in the performance of this Agreement; and

NOW, THEREFORE, the Parties agree as follows:

**1. Property.** The property subject to this Agreement is known as NCPA's Disaster Recovery Center, temporarily located at 7664 Old Auburn Rd., Building A, Citrus Heights, CA 95610-3831 (the "Property"). At some point in 2025, NCPA's Disaster Recovery Center will move to its permanent location at 5034 Sunrise Blvd, Fair Oaks, CA 95628. NCPA will provide Signatory Members written notice of the change of the Property location no less than 30 days before the change. Upon the effective date of NCPA's issuance of that written notice, the term "Property" will become 5034 Sunrise Blvd, Fair Oaks, CA 95628.

Agency shall have priority on all office space within the Property. Office space within the Property not being used or planned to be used by Agency will be available for use by NCPA Members on a first come first served basis.

**2. Effective Date as to Signatory Member.** Following the approval of this Agreement by the NCPA Commission, any Member may become a Signatory Member by providing an executed counterpart of

this Agreement to NCPA in the form set forth on **Exhibit A**. Each signature page shall identify the initial Designated Representatives of the Signatory Member who are authorized to request occupancy and use of available office space at the Property and assign personnel to occupy the space. Signatory Members shall provide written notice to Agency upon a change in the identity of either of its Designated Representatives.

**3. Signatory Member Request for Use and Occupancy of the Property.** Signatory Members desiring to access, use, and occupy available office space within the Property shall submit a request to Agency in the form set forth on **Exhibit B and B-1**. Exhibit B-1 may be modified from time to time upon mutual agreement of the authorized representatives of Agency and the Signatory Members. If Agency has available space and at Agency's sole discretion, Agency will grant the request by executing Exhibit B. Agency will return the counter-signed Request to Use and Occupy Available Office Space to Signatory Member.

**4. Occupancy Charge.** An occupancy charge is an amount that represents the increased monthly cost incurred by NCPA for utility-related expenses and increased frequency of janitorial services for the use of the Property by a Signatory Member. The occupancy charge will be split evenly amongst the Signatory Members on a pro-rata basis based on the total number of Signatory Member assigned personnel using the Property and billed monthly to each Signatory Member's All Resources Bill.

## **5. Termination.**

a. Signatory Member. A Signatory Member may voluntarily withdraw from this Agreement and/or request cancellation of an approved Request to Use and Occupy Available Office Space with 30 days' advance written notice to Agency. Occupancy charges will be prorated based on the departure date if the proper notice period is given (minimum of 30 days before departure).

b. Agency. Agency may terminate an approved Request to Use and Occupy Available Office Space with one (1) year advance written notice to Signatory Member's Designated Representatives.

**6. No Assignment or Sublease.** NCPA provides this service to its Members on an as available basis. Signatory Member(s) shall not assign this Agreement, or sublet or grant any license to use the Property or any part thereof.

**7. Use.** The Property shall be used and occupied by the assigned employee(s) of a Signatory Member for the sole purpose of conducting a Signatory Member's business. The Signatory Member and/or their assigned personnel shall not allow any other person to use, be a guest of, or occupy the Property without first obtaining NCPA's written consent to such use.

**8. Entry by the Agency.** The Agency shall have the right, at any time, to enter and use the Property making all efforts to avoid the workspaces occupied by a Signatory Member's assigned personnel.

**9. Security Access Badges.** The Agency will create and provide a Signatory Member's assigned personnel security access badges allowing entry to the premises. When occupancy is no longer needed, security access badges must be returned to the Agency prior to or on the day of vacating the Property.

**10. Condition of Property.** The Agency stipulates the Property is in good order, repair, and in a safe and clean condition. A Signatory Member stipulates, represents, and warrants that assigned personnel will examine the Property upon arrival and will notify the Agency of any issues within ten (10) days of arrival.

**11. Care of the Property.** A Signatory Member's assigned personnel agree to maintain the Property in as good condition as it is at the start of the occupancy term, except for ordinary wear and tear and damage from casualty or condemnation. A Signatory Member must pay for all repairs, replacements, and damages caused by the act or neglect of their assigned personnel. NCPA shall coordinate periodic maintenance, repair, cleaning, and janitorial service.

**12. Alterations.** A Signatory Member's assigned personnel shall make no alterations to or improvements on the Property. To the extent that the Signatory Member's Designated Representatives request to fund alterations to the Property (e.g. alteration of cubicles), the request shall be made in writing to the Agency. The Agency at its sole discretion may agree to perform the requested alterations as funded by the Signatory Member or reject the request. All alterations to the Property funded by the Signatory Member will become the property of the Agency.

**13. Repairs by the Agency.** If the Property is damaged or in need of repair, the Signatory Member must promptly notify the Agency, and thereafter the Agency will cause the approved repairs to be made within a reasonable time. Failure to promptly notify the Agency of a needed repair, which in turn results in additional damage, could result in additional charges to the Signatory Member.

**14. Damage to Property.** In the event the Property is destroyed or rendered wholly uninhabitable by fire, storm, or other casualty not caused by the negligence of either Party, this Agreement and any approved use and occupancy thereunder shall terminate. In that event, the monthly occupancy charge will be prorated as necessary. Should a portion of the Property thereby be rendered uninhabitable, the Agency shall have the option of either repairing such injured or damaged portion(s) or terminating this Agreement and the approved use and occupancy thereunder.

**15. Required Condition.** Upon termination of an approved use and occupancy arrangement, the Signatory Member will remove all of their personal property (computers, laptops, monitors, printers, documents, etc.) and will leave the Property clean.

**16. Utilities.** The Agency shall throughout the term promptly pay, and be responsible, for all of its share of gas, electricity, water, wastewater, refuse, network services, and internet access. Assigned personnel are requested to use these services wisely and conserve where possible. The Agency is not responsible for any inconvenience or interruption of services due to repairs, improvements, or any reason beyond the Agency's control.

**17. Compliance with Laws.** A Signatory Member's assigned personnel must comply with all laws, orders, rules, and requirements of governmental authorities and insurance companies that have issued or are about to issue policies covering the Property and/or its contents.

**18. Administration of Agreement.** The NCPA Commission has sole overall responsibility and authority for the administration of this Agreement. Any acts, decisions or approvals taken, made or sought by

NCPA under this Agreement shall be taken, made or sought, as applicable, in accordance with NCPA's Constitutive Documents.

**19. Limitation of NCPA Liability.** Except as otherwise provided, NCPA shall not at any time be liable for any injury or damage occurring to a Signatory Member or any other person or property from any cause whatsoever arising out of this Agreement.

**20. Limited Right of Recourse.** The provisions of Section 19 shall not apply where the injury or damage is to a Signatory Member and is caused by the active negligence of NCPA or of any employee, agent or contractor of NCPA, provided, however, that any liability under this subsection is limited to the extent of the actual coverage and coverage limits of the insurance policies described within.

**21. Indemnity Obligation of Signatory Members.** Except as provided in Section 20 above, each Signatory Member shall, at its sole cost and expense, indemnify and hold harmless NCPA, and its Members, and their respective officers, agents and employees ("Indemnitees") from and against any and all liability, obligation, damages, penalties, claims, liens, costs, charges, losses and expenses (including reasonable attorneys' fees), which may be imposed upon, incurred by or be asserted against the Indemnitees arising out of this Agreement.

**22. Defense Obligation of Signatory Members.** In the event any action or proceeding shall be brought against the Indemnitees by reason of any matter for which the Indemnitees are indemnified hereunder, the Signatory Members shall, upon reasonable prior written notice from any of the Indemnitees, at a Signatory Member's sole cost and expense, resist and defend the same with legal counsel mutually selected by Indemnitee and the Signatory Member or Members, unless mutual selection of counsel is expressly prohibited by an applicable insurance policy; provided however, that neither Indemnitee nor Signatory Member shall admit liability in any such matter or on behalf of the other without express written consent, which consent shall not be unreasonably withheld or delayed, nor enter into any compromise or settlement of any claim for which Indemnitees are indemnified hereunder without prior express written consent. The Signatory Member's duty to defend shall begin upon receipt of a written notice identifying with specificity the allegations that give rise to this duty to defend.

**23. Notice of Claims Required.** The Parties shall give each other prompt written notice of the making of any claim or the commencement of any action, suit or other proceeding covered by the provisions of this Agreement.

**24. NCPA Obligation to Maintain Insurance.** During the term of the Agreement, NCPA shall maintain, or cause to be maintained, in full force and effect, and at its sole cost and expense, the types and limits of insurance as are annually approved by the governing Commission of NCPA.

**25. Signatory Member Insurance.** Signatory Members acknowledge that there are significant limits on NCPA's liability under this Agreement. A Signatory Member may wish to purchase additional insurance of its own to cover the additional risks and the potential additional liabilities it is assuming. Each Signatory Member will, with respect to any additional insurance it obtains or which is otherwise available to it, cause its insurers to issue an endorsement providing a waiver of subrogation rights as to the Indemnitees.

**26. Survival of Obligations.** The defense and indemnity obligations shall survive the termination of this Agreement.

**27. Dispute Resolution.** If any dispute arises between the Parties that cannot be settled engaging in good faith negotiations, each Party shall designate a senior management or executive level representative to negotiate and resolve the dispute by any means within their authority. In the event that a dispute remains unresolved, either Party may pursue arbitration pursuant to the Commercial Arbitration and Mediation Rules of the American Arbitration Association. The costs of arbitration shall be equally shared by the Parties, and the Parties shall bear their own attorneys' fees. The arbitrator shall have no authority to amend this Agreement.

**28. No Consequential Damages.** FOR ANY BREACH OF ANY PROVISION OF THIS AGREEMENT FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED IN THIS AGREEMENT, THE LIABILITY OF THE DEFAULTING PARTY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION, AND ALL OTHER DAMAGES OR REMEDIES ARE HEREBY WAIVED. IF NO REMEDY OR MEASURE OF DAMAGE IS EXPRESSLY PROVIDED, THE LIABILITY OF THE DEFAULTING PARTY SHALL BE LIMITED TO ACTUAL DAMAGES ONLY AND ALL OTHER DAMAGES AND REMEDIES ARE HEREBY WAIVED. IN NO EVENT SHALL NCPA OR ANY PARTICIPATING OR SIGNATORY OR OTHER MEMBER OR THEIR RESPECTIVE SUCCESSORS, ASSIGNS, REPRESENTATIVES, DIRECTORS, OFFICERS, AGENTS, OR EMPLOYEES BE LIABLE FOR ANY LOST PROFITS, CONSEQUENTIAL, SPECIAL, EXEMPLARY, INDIRECT, PUNITIVE OR INCIDENTAL LOSSES OR DAMAGES, INCLUDING LOSS OF USE, LOSS OF GOODWILL, LOST REVENUES, LOSS OF PROFIT OR LOSS OF CONTRACTS ARISING FROM THIS AGREEMENT OR ANY CONFIRMATION ENTERED INTO PURSUANT TO THIS AGREEMENT EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. EACH SIGNATORY MEMBER EACH HEREBY WAIVES SUCH CLAIMS AND RELEASES EACH OTHER AND EACH OF NCPA AND ITS MEMBERS FROM ANY SUCH LIABILITY.

**29. Severability.** In the event that any of the terms, covenants, or conditions of this Agreement or the application of any such term, covenant, or condition, shall be held invalid as to any person or circumstance by any court having jurisdiction, all other terms, covenants or conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect unless the court holds that such provisions are not severable from all other provisions of this Agreement.

**30. Governing Law.** This Agreement shall be interpreted, governed by, and construed under the laws of the State of California.

**31. Nature of Occupancy.** No legal title or leasehold interest in the Property shall be deemed or construed to be created or vested by a Signatory Member. A Signatory Member shall occupy the Property, merely as a licensee. It is expressly understood and agreed that a Signatory Member is not a tenant or lessee, the Agency is not a landlord, and a Signatory Member does not have such rights as exist at law regarding landlord/tenant rights.

**32. Entire Agreement.** All promises regarding the Property made by the Agency, and a Signatory Member's right to use and occupy, are contained in this Agreement. This Agreement can only be changed by an agreement in writing signed by both the Agency and the Signatory Member.

**33. Notices.** Any notice, demand or request required or authorized by this Agreement to be given to any Party shall be in writing. Notices shall either be personally delivered to a Signatory Member's



Designated Representative(s) and to the Agency as set forth below or transmitted to the Signatory Member's Designated Representative(s) and to the Agency by U.S. mail, first class postage prepaid. The designation of such address may be changed at any time by written notice given to the Secretary of the Commission who shall thereupon give written notice of such change to each Signatory Member. Notices shall be deemed received upon delivery or three (3) days after mailing.

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

With Copy to:

Mr. Monty Hanks, Assistant General Manager  
Administrative Services  
Northern California Power Agency  
651 Commerce Drive  
Roseville, CA 95678

And

Mr. Jonathan Ashcraft, Facilities Manager  
Northern California Power Agency  
661 Commerce Drive  
Roseville, CA 95678

**34. Exhibits.** The Exhibits referenced herein are incorporated by this reference. They shall be denoted as follows:

- Exhibit A: Form of Signatory Member Execution Page including designation of Designated Representatives
- Exhibit B: Signatory Member Request to Use and Occupy Available Office Space
- Exhibit B-1: Depiction of office space within the Property to be used by Signatory Member

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IN WITNESS WHEREOF, each Signatory Member has executed this Agreement with the approval of its Governing Body, and NCPA has authorized the execution of this Agreement by its General Manager in accordance with the authorization of its Commission.

## NORTHERN CALIFORNIA POWER AGENCY

By: \_\_\_\_\_  
Randy S. Howard, General Manager

Attest:

\_\_\_\_\_  
Carrie Pollo, Assistant Secretary to the Commission

Approved as to Form:

By: \_\_\_\_\_  
Jane E. Luckhardt, General Counsel

**EXHIBIT A**

**NORTHERN CALIFORNIA POWER AGENCY SHARED USE AND OCCUPANCY AGREEMENT**  
**Signatory Member Execution Page**

The Shared Use and Occupancy Agreement is hereby approved, executed, and joined by the following NCPA Member as a Signatory Member:

\_\_\_\_\_  
[Name of NCPA Member Agency]

1. The initial Designated Representatives of the Signatory Member who are jointly authorized to request occupancy and use of available office space at the Property and assign personnel to occupy the requested space are:

\_\_\_\_\_  
Utility Director/City Manager/  
or General Manager

\_\_\_\_\_  
General Counsel or City Attorney

Notice Address: \_\_\_\_\_  
\_\_\_\_\_

The NCPA Shared Use and Occupancy Agreement was approved on \_\_\_\_\_, 20\_\_ by  
Resolution no. \_\_\_\_\_ of the \_\_\_\_\_ [Name of Governing Body of  
Signatory Member, e.g., "city council" or "board of directors"].

By: \_\_\_\_\_ [Signature of person executing]

Its: \_\_\_\_\_ [Title of person executing]

Attest:

\_\_\_\_\_ [Signature of Person Attesting to Approval]

Its: \_\_\_\_\_ [Title of Person Attesting]

Approved as to Form:

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

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

**EXHIBIT B**

**NORTHERN CALIFORNIA POWER AGENCY SHARED USE AND OCCUPANCY AGREEMENT  
SIGNATORY MEMBER REQUEST TO USE AND OCCUPY AVAILABLE OFFICE SPACE**

Pursuant to the Northern California Power Agency Shared Use and Occupancy Agreement and subject to the terms and conditions of that Agreement, Signatory Member, [insert name]

\_\_\_\_\_, hereby requests  
occupancy and use of available office space of the Property, commonly referred to as NCPA's Disaster  
Recovery Center, located at \_\_\_\_\_,  
for use by \_\_\_\_\_ (name of personnel), and as depicted on the floorplan of the  
Property attached hereto as Exhibit B-1, for a term of \_\_\_\_\_, commencing on  
\_\_\_\_\_ and ending on \_\_\_\_\_.

\_\_\_\_\_  
Utility Director/City Manager/  
or General Manager

\_\_\_\_\_  
General Counsel or City Attorney

Notice \_\_\_\_\_  
Address: \_\_\_\_\_

**Acknowledgment and Approval**

NCPA has reviewed the foregoing request, confirmed that the requested space is available, and hereby approves the requested access, use, and occupancy.

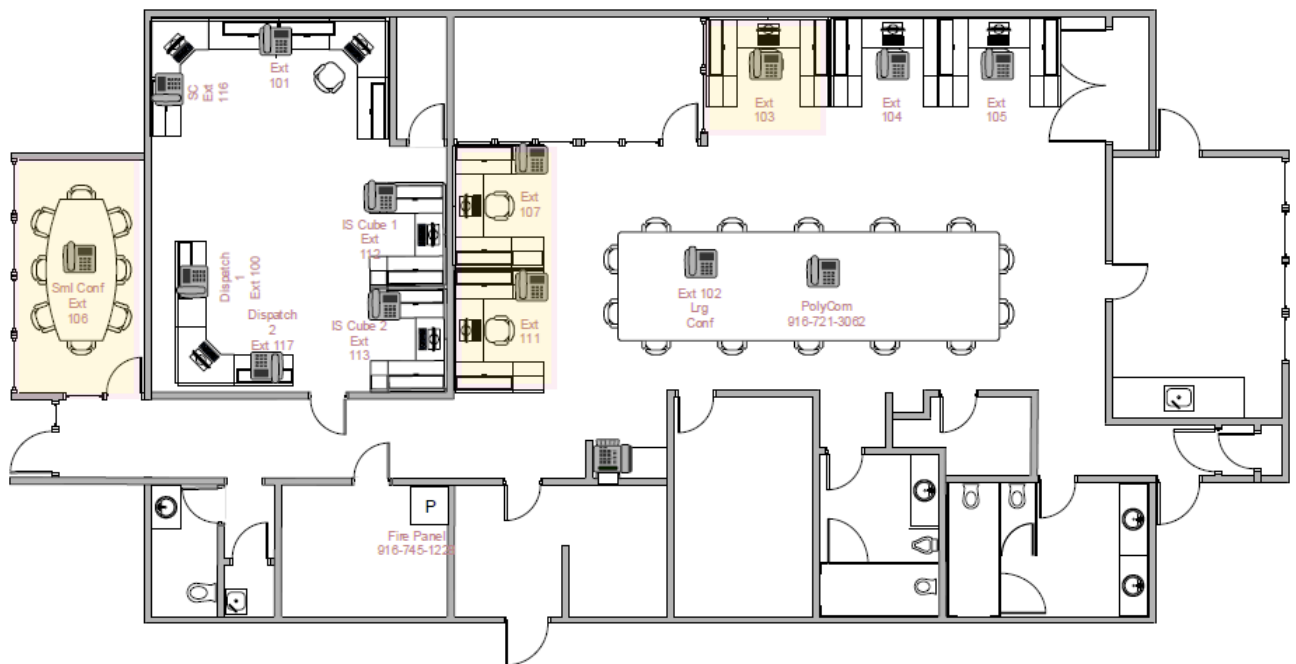
NORTHERN CALIFORNIA POWER AGENCY

By: \_\_\_\_\_  
Randy S. Howard, General Manager

## EXHIBIT B-1

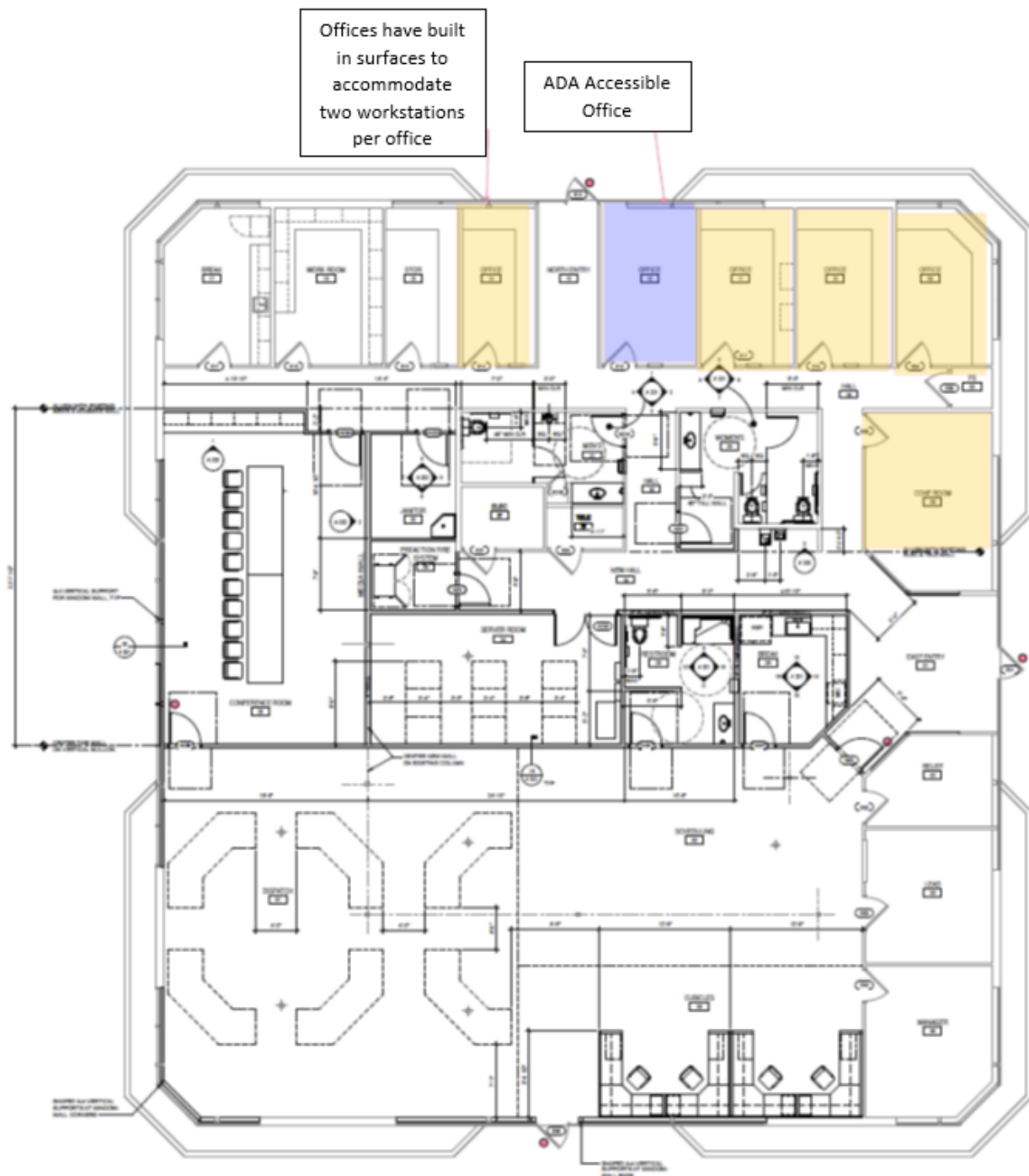
Location of office space within the Property at 7664 Old Auburn Rd., Building A, Citrus Heights, CA 95610-3831 to be used by Signatory Member, as depicted on the floorplan below.

TEMPORARY LOCATION:



Pursuant to paragraph 1 of the Agreement, NCPA's Disaster Recovery Center will move to its permanent location in 2025. Upon the effective date of NCPA's issuance of a Notice of the change of the Property location, the Property location will be 5034 Sunrise Boulevard, Fair Oaks, CA 95628 to be used by Signatory Member as depicted on the floorplan below. The office space within the Property available for use by Signatory Members, is depicted on the floorplan below.

PERMANENT LOCATION:





# Commission Staff Report – *DRAFT*

**COMMISSION MEETING DATE:** June 27, 2024

**SUBJECT:** Geysers Power Company Second Amendment to Transmission Service Agreement; Applicable to the following: NCPA Geothermal Facility

**AGENDA CATEGORY:** Discussion/Action

<b>FROM:</b>	Michael DeBortoli	<b>METHOD OF SELECTION:</b>
	Assistant General Manager	N/A
<b>Division:</b>	Generation Services	<i>If other, please describe:</i>
<b>Department:</b>	Generation Services	

<b>IMPACTED MEMBERS:</b>		
All Members	<input type="checkbox"/>	City of Lodi <input checked="" type="checkbox"/>
Alameda Municipal Power	<input checked="" type="checkbox"/>	City of Shasta Lake <input type="checkbox"/>
San Francisco Bay Area Rapid Transit	<input type="checkbox"/>	City of Ukiah <input checked="" type="checkbox"/>
City of Biggs	<input checked="" type="checkbox"/>	City of Lompoc <input checked="" type="checkbox"/>
City of Gridley	<input checked="" type="checkbox"/>	City of Palo Alto <input type="checkbox"/>
City of Healdsburg	<input checked="" type="checkbox"/>	City of Redding <input type="checkbox"/>
		City of Santa Clara <input checked="" type="checkbox"/>
		Plumas-Sierra REC <input checked="" type="checkbox"/>
		Port of Oakland <input type="checkbox"/>
		Truckee Donner PUD <input type="checkbox"/>
		Other <input checked="" type="checkbox"/>
		Turlock



## **RECOMMENDATION:**

Approve Resolution 24-XX authorizing the Second Amendment to the Transmission Service Agreement with Geysers Power Company, LLC, updating the existing transmission interconnection agreement to modify Bear Canyon and West Ford Flat from a geothermal to a BESS facility to support Geysers Power Company battery operations, with any non-substantial changes as approved by the NCPA General Counsel, with no change to the contract term, for continued use by NCPA's Geothermal Facility.

## **BACKGROUND:**

NCPA entered into a Transmission Service Agreement with Pacific Gas & Electric (PG&E) effective January 23, 1985, establishing operating protocols for NCPA to provide transmission service for PG&E's electrical generating facilities in Lake County, made up of Power Units 1, 2 and 3, and Unit 16. Under this agreement, NCPA would transmit generation from PG&E's generating facilities over the Plant 2 230 kV tap line that connects NCPA's Geothermal Projects to the Castle Rock Junction-Lakeville 230 kV transmission line. The Bear Canyon geothermal generating unit (Power Units 1 and 2) and the West Ford Flat geothermal generating unit (Power Unit 3) ceased operations as a geothermal unit in January 2016 and September 2015, respectively.

Effective April 30, 1999, PG&E sold its electrical generating facilities in Lake County to Geysers Power Company, LLC (Calpine-Geysers Power Company, or "Calpine-GPC"). As a part of the sale, PG&E assigned all rights, benefits, and duties under the existing Transmission Service Agreement to Calpine-GPC.

In 2020, NCPA was informed of Calpine-GPC's intent to pursue a battery energy storage systems (BESS) project as a potentially affected facility. After reviewing the potential project, NCPA determined that it would still produce the same or less power than the previous geothermal units, and NCPA informed Calpine-GPC that they were not concerned with them moving forward with the projects as proposed. NCPA informed Calpine-GPC that they would be required to perform relay coordination studies and that the existing Transmission Service Agreement would need to be modified to account for the new BESS projects.

In January 2024, Calpine-GPC informed NCPA that it was ready to engage in these activities. At Calpine-GPC's expense, NCPA hired Worley Group, Inc. to conduct the relay coordination studies. While the new equipment was well coordinated, Worley identified an issue with the existing relay where the backup protection would fall to NCPA's unit during a communication failure event. As a part of the contract modification, NCPA will allow Calpine-GPC one year to design and install a transfer trip mechanism that clears their own equipment during communication failure, preventing them from using NCPA as a backup.

Calpine-GPC is in the process of constructing and commissioning the new BESS at the former sites of the Bear Canyon and West Ford Flat geothermal generating units. They expect to begin commercial operation on July 1, 2024. NCPA and Calpine-GPC now desire to enter into a Second Amendment to the existing Transmission Service Agreement to acknowledge the new Bear Canyon BESS and West Ford Flat BESS systems, and detail interconnection of these new systems with NCPA's 230 kV tap line.

**FISCAL IMPACT:**

The current Transmission Service Agreement with Geysers Power Company, LLC stipulates that Calpine-GPC shall compensate NCPA monthly for transmission service provided or made available, as determined by the formulas included in Appendix A for the Transmission Service Agreement with Geysers Power Company, LLC. The monthly payment by Calpine will not change as a result of this amendment.

**ENVIRONMENTAL ANALYSIS:**

NCPA is not required to perform any work as a part of this modification. Therefore, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore, not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary. All required environmental review for the BESS was the responsibility of Calpine-GPC.

**COMMITTEE REVIEW:**

Pending Committee review and approval.

**AFTER FACILITIES APPROVAL:** On June 5, 2024, the Facilities Committee reviewed and endorsed the recommendation above for Commission approval.

Respectfully submitted,

RANDY S. HOWARD  
General Manager

Attachments (3):

- Resolution 24-XX
- Transmission Service Agreement with Geysers Power Company, LLC
- Second Amendment to Transmission Service Agreement with Geysers Power Company, LLC

## **RESOLUTION 24-XX**

### **RESOLUTION OF THE NORTHERN CALIFORNIA POWER AGENCY APPROVING A SECOND AMENDMENT TO THE TRANSMISSION SERVICE AGREEMENT WITH GEYSERS POWER COMPANY, LLC**

**(reference Staff Report XXX:24)**

WHEREAS, NCPA entered into a Transmission Service Agreement with Pacific Gas & Electric (PG&E) effective January 23, 1985, establishing operating protocols for NCPA to provide transmission service for PG&E's electrical generating facilities in Lake County, made up of Power Units 1, 2 and 3, and Unit 16; and

WHEREAS, Effective April 30, 1999, PG&E sold its electrical generating facilities in Lake County to Geysers Power Company, LLC (Calpine-Geysers Power Company, or "Calpine-GPC"). As a part of the sale, PG&E assigned all rights, benefits, and duties under the existing Transmission Service Agreement to Calpine-GPC; and

WHEREAS, in 2020, NCPA was informed of Calpine-GPC's intent to pursue a battery energy storage systems (BESS) project as a potentially affected facility. NCPA determined that it would still produce the same or less power than the previous geothermal units, and NCPA informed Calpine-GPC that they were not concerned with them moving forward with the projects as proposed. NCPA informed Calpine-GPC that they would be required to perform relay coordination studies and that the existing Transmission Service Agreement would need to be modified to account for the new BESS projects; and

WHEREAS, In January 2024, Calpine-GPC informed NCPA that it was ready to engage in these activities. At Calpine-GPC's expense, NCPA hired Worley Group, Inc. to conduct the relay coordination studies. Worley identified an issue with the existing relay where backup protection would fall to NCPA's unit during a communication failure event. NCPA will allow Calpine-GPC one year to design and install a transfer trip mechanism that clears their own equipment during communication failure events; and

WHEREAS, NCPA and Calpine-GPC now desire to enter into a Second Amendment to the existing Transmission Service Agreement to acknowledge the new Bear Canyon BESS and West Ford Flat BESS systems, and detail interconnection of these new systems with NCPA's 230 kV tap line; and

WHEREAS, NCPA is not required to perform any work as a part of this modification. Therefore, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore, not a "project" for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary. All required environmental review for the BESS was the responsibility of Calpine-GPC; and

NOW, THEREFORE BE IT RESOLVED, that the Commission of the Northern California Power Agency authorizes the General Manager or his designee to enter into said Second Amendment to the Transmission Service Agreement with Geysers Power Company, LLC, updating the existing transmission interconnection agreement to modify Bear Canyon and West Ford Flat from a geothermal to a BESS facility to support Geysers Power Company battery operations, with any non-substantial changes as approved by the NCPA General Counsel, with no change to the contract term, for continued use by NCPA's Geothermal Facility.

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PASSED, ADOPTED and APPROVED this \_\_\_\_ day of \_\_\_\_\_, 2024 by the following vote on roll call:

	<u>Vote</u>	<u>Abstained</u>	<u>Absent</u>
Alameda	_____	_____	_____
San Francisco BART	_____	_____	_____
Biggs	_____	_____	_____
Gridley	_____	_____	_____
Healdsburg	_____	_____	_____
Lodi	_____	_____	_____
Lompoc	_____	_____	_____
Palo Alto	_____	_____	_____
Port of Oakland	_____	_____	_____
Redding	_____	_____	_____
Roseville	_____	_____	_____
Santa Clara	_____	_____	_____
Shasta Lake	_____	_____	_____
Truckee Donner	_____	_____	_____
Ukiah	_____	_____	_____
Plumas-Sierra	_____	_____	_____

\_\_\_\_\_  
JERRY SERVENTI  
CHAIR

ATTEST: \_\_\_\_\_  
CARRIE POLLO  
ASSISTANT SECRETARY



## Commission Staff Report

ITEM NO. 15

February 19, 1999

TO: The NCPA Commission

SUBJECT: Assignment of Transmission

### Background

PG&E is currently selling its electrical generating facilities in Lake County to Geysers Power Company, LLC, a Delaware limited liability company ("Calpine-GBC"). The sale is scheduled to close on April 30. Effective as of the closing date, PG&E desires to assign its rights, benefits and duties under the Transmission Service Agreement between PG&E and NCPA dated as of January 23, 1985, (the "Agreement") to Calpine-GBC in connection with Calpine-GBC's purchase of the Lake County Units. PG&E requested in the attached letter that NCPA consent to the transfer of all of PG&E's rights, duties and benefits under the Agreement to Calpine-GBC.

Under the Agreement NCPA provides transmission service to PG&E for the benefit of PG&E's Geysers Unit 16 power plant, and three existing Calpine Corporation QF units that are under contract to PG&E. NCPA transmits generation from these units over the second circuit of the 230 kV tap line that connects NCPA's Geothermal Projects to the Castle Rock Junction-Lakeville 230 kV transmission line.

The Agreement provides for assignments under Article 18 as follows:

No transfer or assignment of all or any part of this Agreement or any rights, benefits, or duties under it by any Party shall be effective without the prior written consent of the other Party, such consent not to be withheld unreasonably.

Any successor to or transferee or assignee of the right of a Party, whether by voluntary transfer, judicial sale, foreclosure sale, or otherwise, shall be subject to all provisions and conditions of this Agreement to the same extent as though such successor, transferee or assignee were an original Party.

The transferor or assignor of all or any part of this Agreement or any right or benefit under it shall continue to be obligated by the terms and conditions of this Agreement in the event its successor, transferee or assignee fails to perform as required by this Agreement.

The Agreement also provides for cancellation charges to be paid by PG&E (or its successor) in the event of the Agreement's cancellation by PG&E. Cancellation charges include the undepreciated portion of costs incurred by NCPA for facilities that were not necessary for NCPA's Geo Projects, less their salvage value.

SR: 110: 9

Discussion

Given the assignment provisions of the Agreement, following assignment, Calpine-GBC will be obligated to perform under the Agreement as though it was PG&E. Further, PG&E will continue to be obligated by the terms and conditions of the Agreement in the event Calpine-GBC failed to perform as required by the Agreement. Presuming PG&E acknowledges its continuing obligations in the event of any default by Calpine-GBC, there appears to be no reasonable basis for withholding consent to the assignment.


Review of Calpine Corporation's Form 10-Q filing with the Securities and Exchange Commission suggests the practical ability of Calpine-GBC, a Calpine Corporation subsidiary, to perform as a responsible corporate entity capable of fulfilling its obligations under the Agreement. In addition, Larry Jones, NCPA Geo Plant Superintendent, is not aware of any potential for Calpine-GBC to modify operations of the acquired power plants so as to detrimentally affect NCPA's operations in The Geysers as a result of their interconnections to NCPA's Tap Line.

Measures for securing greater protection from potential adverse affects of the transfer include: (1) requiring PG&E to provide written acknowledgement of its continuing obligations in the event of default by Calpine-GBC; (2) requiring PG&E to require Calpine-GBC to provide additional security for the benefit of NCPA; or (3) doing both. There are no security or credit worthiness provisions in the Agreement that apply to PG&E. However, requesting additional security from Calpine-GBC, at least equal to the outstanding potential cancellation charge, does not appear to be unreasonable given the lack of demonstrated viability of Calpine-GBC. Nonetheless, NCPA and Calpine potentially have certain mutual business interests that might justify a less conservative stance.

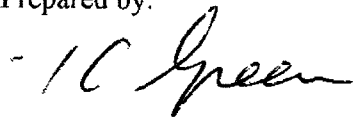
Recommendation

Staff recommends that the Commission authorize the General Manager to consent to the transfer of the Agreement to Calpine-GBC, subject to PG&E's written acknowledgement of its continuing obligations in the event of default by Calpine-GBC, and PG&E requiring Calpine-GBC to provide additional security for the benefit of NCPA; except that, General Manager may determine that there is a justifiable business reason to forego the requirement for additional security from Calpine-GBC.

Respectfully submitted,

  
GEORGE FRASER  
General Manager

Prepared by:

  
THOMAS C. GREEN  
Supervisor, Power Marketing  
& Contracts

TCG/la  
Attachment  
1.52

SR:110:9

TRANSMISSION SERVICE AGREEMENT  
BETWEEN  
PACIFIC GAS AND ELECTRIC COMPANY  
AND  
NORTHERN CALIFORNIA POWER AGENCY

This "Agreement" is made this 23 day of January  
1985 by and between PACIFIC GAS AND ELECTRIC COMPANY,  
hereinafter referred to as "PGandE" and the NORTHERN  
CALIFORNIA POWER AGENCY, hereinafter referred to as "NCPA".  
PGandE and NCPA are hereinafter referred to individually as  
"Party", collectively as "Parties".

RECITALS:

WHEREAS: PGandE, a corporation organized under California  
law, is engaged, among other things, in the business of  
generating, transmitting, and distributing electric power in  
northern and central California.

WHEREAS: NCPA is a public agency created, for the purpose,  
among other things, of generating and transmitting electric  
capacity and energy by a Joint Powers Agreement dated July



19, 1968, as amended, entered into pursuant to Chapter 5, Division 7, Title 1 of the California Government Code commencing with Section 6500 by the NCPA member Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, and Ukiah, and by the Plumas-Sierra Rural Electric Cooperative, an associate member of NCPA,

WHEREAS: NCPA has constructed a nominal 230 kv double-circuit tower line ("DCTL") from its NCPA Project No. 2 and No. 3 to interconnect such units to PGandE's existing Geysers Unit No. 9 - Castle Rock Junction and Geysers Unit No. 14 - Castle Rock Junction 230 kv transmission line at a point hereinafter referred to as "NCPA Junction" and has strung the first circuit on such 230 kV DCTL to PGandE's Geysers Unit No. 9 - Castle Rock Junction 230 kV transmission line,

WHEREAS: NCPA intends to construct a nominal 110 MW geothermal generating resource at The Geysers, hereinafter referred to as "NCPA Project No. 3", for the primary purpose of supplying electric power to its members for their use and resale and intends to interconnect such unit to the DCTL near NCPA Project No. 2,

WHEREAS: PGandE intends to construct a nominal 110 MW geothermal resource at The Geysers, hereinafter referred to as "Unit No. 16", for the primary purpose of supplying electric power to PGandE's customers,

WHEREAS: PGandE has requested and NCPA desires to provide transmission service over its DCTL to PGandE for PGandE's Unit No. 16.

WHEREAS: NCPA intends to complete the DCTL by stringing the second circuit to PGandE's Geysers Unit No. 14 - Castle Rock Junction 230 kV transmission line no later than the Forecasted Operation Date for Unit No. 16 for the purpose of unit testing,

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

ARTICLE 1) Definitions

Whenever used in this Agreement and Appendices hereto, these terms shall have the following meanings:

- a) "Cancellation Charges" - The charges defined in Appendix B.

- b) "Capacity Rating" - The gross output which a generating unit is capable of producing in kilowatts, less station use and less step-up transformation losses to the high voltage bus at the generator site.
- c) "Coordination Committee" - A special committee formed to resolve disputes pursuant to Article 10, It is composed of two representatives from each Party who are authorized to act on behalf of that Party in resolving disputes. The representatives will be designated in writing by each Party after this Agreement is executed. Either Party may designate new representatives as appropriate.
- d) "Costs" - The costs associated with the construction and operation of the NCPA Tap Line, including but not limited to: all capital expenditures, expenses of operation, maintenance, administrative and general expenses, taxes, an allocation of fixed charges on general plant and common utility plant, labor and payroll taxes, materials and supplies, transportation, stores and tool expenses, supervision and overheads, depreciation, an allowance for workers' compensation, and public liability and property damage insurance, as determined by NCPA in accordance with the Federal Energy Regulatory Commission Uniform System of Accounts

as may be amended from time to time, The appropriate components of Costs, as defined herein, shall be applied for the particular service or transaction performed. **NCPA's** rate of return shall be 11.5 percent.

- e) "DCTL" - The nominal 230 kv double-circuit tower line presently connecting NCPA Project No. 2, with PGandE's Geysers Unit No. 9 - Castle Rock Junction 230 kv transmission line at NCPA Junction, and which will include a second circuit from proposed **NCPA** Project No. 3 to PGandE's Geysers Unit No. 14 - Castle Rock Junction 230 kV transmission line at the NCPA Junction,
- f) "Firm Transmission Service" - Transmission service pursuant to the terms of Article 6 on the NCPA Tap Line as and when required by PGandE to deliver electric power from the Interconnection Point to NCPA Junction.
- g) "Forecasted Operation Date" - The estimated interconnection date of PGandE's Geysers Unit No. 16 shall be March 1, 1985, unless changed by mutual agreement of the Parties.
- h) "Good Utility Practice" - Those practices, methods and equipment, including levels of reserves and provisions

for contingencies, as modified from time to time, that are at least as good as those commonly used in the Service Area to operate, reliably and safely, electric power facilities to serve a utility's own customers dependably and economically, with due regard for the conservation of natural resources and the protection of the environment of the Service Area; provided, that such practices, methods and equipment are not unreasonably restrictive. Service Area refers to that area within the exterior geographic boundaries of the several areas electrically served at retail, now or in the future, by PGandE, and those areas in northern and central California adjacent thereto.

- i) "Interconnection Point" - The point of interconnection between NCPA's DCTL and PGandE's Unit No. 16 transmission facilities described in Article 3.
- j) "Monthly Charges" - The amount billed PGandE monthly by NCPA pursuant to the terms of Article 8 and Appendix A.
- k) "NCPA Project No. 2" - NCPA's Project No. 2, a nominal 110 MW geothermal generating resource at The Geysers.
- l) "NCPA Project No. 3" - NCPA's Project No. 3, a nominal 110 MW geothermal generating resource at The Geysers.

- m) "NCPA Tap Line" - The portion of the DCTL between the Interconnection Point and NCPA Junction including the second circuit to be constructed by NCPA.
- n) "NCPA Junction" - The interconnection point of the DCTL with PGandE's Geysers Unit No. 9 - Castle Rock Junction 230 kv transmission line and PGandE's Geysers Unit No. 14 - Castle Rock Junction 230 kv transmission line.
- o) "The Geysers" - The area designated as the Known Geothermal Resources Area by the U.S. Geological Survey which encompasses portions of Sonoma, Mendocino, and Lake Counties, in the State of California.
- p) "Unit No. 16" - PGandE's Unit No. 16, a nominal 110 MW geothermal generating resource at The Geysers.
- q) "Year" - The NCPA fiscal year from July 1 through June 30.

ARTICLE 2) Effective Date and Term

This Agreement's effective date shall be the date it is fully executed by both Parties and it shall continue in effect until the cancellation date pursuant to Section 5(e) or Article 9.

ARTICLE 3)     PGandE's Interconnection to NCPA

PGandE shall construct, own, operate and maintain, at its own expense, the facilities necessary to interconnect Unit No. 16 to the DCTL. The Interconnection Point shall be NCPA tower O/2, and the portion of the DCTL between the Interconnection Point and NCPA Junction shall be referred to as the NCPA Tap Line, as shown in Appendix C.

ARTICLE 4)     Protective Equipment

Each Party shall install, maintain, and operate on its own system, at its own expense, such protective equipment as necessary to provide safe and reliable operation of its system. Each Party shall use its best efforts to employ maintenance procedures which provide for the safe and reliable operation of its system.

ARTICLE 5)     NCPA Tap Line

- a) NCPA, at its own expense, shall construct, own, operate, and maintain the "DCTL from its NCPA Project No. 2 to NCPA Junction. In order to provide adequate transmission capacity and reliable transmission service to PGandE's Unit No. 16 as hereinafter set forth, with minimum transmission losses, NCPA shall construct, own,



maintain and operate, at its own expense, two circuits on the DCTL from the Interconnection Point to NCPA Junction (NCPA Tap Line). These circuits shall be strung with 1113 kcmil, aii aluminum conductor. NCPA shall provide, install, own, maintain and operate, at its own expense, disconnecting switches on the NCPA Tap Line near NCPA Junction. NCPA shall use its best efforts to complete construction of the second circuit of the NCPA Tap Line by a date no later than the Forecasted Operation Date.

- b) NCPA and PGandE agree that the two circuits of the NCPA Tap Line shall be operated independently, generally consistent with Order No. 82-1229-2 of the California Energy Commission in Docket No. 81-AFC-3 dated December 29, 1982. To accommodate such operation, PGandE must make appropriate modifications to its 230 kV transmission line facilities at NCPA Junction. NCPA and PGandE shall evenly share all costs incurred in performing work necessary to complete the 230 kV interconnection between the Parties' systems at NCPA Junction. Such costs shall include, but not be limited to engineering, design, material procurement, and construction necessary to connect NCPA's second circuit to PGandE's Geysers Unit No. 14 - Castle Rock Junction 230 kV transmission line at tower 3/18. NCPA shall pay

for its fifty percent (50%) share of such costs in accordance with a payment schedule based on expected monthly costs to be incurred by PGandE. NCPA's payments to PGandE shall be incorporated into the capital Costs of the NCPA Tap Line pursuant to Appendix A. PGandE shall use best efforts to complete the interconnection by October 1, 1985, NCPA and PGandE agree that each circuit of the DCTL shall be separately connected to a different PGandE 230 kV circuit connecting The Geysers to the PGandE backbone transmission system, unless otherwise agreed by the Parties.

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- c) NCPA shall operate and maintain its NCPA Tap Line in a manner so as not to adversely affect the reliable operation of PGandE's system and so as to provide reliable transmission service to PGandE. NCPA shall give PGandE reasonable advance notice of any maintenance or other scheduled outages of the NCPA Tap Line. The Parties agree to coordinate such outages to the extent possible.
- d) NCPA shall promptly give PGandE advance notice of any unscheduled interruption or curtailment of transmission service, upon becoming aware of the need for any such interruption or curtailment.

e) In the event NCPA is unable, for any reason, to complete construction of a second circuit on the DCTL by a date no later than the Forecasted Operation Date, NCPA shall promptly notify PGandE in writing. In such event, at PGandE's written request, NCPA shall, for the purpose of testing Unit No. 16, make a temporary connection to the existing circuit on the DCTL. If the failure to complete construction of the second circuit on the DCTL by the Forecasted Operation Date (the "Failure to Complete") would delay the planned operating date of Unit No. 16, PGandE, at its option (1) may elect to use the temporary connection with the existing circuit on the DCTL to deliver energy from Unit No. 16 to the NCPA Junction until such time as the second circuit is completed; or (2) may, within thirty (30) days of receipt of NCPA's notice, cancel this Agreement and shall not pay any Cancellation Charges, pursuant to Appendix B, or have any other liability to NCPA under this Agreement. Likewise, NCPA will bear no liability to PGandE under cancellation of this Agreement as a result of the Failure to Complete, provided NCPA has met its obligations under the final sentence of Section 5(a). Such cancellation by PGandE shall be effective upon receipt by NCPA of written notice of cancellation by PGandE.

- f) In the event that NCPA has completed construction of the second circuit of the DCTL but cannot interconnect such circuit with PGandE's Geysers Unit No. 14 - Castle Rock Junction 230 kV transmission line because PGandE has not completed the modification of facilities at NCPA Junction to accommodate the interconnection of such circuit, NCPA shall temporarily connect PGandE's Unit No. 16 transmission facilities to either the first or second circuit of the DCTL at the Interconnection Point, as appropriate, so that PGandE may test its Unit No. 16 and deliver energy from such unit to the NCPA Junction and PGandE's 230 kV transmission system. The temporary connection shall remain in place until such time as PGandE completes the necessary modifications to accommodate the interconnection of such second circuit at NCPA Junction.
- g) If NCPA fails to complete construction of the second circuit on the DCTL by a date no later than the Forecasted Operation Date, then NCPA shall, as liquidated damages, waive all right to payment for transmission service provided or made available under this Agreement until such construction is complete. If PGandE fails to complete the modification to its 230 kV transmission line facilities at NCPA Junction by October 1, 1985, then PGandE shall, as liquidated

damages, pay NCPA twice the payment described in Section 8(a) for transmission service provided or made available in this Agreement until such modifications are complete.

ARTICLE 6) Firm Transmission Service

NCPA, as line operator, shall provide and PGandE shall purchase Firm Transmission Service. NCPA shall accept delivery from PGandE's Unit No. 16 at the Interconnection Point. The electric power furnished by PGandE shall be at delivery rates up to and including the Capacity Rating of Unit No. 16. NCPA shall deliver an equivalent amount of electric power less losses over the NCPA Tap Line to PGandE at NCPA Junction; except as provided in Section 5(c) and (d). If sufficient transmission capability as determined by NCPA in accordance with Article 19 is not available to transmit all electric power then being generated by all electric generating plants which use the NCPA Tap Line, PGandE shall curtail, at NCPA's request, PGandE's scheduled deliveries from PGandE's Unit No. 16 at The Geysers as required to share on a pro-rata basis with entities other than NCPA the transmission capability remaining after NCPA transmits energy owned by NCPA and which is generated by NCPA's power plants or by plants from which NCPA is obligated to purchase energy. The Parties agree that the

language in the preceding sentence shall not serve as a precedent for language in any subsequent agreement between them.

ARTICLE 7)     Station Use Power

During the period of a Unit No. 16 outage, PGandE may deliver and NCPA shall accept station use power at NCPA Junction, and NCPA shall deliver such power less losses to the Interconnection Point, provided that delivery of such power shall not require the reduction of output from the NCPA Projects No. 2 and No. 3, and shall not adversely affect the reliable operation of the DCTL and the NCPA units connected to it.

ARTICLE 8)     Payment for PGandE's Use of the NCPA Tap Line

- a) During the term of this Agreement, PGandE shall compensate NCPA monthly for transmission service provided or made available hereunder in an amount equal to the Monthly Charges determined in accordance with the formulas set forth in **Appendix A** for the NCPA Tap Line which specify PGandE's share of capital, operating and maintenance Costs. PGandE's share is equal to the ratio of the Capacity Rating of PGandE's Unit No. 16 to the sum of the Capacity Ratings of PGandE's Unit No. 16

and NCPA Projects Nos. 2 and 3 and reflects PGandE's proportionate use of the NCPA Tap Line. The Monthly Charges shall be adjusted by NCPA in accordance with Appendix A to accurately reflect PGandE's proportionate use of the NCPA Tap Line in the event that additional electric generating plants use the NCPA Tap Line or in the event that there is a change in the ability of NCPA Projects No. 2 or No. 3 or Unit No. 16 to operate at a nominal rating of 110 MW. The Party requesting the adjustment shall give notice to the other Party documenting the reason for the request.

- b) In addition to the Monthly Charges, PGandE shall also pay NCPA for all costs incurred in performing work necessary to complete the first 230-kV interconnection between the Parties' systems at the Interconnection Point. Such costs shall include, but not be limited to engineering, design and modification of the NCPA Tap Line to accommodate the Interconnection Point and the costs NCPA incurs as a result of clearing its lines, including the costs because of the loss of geothermal generation by NCPA while the 230 kV interconnection is being made between the Parties' systems at the Interconnection Point. Within thirty **(30)** days after the effective date of this Agreement, PGandE will provide NCPA an estimate of time NCPA's lines will be



cleared in order to make the connection at the Interconnection Point. **NPCA** shall use best efforts to reduce or eliminate such costs and shall provide PGandE with an estimate of such costs within sixty (60) days of the effective date of this Agreement. PGandE shall have at all reasonable times the right to audit the records on which the costs described in this Section 8(b) are based.

- c) **NPCA** shall bill PGandE each month for the estimated Monthly Charges for the previous month's transmission service and for any unpaid portion of other charges due under this Agreement. The bill issued pursuant to this Agreement shall be separate from bills or invoices issued pursuant to any other contracts or agreements between the parties. Payment by PGandE to **NPCA** shall be due within twenty (20) days of PGandE's receipt thereof except when the due date is on a Saturday, Sunday or legal holiday, in which event the payment due date shall be the first business day following such date. Except as provided in Sections 5(e) and 8(e), Monthly Charges shall commence on March 1, 1985 or such other date as may be mutually agreed upon, if **NPCA** has completed the second circuit of the **DCTL** and has it ready for interconnection at the Interconnection Point. If not, and except as provided in Section 5(g), charges

will commence when such interconnection is made or when a temporary connection is made pursuant to Section 5(e).

- d) NCPA shall maintain books and records for the purpose of determining Monthly Charges associated with any billing rendered by NCPA to PGandE pursuant to this Agreement, and PGandE shall at all reasonable times have the right to audit such books and records provided reasonable advance notice is given to NCPA. Within one hundred and twenty (120) days following the end of each Year, NCPA shall determine the difference, if any, between the estimated Monthly Charges paid by PGandE during the Year and the actual Monthly Charges for the Year. If any such difference is determined to exist, an adjustment shall be made in the next monthly billing following the date of such determination in order to correct for any difference between estimated and actual Monthly Charges. Interest, compounded monthly, at a rate equal to the first of the month reference rate charged by the Bank of America, NT&SA, San Francisco, California, or the maximum rate allowed by law, whichever is less, shall accrue: (1) for all adjustments, from the date of payment of the billing statement that was adjusted until the date the adjusted amount is paid, and (2) for all overdue bills from the

date the payment was due until the date the payment was received.

- e) In recognizing the need for additional **transmission** capacity out of The Geysers, NCPA has undertaken the construction of a new 230 kv line from The Geysers to an appropriate substation. At the time such line is completed, NCPA may utilize the line to transmit power from NCPA Projects No. 2 and/or No. 3. If such utilization results in a decreased use of the NCPA Tap Line by NCPA, NCPA shall continue to provide services to PGandE as provided for herein and the Parties agree to revise the Monthly Charges to reflect PGandE's proportionate use of the NCPA Tap Line, or NCPA may sell the NCPA Tap Line to PGandE upon mutually agreeable terms and conditions.

ARTICLE 9) Cancellation of the Agreement by the Parties

Either Party may cancel this Agreement on five (5) years advance written notice.

In the event PGandE cancels this Agreement hereunder, PGandE shall pay Cancellation Charges to NCPA in the amount set forth in Appendix B, and PGandE shall have no other liability to NCPA under this Agreement, except as provided

below. In the event NCPA cancels this Agreement, PGandE shall not pay any Cancellation Charges to NCPA, pursuant to Appendix B, or have any other liability to NCPA under this Agreement. After such termination, all rights to services provided under this Agreement shall cease. Prior to the Agreement's cancellation date NCPA's billing to PGandE shall continue pursuant to Article 8, and PGandE shall continue to be obligated to pay for transmission services provided or made available during the term of this Agreement, including the period from the time of notice of cancellation up to the cancellation date.

ARTICLE 10) Settlement of Disputes

- a) The Parties agree to make best efforts to settle all disputes between the Parties connected with this Agreement as a matter of normal business under this Agreement. The disputing Party will notify the other Party in writing regarding the nature of the dispute. Representatives of the two Parties will meet within thirty (30) days to review the supporting documentation and agree on the action required. If the Parties cannot agree within thirty (30) days of written notification, either Party may submit the dispute in writing to the Coordination Committee. All disputes referred to the Coordination Committee shall be settled

by such committee as soon as possible but in no case later than forty-five (45) days after the dispute is submitted, unless an extension of time is agreed to by both Parties. in the event that a dispute is not settled within the required time period, or at any time upon mutual agreement, each Party shall submit its final offer to binding arbitration.

- b) The disputing Parties will agree on a single arbitrator with an acceptable understanding of the utility industry. If the Parties fail to agree, the arbitrator will be selected by the American Arbitration Association within fifteen (15) days after each Party's final offer is submitted, pursuant to Section 10a above. Within thirty (30) days after selection, unless the arbitrator requests and is granted an extension of time by both Parties, the arbitrator will accept one of the submitted offers without modification of any kind, and the Parties hereby agree to be bound by that decision. After the decision by the arbitrator, each disputing Party shall immediately take whatever action is required to comply with' the accepted offer. **Any** and all costs associated with the arbitration shall be borne by the Party sponsoring the rejected offer.

- c) The arbitrator shall determine which Party's final offer more reasonably applies the standards of this Agreement or, absent such standards, which Party's final offer was more reasonable. The arbitrator shall specifically consider all factors relevant to the reasonableness of the Parties' final offers, including, but not limited to the facts known to the Party at the time of action complained of, the amount of time available in which to act, existing contractual arrangements and the nature and extent of the Party's perceived risks to the reliability and safety of its electrical system, and other factors relevant under the circumstances. Nothing contained herein shall permit the arbitrator to waive or change any of the provisions of the Agreement, including but not limited to this Article 10.

ARTICLE 11) Liability

- a) Rights of Third Parties. Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to, or any liability to any person not a Party.
- b) Between Parties.

(i) Except as provided in Article 12 below, neither Party, nor its directors or other governing body, officers, agents or employees shall be liable to the other Party for any loss, damage, claim, cost, charge or expense arising from performance or non-performance under this Agreement.

(ii) Each Party shall be responsible for protecting its facilities from possible damage by reason of electrical disturbances or faults caused by the operation, faulty operation, or nonoperation of the other Party's facilities, and such other Party shall not be liable for any such damages so caused.

ARTICLE 12) Indemnity

a) Each Party as indemnitor shall hold harmless and indemnify the other Party and the directors, officers, members, commissioners, councilmen, agents and employees of such other Party against and from any and all liability for damages for injuries to persons or damage to property, except as provided in Article 11, resulting from or arising out of the engineering, design, construction, maintenance or operation of or the making of replacements, additions or betterments to, the indemnitors' facilities. None of the indemnity

and hold harmless provisions set forth in this paragraph shall apply to injuries or damage arising from the sole negligence or willful misconduct of the indemnitee, or the indemnitee's directors, officers, members, commissioners, councilmen, agents or independent contractors who are directly responsible to said indemnitee.

Each Party as indemnitor shall hold harmless and indemnify the other Party and the directors, officers, members, commissioners, councilmen, agents, employees and independent contractors of such other Party from all claims by, or liability to, any resale or ultimate consumer of the indemnifying Party, for any loss, injury or damage occurring within the boundaries of the service area of the indemnifying Party or its members resulting from an electric disturbance on such other Party's system, whether or not such electric disturbance results from negligence of such other Party. As used in this paragraph, the term "ultimate consumer" means an electric customer to which power is delivered for use and **not** ~~for~~ resale.

ARTICLE 13) Cooperation and Right of Access and Inspection



Each Party shall give all necessary permission to the other to enable that Party to carry out this Agreement. Each Party ("Owning Party") shall give the other ("Entering Party") the right to have the Entering Party's agents, employees and representatives, when accompanied by the agents, employees and representatives of the Owning Party, enter the latter's premises at all reasonable times and in accordance with any rules and regulations applicable to such access, for the purpose of inspecting the property and equipment of the Owning Party as may be appropriate for assuring performance under this Agreement.

**ARTICLE 14)    Uncontrollable Forces**

Except as herein designated, neither Party shall be liable to the other for failure to perform its obligations hereunder, except for the obligation to make payment of money, to the extent such failure is due to strikes, lockouts, labor disputes, riots, war, revocation of land rights, acts of Government having jurisdiction, acts of God or the public enemy, unavoidable accidents or other matters beyond the reasonable control of the Party so obligated, whether similar to the matters herein enumerated or not. A claim by a Party of failure to perform due to an Uncontrollable Force shall excuse the other Party from performance hereunder until the Party asserting such

Uncontrollable Force resumes performance of this Agreement. Either Party rendered unable to fulfill any obligation by reason of an Uncontrollable Force shall exercise due diligence to remove such inability with all reasonable dispatch.

**ARTICLE 15)**    No Dedication of Facilities

Any undertaking by one Party to the other Party under any provision of this Agreement is rendered strictly **as** an accommodation and shall not constitute the dedication of the electric system or any portion thereof by the undertaking Party to the public or to any third Party, and it is understood and agreed that any such undertaking under any provisions of this Agreement by a Party shall cease upon the termination of such Party's obligations under this Agreement.

**ARTICLE 16)**    Integration

This Agreement contains the entire agreement and understanding between the Parties as to the subject matter of this Agreement. Appendices A, B, and C attached hereto and as modified from time to time by the Parties are made an express part of this Agreement. This Agreement stands alone

and is separate from all other contractual arrangements between the Parties.

ARTICLE 17) Continuity of Service

Transmission service on the NCPA Tap Line, unless otherwise specified, will be furnished as provided for herein continuously except: 1) for interruptions or reductions due to operation of devices installed for power system protection or due to Uncontrollable Forces, as defined in Article 14, 2) for temporary interruptions or reductions necessary for the purposes of maintenance, repairs, replacements, installation of equipment, or investigation and inspection to provide safe and reliable operation of the respective Parties' systems, and 3) as provided in Section 5(e) and Article 6. NCPA shall give PGandE reasonable advance notice whenever possible of such temporary interruptions or reductions and in all cases NCPA will remove the cause thereof with diligence.

ARTICLE 18) Assignment

No transfer or assignment of all or any part of this Agreement or any rights, benefits, or duties under it by any

Party shall be effective without the prior written consent of the other Party, such consent not to be withheld unreasonably.

Any successor to or transferee or assignee of the right of a Party, whether by voluntary transfer, judicial sale, foreclosure sale, or otherwise, shall be subject to all provisions and conditions of this Agreement to the same extent as though such successor, transferee or assignee were an original Party.

The transferor or assignor of all or any part of this Agreement or any right or benefit under it shall continue to be obligated by the terms and conditions of this Agreement in the event its successor, transferee or assignee fails to perform as required by this Agreement,

ARTICLE 19) Judgments and Determinations

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

**ARTICLE 20) Captions**

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

**ARTICLE 21) Choice of Law**

This Agreement shall be interpreted in accordance with the laws of the State of California, excluding any choice of law rules which may direct the application of the laws of another jurisdiction.

**ARTICLE 22) Effect on Other Contracts**

This Agreement shall not be deemed to modify or change any rights or obligations under prior agreements between the Parties except **as** expressly provided herein.

ARTICLE 23) Construing Meaning of Contract

Ambiguities in the wording of this Agreement shall not be construed for or against either Party, but shall be construed in a manner which most accurately reflects the intent of the Parties.

ARTICLE 24) Waiver of Rights

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

ARTICLE 25) Formal Notices

Any notice required, authorized or provided for in this Agreement shall be deemed properly given if delivered in person or sent by United States mail, postage prepaid, to the persons specified below.

a) To PGandE:

Vice President, Electric Operations  
Pacific Gas and Electric Company  
77 Beale Street  
San Francisco, California 94106

b) To NCPA:

General Manager  
Northern California Power Agency  
180 Cirby Way  
Roseville, California 95678

Either Party may, by written notice to the other Party at any time, change the designation of the person to be notified or the address of such person.

ARTICLE 26) Routine Notices

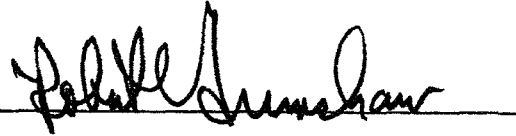
Any notice of a routine character in connection with service under this Agreement or in connection with operation of facilities shall be given in such a manner as the Parties may determine from time to time, unless otherwise provided in this Agreement.

The signators below represent and warrant that they are fully authorized to execute this Agreement on behalf of the Party indicated.

IN WITNESS WHEREOF, the Parties have caused this Agreement  
to be executed the day and year first above written.

NORTHERN CALIFORNIA POWER AGENCY

By



General Manager

PACIFIC GAS AND ELECTRIC COMPANY

By



Executive Vice President

Facilities and Electric

Resources Development



## APPENDIX A

### Formulation of Transmission Service Costs

**The Monthly Charges to be paid by PGandE will be the sum of the Monthly Fixed Charges (MFC) and the Monthly Operating and Maintenance Cost (MOMC).**

- A. The Monthly Fixed Charges shall be calculated as follows, based upon the portion of the facilities used in supplying transmission service to PGandE.

$$MFC = [(CC * \frac{PCAP}{TCAP})] \frac{8}{9} * \frac{RR}{12}$$

- B. The Monthly Operating & Maintenance Costs shall be calculated as follows, based upon the portion of the operation and maintenance Costs associated with facilities used in supplying transmission services to PGandE.

$$MOMC = [(EX * \frac{PCAP}{TCAP})] \frac{8}{9} * (1 + A)$$

MFC = Monthly Fixed Charges to be paid to NCPA by PGandE.

PCAP = The Capacity Rating of PGandE Unit No. 16 (110 MW).

TCAP = The Capacity Ratings of PGandE Unit No. 16  
(110 MW) plus NCPA Project Nos. 2 and 3  
(220 MW) plus any other units which may  
utilize portions of the NCPA Tap Line.

CC = NCPA's original capital Cost applicable to  
the NCPA Tap Line portion of the DCTL and to  
the modifications at NCPA Junction to be  
constructed by PGandE under Section 5(b).

RR = 0.115

MOMC = Monthly operating and maintenance Costs to be  
paid to NCPA by PGandE.

EX = NCPA's monthly operating and maintenance  
Costs applicable to the NCPA Tap Line portion  
of the DCTL and to the modifications at NCPA  
Junction to be constructed by PGandE under  
Section 5(b).

A = Administrative Factor.

PCAP and TCAP may be adjusted from time to time by mutual  
agreement of the Parties, pursuant to Article 8, in order to

more accurately reflect PGandE's proportionate use of the NCPA Tap Line.

The Administrative Factor **(A)** to be used in the initial year and the method for calculating the Administrative Factor shall be determined by NCPA and mutually agreed to by both Parties in writing. The Administrative Factor shall be adjusted annually to reflect NCPA's actual costs. Such adjustments shall be determined within one hundred and twenty (120) **days** following the end of each Year. NCPA shall base monthly billings on the most recent Administrative Factor available.

The method for calculating the Administrative Factor described in this Appendix and used in determining PGandE's compensation to NCPA for transmission service may be adjusted by NCPA at such time as NCPA can reasonably demonstrate to PGandE the justification for such adjustments. Should the Parties fail to agree on a revision of the above factor, the Parties shall attempt to reconcile their differences through the procedures in Article 10.

## APPENDIX B

### Cancellation Charges

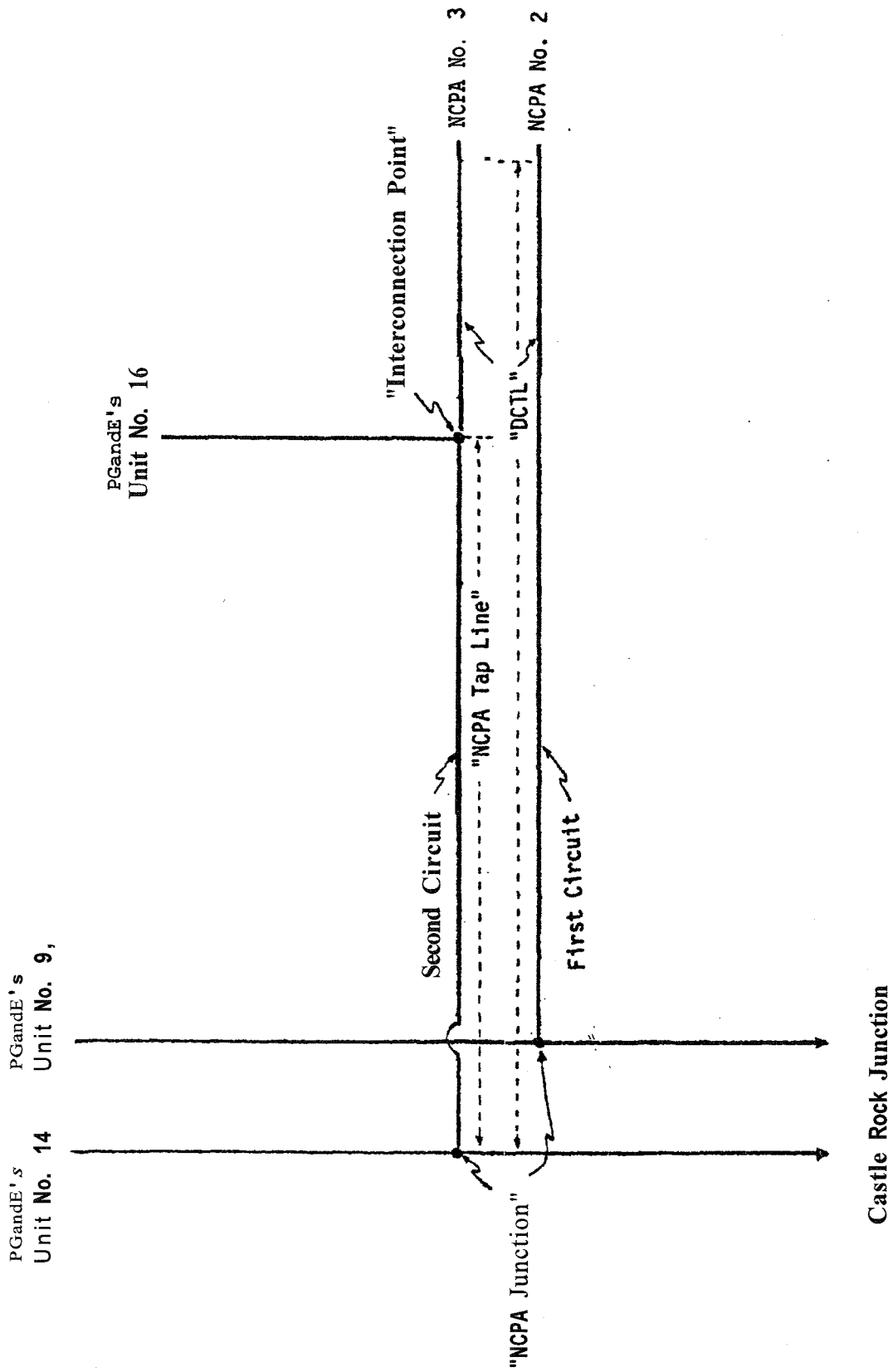
Cancellation Charges shall include:

1. The undepreciated portion of Costs incurred by NCPA in the installation of transmission facilities which are not necessary to NCPA for it to transmit power from NCPA Project Nos. 2 and 3 to NCPA Junction, plus
2. The removal Cost of such transmission facilities which are proposed to be removed, if any such facilities are to be removed, less
3. The salvage value of such transmission facilities which are not necessary for NCPA to transmit power from NCPA Project Nos. 2 and 3 to NCPA Junction.

If, after payment of the Cancellation Charges, a portion of the transmission facilities on which the Cancellation Charges were based are retained in place and later used by NCPA to transmit power from any generating facilities other

than PGandE's or NCPA Project No. 3, an equitable adjustment shall be made in the calculation of the applicable Cancellation Charges and a refund paid by NCPA to PGandE.

APPENDIX C



OCT 27 1987

DATE OCT 26, 1987

TO: Scott Barnhart

FROM: Judith Olney

RE: Unit 16 Wheeling

Attached is a fully executed  
copy of the First Amendment  
to the Transmission Service  
Agreement between PG&E  
and NCPA.

RF  
SP  
[Signature]

File: Unit 16 Transmission  
Service Agreement

= Amendment

FOLLOW-UP:

FILE NO.

EE:

FIRST AMENDMENT TO THE TRANSMISSION SERVICE AGREEMENT  
BETWEEN  
PACIFIC GAS AND ELECTRIC COMPANY  
AND  
NORTHERN CALIFORNIA POWER AGENCY

WHEREAS, on January 23, 1985 the Northern California Power Agency (NCPA) and Pacific Gas and Electric Company (PGandE) executed an agreement providing transmission service to PGandE over the NCPA Tap Line (Transmission Service Agreement) ;

WHEREAS, by letter dated August 13, 1987, PGandE, in accordance with Article 8a of the Transmission Service Agreement, requested transmission service over the NCPA Tap Line for three additional generating units with a combined rating of 50 MW;

WHEREAS, this additional generation, developed by an independent power producer and purchased by PGandE under Standard Offer Contracts pursuant to CPUC regulations, shall be connected to the Geysers 16 230 kV tap at Tower No. 2 and will be delivered, along with the Unit No. 16 output, by and for PGandE at the Interconnection Point with the second circuit of the NCPA Tap Line; and

WHEREAS, on September 23, 1987 NCPA's Commission approved the amendment to the Transmission Service Agreement.

NOW THEREFORE, it is agreed that the Transmission Service Agreement be amended as follows:

1. Article 1: Definitions

Add the following definitions:

- r) Purchased Power Units 1 and 2: Power purchased from two nominal 10 MW geothermal generating resources at The Geysers under Standard Offer Contracts PGandE Project Log Numbers 046012 and 046016, respectively .
- s) Forecast Operation Date Purchased Power Units 1 and 2: The estimated interconnection date of Purchased Power Units 1 and 2 shall be August 1, 1988, unless changed by mutual agreement of the Parties.
- t) Purchased Power Unit 3: Power purchased from a nominal 30 MW geothermal generating resource at The Geysers under Standard Offer Contract PGandE Project Log Number 046025.
- u) Forecast Operation Date Purchased Power Unit 3: The estimated interconnection date of Purchased Power Unit 3 shall be June 1, 1989, unless changed by mutual agreement of the Parties.



2. Article 5a: NCPA Tap Line:

Replace the second sentence of Article 5a) with the following:

In order to provide adequate transmission capacity and reliable transmission service to PGandE's Unit No. 16 and Purchased Power Units 1, 2, and 3 as hereinafter set forth, with minimum transmission losses, NCPA shall construct, own, maintain and operate at its own expense, two circuits on the DCTL from the Interconnection Point to NCPA Junction (NCPA Tap Line).

3. Article 6: Firm Transmission Service

Replace Article 6 in its entirety with the following:

NCPA, as line operator, shall provide and PGandE shall purchase Firm Transmission Service. NCPA shall accept delivery from PGandE's Unit No. 16 and Purchased Power Units 1, 2, and 3 at the Interconnection Point. The electric power furnished by PGandE shall be at delivery rates up to and including the combined Capacity Ratings of Unit No. 16 and Purchased Power Units 1, 2, and 3. NCPA shall deliver an equivalent amount of electric power less losses over the NCPA Tap Line to PGandE at NCPA Junction, except as provided in Section 5(c) and (d). If sufficient transmission capability as determined by NCPA in accordance with Article 19 is not available to transmit all electric power then being generated by all electric generating plants which use the NCPA Tap Line, PGandE shall curtail, at NCPA's request, PGandE's scheduled deliveries from PGandE's Unit No. 16 and Purchased Power Units 1, 2, and 3 at The Geysers as required to share on a pro-rata basis with entities other than NCPA the transmission capability remaining after NCPA transmits energy owned by NCPA and which is generated by NCPA's power plants or by plants from which NCPA is obligated to purchase energy. The Parties agree that the language in the preceding sentence shall not serve as a precedent for language in any subsequent agreement between them.

4. Article 8a) Payment for PGandE's Use of the NCPA Tap Line

Replace Article 8A) in its entirety with the following:

During the term of this Agreement, PGandE shall compensate NCPA monthly for transmission service provided or made available hereunder in an amount equal to the Monthly Charges determined in accordance with the formulas set forth in Appendix A for the NCPA Tap Line which specify PGandE's share of capital, operating and maintenance Costs. PGandE's share is equal to the ratio of the sum of the Capacity Rating of PGandE's Unit No. 16 and Purchased Power Units 1, 2, and 3 to the sum of the Capacity Ratings of PGandE's Unit No. 16, Purchased Power Units 1, 2, and 3 and NCPA Projects Nos. 2 and 3 and reflects PGandE's proportionate use of the NCPA Tap Line. The Monthly Charges shall be adjusted by NCPA in accordance with Appendix A to accurately reflect PGandE's proportionate use of the NCPA Tap Line in the event that additional electric generating plants use the NCPA Tap Line or in the event that there is a change in the ability of NCPA Projects No. 2 or

Date: October 23, 1987



**Pacific Gas and  
Electric Company**

**Judi K. Mosley**  
Manager  
Electric Transmission Services

77 Beale Street, Room 7337  
San Francisco, CA 94105

*Mailing Address*  
Mail Code B23A  
PO Box 770000  
San Francisco, CA 94177

415 973 4408  
Fax 415 973 9174

January 28, 1999

**BY HAND DELIVERY**

Mr. George Fraser  
General Manager  
Northern California Power Agency  
180 Kirby Way  
Roseville, CA 95678

Dear Mr. Fraser:

PG&E is currently selling its electrical generating facilities in Lake County (the "Lake County Units") to Geysers Power Company, LLC, a Delaware limited liability company ("Calpine"). The sale is scheduled to close on April 30, 1999 or at a later date mutually agreed upon by PG&E and Calpine (the "Closing Date"). Effective as of the Closing Date, PG&E would like to assign its rights, benefits and duties under the Transmission Service Agreement between PG&E and Northern California Power Agency dated as of January 23, 1985 (the "Agreement") to Calpine in connection with Calpine's purchase of the Lake County Units.

Pursuant to Article 18 of the Agreement, PG&E hereby requests that Northern California Power Agency sign below to evidence its consent to the transfer of all of PG&E's rights, duties and benefits under the Agreement to Calpine.

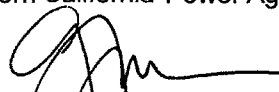
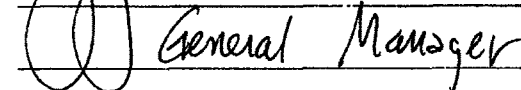
If you have any questions, please contact Issac Moore at (415) 973-1735.

Sincerely,

  
Judi Mosley

The undersigned hereby consents to the transfer by PG&E to Geysers Power Company, LLC effective as of the Closing Date of the Transmission Service Agreement pursuant to Article 18 of such Agreement.

Northern California Power Agency

By:   
Title:  General Manager

*Returned to PG&E 9/24*

**PACIFIC GAS AND ELECTRIC COMPANY**

**PG&E** + 77 BEALE STREET • SAN FRANCISCO, CALIFORNIA 94106 • (415) 781-4211 • TWX 910-372-6587

**E. F. KAPRIELIAN**  
VICE PRESIDENT - ELECTRIC OPERATIONS

September 20, 1985

Mr. Paul E. Cavote  
General Manager  
Northern California Power Agency  
180 Cirby Way  
Roseville, California 95678

Dear Paul:

Subject: Transmission Service Agreement for PGandE's Unit No. 16 --  
Completion of Connections at NCPA Junction

I understand that you have agreed to PGandE's schedule for completing the connections of the second circuit of the NCPA Tap Line to PGandE's Geysers 14-Castle Rock Junction 230-kV collector line.

Concurrently, we have asked that you waive Article 5g of the Transmission Service Agreement between PGandE and NCPA for PGandE's unit No. 16 dated January 23, 1985 ("Unit 16 Agreement"). Article 5g requires PGandE to make a damage payment if the connections are not completed by October 1, 1985.

If you agree to waive Article 5g of the Unit 16 Agreement, please sign below and return this letter to me for our files. Thank you for your assistance and cooperation.

sincerely,

PACIFIC GAS AND ELECTRIC COMPANY

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

*E. F. Kaprielian*  
**E. F. KAPRIELIAN**  
vice president  
Electric Operations

Agreed to and accepted as of this

*24th* day of *September*, 1985

NORTHERN CALIFORNIA POWER AGENCY

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

*Paul E. Cavote*  
**PAUL E. CAVOTE**  
General Manager

SECOND AMENDMENT TO THE TRANSMISSION SERVICE AGREEMENT  
BETWEEN  
GEYSERS POWER COMPANY, LLC  
AND  
NORTHERN CALIFORNIA POWER AGENCY

WHEREAS, the Northern California Power Agency (“NCPA”) and Geysers Power Company, LLC (“GPC”) are parties to that certain Transmission Service Agreement (the “Transmission Service Agreement”) providing transmission service to GPC over the NCPA Tap Line (Transmission Service Agreement) for Purchase Power Units 1, 2 and 3 and Unit 16;

WHEREAS, NCPA completed construction of the NCPA Tap Line contemplated in the Transmission Service Agreement;

WHEREAS, the Bear Canyon geothermal generating unit (the “Purchased Power Units 1 and 2”) and the West Ford Flat geothermal generating unit (the “Purchased Power Unit 3”) ceased operations as of January 2016 and September 2015, respectively;

WHEREAS, GPC has constructed, permitted, and intends to commercially operate new battery energy storage systems (“BESS”) at the former sites of the Bear Canyon and West Ford Flat geothermal generating units, respectively;

WHEREAS, the Parties wish to amend the Transmission Service Agreement (this “Second Amendment”) to provide for transmission service to the Bear Canyon BESS and the West Ford Flat BESS (each, as defined below); and

WHEREAS, initially capitalized terms used but not defined in this Second Amendment have the meanings set forth in the Transmission Service Agreement.

NOW THEREFORE, it is agreed that the Transmission Service Agreement be amended as follows:

1. Article 1: Definitions:

Replace Article 1e), 1f), 1m), 1n), 1r), 1s), 1t) and 1u) in their entirety with the following:

e) “DCTL” – The nominal 230 kV generation tie line connecting NCPA Project No. 3 to the NCPA Junction (current configuration shown in Appendix C).

f) “Firm Transmission Service” – Transmission access service pursuant to the terms of Article 6 on the NCPA Tap Line as and when required by GPC to deliver or receive electric power between the Interconnection Point at the NCPA Junction.

m) “NCPA Tap Line” – The portion of the DCTL between the Interconnection Point and NCPA Junction.

n) “NCPA Junction” – The interconnection point of the DCTL with PG&E’s Geysers Unit No. 12 – Fulton 230 kV transmission line at Switch 1235.

r) “Bear Canyon BESS: A nominal 15 MW battery energy storage system at The Geysers.”

s) Intentionally deleted.

t) “West Ford Flat BESS: A nominal 25 MW battery energy storage system at The Geysers.”

u) Intentionally deleted.

Add Article 1v) and 1w) as follows:

v) Capacity Amount: The maximum amount of capacity that GPC may use on the NCPA Tap Line. GPC’s Capacity Amount is 160 MW.

w) GPC Facilities: This term collectively represents Unit No. 16, West Ford Flat BESS and Bear Canyon BESS.

2. Article 5a): NCPA Tap Line:

Delete all but the first sentence of Article 5a), change “Project No. 2” to “Project No. 3” and delete the quotation mark from the first sentence of Article 5a). Thus, only the following sentence remains and reads as:

“NCPA, at its own expense, shall construct, own, operate, and maintain the DCTL from its NCPA Project No. 3 to NCPA Junction.”

3. Articles 5b), 5e), 5f) and 5g) are deleted in their entirety.

4. Article 6: Firm Transmission Service:

Replace Article 6 in its entirety with the following:

“NCPA, as line operator, shall provide and GPC shall purchase bidirectional Firm Transmission Service for deliveries to and from the GPC Facilities. NCPA shall accept delivery from the GPC Facilities at the Interconnection Point of a quantity at or below GPC’s Capacity Amount and accept delivery to the GPC Facilities at NCPA Junction of a quantity at or below GPC’s Capacity Amount. NCPA shall deliver GPC’s scheduled electric power less losses over the NCPA Tap Line between NCPA Junction and the Interconnection Point, except as provided in Section 5(c) and (d). If sufficient transmission capability as determined by NCPA in accordance with Article 19 is not available to transmit all electric power being generated by all electric generating plants which use the NCPA Tap Line, GPC shall curtail, at NCPA’s request, GPC’s scheduled deliveries from the GPC Facilities as required to share on a pro-rata basis with entities other than NCPA the

transmission capability remaining after NCPA transmits energy owned by NCPA and which is generated by NCPA's power plants or by plants from which NCPA is obligated to purchase energy. The Parties agree that the language in the preceding sentence shall not serve as a precedent for language in any subsequent agreement between them."

5. Article 7: Station Use Power:

Add the phrase "Bear Canyon BESS, and West Ford Flat BESS," after the phrase "Unit No. 16 outage" in the first line.

6. Article 8: Payment for GPC's Use of the NCPA Tap Line:

Replace Article 8a) in its entirety with the following:

During the term of this Transmission Service Agreement, GPC shall compensate NCPA monthly for transmission service provided or made available hereunder in an amount equal to the Monthly Charges determined in accordance with the formulas set forth in Appendix A for the NCPA Tap Line which specify GPC's share of capital and operating and maintenance Costs. GPC's share is equal to the ratio of the sum of the Capacity Amount of the GPC Facilities to the sum of the Capacity Amount of the GPC Facilities and NCPA's nameplate capacity rating of 220 MW. GPC's share reflects GPC's proportionate use of the NCPA Tap Line. The Monthly Charges shall be adjusted by NCPA in accordance with Appendix A to accurately reflect GPC's proportionate use of the NCPA Tap Line in the event that additional electric generating plants use the NCPA Tap Line or in the event that there is a change in the Capacity Rating of NCPA's facilities from its nominal rating of 220 MW. NCPA reserves the right to interconnect both NCPA Projects to the DCTL line. During those interconnected times, NCPA may connect both NCPA Project No. 2 and No. 3 to the DCTL line.

7. Appendix A Formulation for Transmission Service Costs

Replace the definition for PCAP with the following:

The Capacity Amount of the GPC Facilities

Replace the definition for TCAP with the following:

The Capacity Amount of the GPC Facilities plus NCPA Project Nos. 2 and 3 Capacity Rating (220 MW) plus any other units which may utilize portions of the NCPA Tap Line.

8. Article 13: Cooperation and Right of Access and Inspection

Add the sentence at the end of the paragraph:

As a result of the relay coordination study, certain modifications are required. Appendix D defines the modification requirements and schedule for performance.

IN WITNESS WHEREOF, NCPA and GPC hereto have caused this Second Amendment to be executed by their duly authorized representatives and it is effective as of the last date set forth below.

NORTHERN CALIFORNIA POWER AGENCY

GEYSERS POWER COMPANY, LLC

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

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

Its: \_\_\_\_\_

Its: \_\_\_\_\_

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

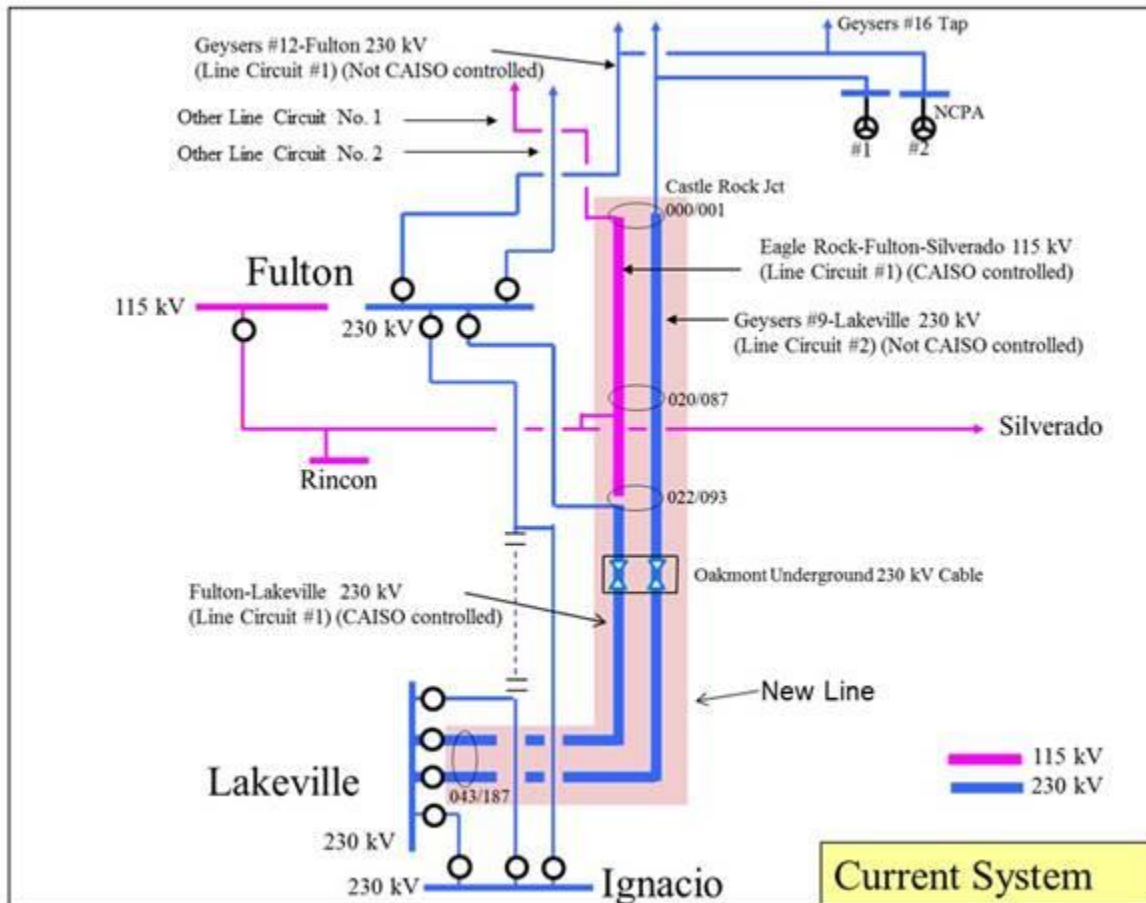
Date: \_\_\_\_\_



## APPENDIX C

### Current Generation Tie Configuration

DCTL – the 230 kV Generation Tie Line Connecting NCPA Project No. 3 to the NCPA Junction



## APPENDIX D

### Required Modifications

In 2024, NCPA conducted a relay coordination study contracted with WorleyParsons Group, Incorporated (“Worley”). In March of that year, NCPA and Worley issued the report with the study results. The reports stated the “411L primary protection scheme relies on fiber optic communication for sensing and relaying potential problems between two 411L units. Should the fiber optic communication fail, and simultaneously, a ground fault on the 230 kV were to occur, the NCPA generation would trip offline due to improper coordination with NCPA ground fault settings. There needs to be a control in place should the fiber optic communication fail.” As a result

of this finding, GPC will be required to install a solution that will protect NCPA from this scenario. It is expected that GPC will design and install a transfer trip scheme that will shut down its units and isolate its system on loss of communications for the 411L. GPC to engineer this protection scheme and shall submit its concept to NCPA by September 30, 2024 and its final design by the end of December 2024. NCPA's review and approval of the concept and final design shall not be unreasonably denied, conditioned or delayed. GPC and shall install the scheme before June 1, 2025. GPC shall invite NCPA for a functional witness test of the system when installed.



# **Geysers Power Company Second Amendment to Transmission Service Agreement**

Facilities Committee  
June 5, 2024

## Background

- NCPA entered into a Transmission Service Agreement with Pacific Gas & Electric (PG&E) effective January 23, 1985, establishing operating protocols for NCPA to provide transmission service for PG&E's electrical generating facilities in Lake County, made up of Power Units 1, 2 and 3, and Unit 16
  - The Bear Canyon geothermal generating unit (Power Units 1 and 2) and the West Ford Flat geothermal generating unit (Power Unit 3) ceased operations in January 2016 and September 2015, respectively.
- Effective April 30, 1999, PG&E sold its electrical generating facilities in Lake County to Geysers Power Company, LLC (Calpine-Geysers Power Company, or "Calpine-GPC").

## Calpine-GPC Battery Energy Storage Systems

- In 2020, NCPA was informed of Calpine-GPC's intent to pursue a battery energy storage systems (BESS) project as a potentially affected facility.
  - NCPA evaluated the project and determined that it would still produce the same or less power than the previous geothermal units, and informed Calpine-GPC that they were not concerned with them moving forward with the project as proposed.
- NCPA informed Calpine-GPC that they would be required to perform relay coordination studies and that the existing Transmission Service Agreement would need to be modified to account for the new BESS projects.
- Calpine-GPC expects to begin commercial operation on July 1, 2024.
- NCPA and Calpine-GPC desire to enter into a Second Amendment to the existing Transmission Service Agreement to acknowledge the new Bear Canyon BESS and West Ford Flat BESS systems, and detail interconnection of these new systems with NCPA's 230 kV tap line.

## Relay Coordination Study - Results

- At Calpine-GPC's expense, NCPA hired Worley Group, Inc. to conduct the relay coordination studies.
- Worley discovered an issue with the existing relay, where under a communication failure, the backup protection would fall to NCPA's unit.
  - As a part of the contract modifications, NCPA will allow Calpine-GPC one year to design and install a transfer trip mechanisms that clears their own equipment during communication failure, preventing them from using NCPA as a backup.

## **Fiscal Impact**

- The current Transmission Service Agreement with Geysers Power Company, LLC stipulates that Calpine-GPC shall compensate NCPA monthly for transmission service provided or made available, as determined by the formulas included in Appendix A for the Transmission Service Agreement with Geysers Power Company, LLC. The monthly payment by Calpine will not change as a result of this amendment.

## **Environmental Analysis**

- NCPA is not required to perform any work as a part of this modification. Therefore, this activity would not result in a direct or reasonably foreseeable indirect change in the physical environment and is therefore, not a “project” for purposes of Section 21065 the California Environmental Quality Act. No environmental review is necessary. All required environmental review for the BESS was the responsibility of Calpine-GPC.



## Proposal

- Staff is seeking a recommendation from the Facilities Committee for Commission approval authorizing the Second Amendment to the Transmission Service Agreement with Geysers Power Company, LLC, updating the existing transmission interconnection agreement to modify Bear Canyon and West Ford Flat from a geothermal to a BESS facility to support Geysers Power Company battery operations, with any non-substantial changes as approved by the NCPA General Counsel, with no change to the contract term, for continued use by NCPA's Geothermal Facility.



# Disaster Recovery Center Update

Jonathan Ashcraft  
Facilities Manager  
5/30/2024

## **Status Update for Sunrise DRC**

NCPA Staff designed the server room for future expansion to serve as a redundant primary server room.

- NCPA Staff requested the mechanical engineer evaluate the server room HVAC, as the mechanical schedule did not reflect the anticipated cooling.
- Mechanical Engineer provided documentation to incorporate the two 5-ton H.P.'s and two 3-mini splits into the design, including the necessary roof penetrations and re-routing of existing ductwork
- The addition of two 5-ton H.P. would require significant Structural Engineering for the rooftop support.

## Server Room HVAC

- Lionaki's in-house structural engineer provided a preliminary review of the increased structural load and determined that additional rooftop HVAC equipment would require significant structural engineering that was outside the project's scope of work and budget.
- NCPA Staff has determined that the DRC server room will be built as a backup, to NCPA's primary server room in Roseville.
- NCPA has identified an alternative that would need further exploration by an engineer for future expansion of the mechanical systems as a separate project.

## Server Room HVAC Cont

- Server Room HVAC Next Steps
  - Capital Engineering to incorporate three 3-ton mini splits for the backup server room HVAC.
  - Lionakis to incorporate the updated mechanical drawings and provide NCPA will final review construction drawings.

## Upcoming Milestones

- Finalize server room mechanical drawings – Capital Engineering and Lionakis
- Provide final plans for review – Lionakis
- Technical manual - Lionakis
- Submit for plan check - Lionakis
- Submit for Public Works RFP - NCPA

# Questions?