

DOCKETED	
Docket Number:	79-AFC-02C
Project Title:	NCPA/Shell Geothermal Project #2 (78-NOI-5) - Compliance
TN #:	242491
Document Title:	Statement of Staff Approval of Post Certification Change for Construction of a 230 kilovolt Transmission Intertie Connection
Description:	Statement of Staff Approval of Post Certification Change for construction of a 230 kilovolt (kV) intertie connection between the NCPA gen-tie transmission lines that would allow NCPA-2 and NCPA-3 to generate onto whichever gen-tie line is available.
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Submitter Role:	Commission Staff
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**CALIFORNIA
ENERGY COMMISSION**



**CALIFORNIA
NATURAL
RESOURCES
AGENCY**

STATEMENT OF STAFF APPROVAL OF POST CERTIFICATION CHANGE NORTHERN CALIFORNIA POWER AGENCY GEOTHERMAL POWER PLANT NO. 2 (NCPA-2) (79-AFC-02C)

On September 27, 2021, the Northern California Power Agency (NCPA) filed a post certification petition with the California Energy Commission (CEC) for the NCPA Geothermal Plant No. 2 (NCPA-2).

NCPA-2 is a 110-megawatt generating geothermal facility consisting of steam wells, steam gathering and reinjection wells systems, a transmission tapline, and two steam turbine units, which can operate independently. The facility is located on federal land approximately 60 miles northwest of Sacramento in Sonoma County in the unincorporated town of Anderson Springs where the facility's geothermal steam wells are located. The facility was certified by the CEC on March 12, 1980, and it began commercial operation on February 1, 1982.

DESCRIPTION OF PROPOSED CHANGE

The purpose of this modification is to establish a 230 kilovolt (kV) intertie connection between the NCPA gen-tie transmission lines that would allow NCPA-2 and NCPA-3 to generate onto whichever gen-tie line is available. The proposed intertie connection would neither parallel the lines nor be used when the two transmission lines are energized concurrently. The proposed modification also includes installation of a 230 kV non-load break disconnection switch at the NCPA-2's switchyard.

For additional information, the [CEC's project webpage](https://www.energy.ca.gov/powerplant/steam-turbine/ncpa-geothermal-plant-no-1-formerly-ncpa-2), <https://www.energy.ca.gov/powerplant/steam-turbine/ncpa-geothermal-plant-no-1-formerly-ncpa-2>, has a link to the petition accessible through the webpage in the box labeled "Compliance Proceeding." Click on the "[Docket Log \(79-AFC-02C\)](#)" option.

CEC STAFF REVIEW AND CONCLUSIONS

This petition is being reviewed pursuant to the California Code of Regulations, Title 20, section 1769. The review process includes an evaluation of the effect the change could have on the environment; the project's compliance with applicable laws, ordinances, regulations, or standards (LORS); and whether a change to, or deletion of, any condition(s) of certification (COC) in the Commission Decision (CEC Decision) or subsequent amendments is required.

The CEC technical staff (staff) reviewed the petition for potential environmental effects and consistency with LORS. Staff's conclusions for all technical and environmental areas are summarized in **Table 1**.

TABLE 1
Summary of Conclusions for all Technical and Environmental Areas

Technical Areas Reviewed	CEQA				Conforms with applicable LORS
	Potentially Significant Impact	Less Than Significant Impact with Mitigation (with Revised or New COCs)	Less Than Significant Impact (with or without Existing COCs)	No Impact	
Air Quality			X		X
Biological Resources				X	X
Cultural Resources			X		X
Efficiency				X	
Facility Design					X
Geological and Paleontological Resources				X	X
Hazardous Materials Management			X		X
Land Use				X	X
Noise and Vibration			X		X
Public Health			X		X
Reliability					
Socioeconomics			X		
Soil and Water Resources				X	X
Traffic and Transportation			X		X
Transmission Line Safety and Nuisance			X		X
Transmission System Engineering					X
Visual Resources				X	X
Waste Management				X	X
Worker Safety and Fire Protection				X	X

Areas shown in gray are not subject to CEQA consideration or have no applicable LORS the project must comply with.

Staff has determined the project would continue to comply with applicable LORS, would not result in any significant adverse environmental impacts, and would not require a change to any COC.

The bases for each of staff's conclusions are provided below:

- **AIR QUALITY**

The proposed project changes would be located within the switchyard of the NCPA-2 power plant site in previously disturbed and developed areas. To accommodate the foundation of the support structure for the switch, the proposed construction work would involve minor potholing or excavation of the previously disturbed soil and would not result in additional grading or ground disturbance. The foundation work would be completed using a small excavator or backhoe. There would be no heavy-duty equipment used in this project. The construction period is expected to be short-term lasting approximately six months from approval to completion, depending on the weather condition. The project site is located within the Northern Sonoma County Air Pollution Control District and the project owner will be required to comply with District Rule 430 for fugitive dust control. All construction equipment brought on the project site must meet the current California Air Resources Board standards for off-road heavy-duty diesel engines.

The proposed changes would not result in any permanent changes in air emissions from the facility; therefore, the impacts would be less than significant. The project would remain in compliance with all applicable LORS related to air quality.

- **BIOLOGICAL RESOURCES**

The proposed project changes would be located within the switchyard of the NCPA-2 power plant site in previously disturbed and developed areas used for current facility operations. No sensitive biological species are expected to be found in the vicinity of the proposed activities and no habitat or vegetation would be disturbed. As a result, no impacts to biological resources would occur from the proposed project changes. The proposed changes would not result in increased nitrogen deposition caused by air emissions from the facility. The proposed project changes would not result in changes to any biological resources COC for the project, and the project would remain in compliance with all applicable LORS related to biological resources.

- **CULTURAL RESOURCES**

There are no known cultural resources on the project site that could be impacted by the proposed project changes. While there was one archaeological site identified within the leasehold, it is not within the area that would be impacted

by this project modification. If cultural resources are encountered during the installation of the 230 kV non-load break disconnect switch, implementation of the mitigation measures in the Final Joint Environmental Study for the NCPA-2 would mitigate any potentially significant impacts to less than significant. The proposed project changes would not result in changes to any cultural resources COC for the project, and the project would remain in compliance with all applicable LORS related to cultural resources.

- **EFFICIENCY**

The proposed intertie connection that allows the two power plants to generate electricity onto whichever gen-tie line is available would not impact the thermal efficiency of the power plant.

- **FACILITY DESIGN**

These proposed project modifications must be in accordance with the 2019 edition of the California Building Code (CBC). Implementation of the existing Facility Design COC adopted in the Final Joint Environmental Study and the CEC Decision would ensure compliance with the CBC.

- **GEOLOGICAL AND PALEONTOLOGICAL RESOURCES**

There would be no impact on geological resources from the proposed project because the ground disturbance would be limited to previously disturbed soil. No changes to the existing Geological Resources COC are required.

No paleontological resources would be disturbed as the ground disturbance would be limited to previously disturbed soil. Therefore, there would be no impacts on paleontological resources.

- **HAZARDOUS MATERIALS MANAGEMENT**

The installation of the intertie switch would not use any extremely hazardous materials and the use of hazardous materials during construction would comply with all LORS. Therefore, the proposed project change would have a less than significant impact on the environment.

- **LAND USE**

The proposed intertie switch would be installed on disturbed land within the NCPA-2 plant boundary of the existing switchyard. NCPA-2 and NCPA-3 would continue to meet all applicable COC and LORS. The proposed change would not physically divide an established community or cause a significant environmental impact due to a conflict with LORS adopted for the purpose of avoiding or

mitigating an environmental effect. Further, the change would not result in the conversion of farmland or forest land. Therefore, no impact to land use would occur.

- **NOISE AND VIBRATION**

Construction activities associated with the proposed changes would be temporary and would occur during daytime hours. Any noise generated during these activities would be temporary, intermittent, and consistent with the local noise requirements (Sonoma County General Plan). There are no nearby residential receptors. The construction work would result in a less than significant impact with the implementation of the existing Noise COC in the Joint Final Environmental Study and the CEC Decision. The operational noise would not be affected as the result of the proposed project modifications.

- **PUBLIC HEALTH**

The proposed project changes would be located within the switchyard of the NCPA-2 site in previously disturbed and developed areas. To accommodate the foundation of the support structure for the switch, the proposed construction work would involve minor potholing or excavation of the previously disturbed soil and would not result in additional grading or ground disturbance. The foundation work would be completed using a small excavator or backhoe. There would be no heavy-duty equipment used for this project. The construction period is expected to be short lasting approximately six months, depending on the weather conditions.

The proposed changes would not result in any permanent changes in air emissions from the facility. Therefore, the proposed project modifications would have a less than significant impact on public health and sensitive receptors. The proposed project changes would not result in changes to any public health COC for the project, and the project would remain in compliance with all applicable LORS related to public health.

- **RELIABILITY**

The proposed intertie connection would not impact the operational reliability of the power plant. However, the ability of the facilities to export generation during Lakeville or Fulton 230 kV line outages would improve grid reliability.

- **SOCIOECONOMICS**

The proposed modification to establish an intertie connection between the two NCPA gen-tie transmission lines would take approximately six months to complete and require approximately five workers. Installation of the support structure, the switch on the structure, and the commissioning of the switch would be performed by different crews of approximately five workers at any given time. There is no socioeconomics-related LORS or COC applicable to the

proposed changes. There would be less than significant workforce-related impacts on population, housing, and public services.

- **SOIL AND WATER**

The proposed modifications would be performed within the switchyard of the NCPA-2 power plant site on previously disturbed and developed areas. The proposed changes would not result in any increases in water demand or generate stormwater runoff that could impact water quality of receiving waters. As a result, no impacts to soil and water resources would occur.

The project would remain in compliance with all applicable LORS and would not require modification of any COC related to soil and water resources.

- **TRAFFIC AND TRANSPORTATION**

The proposed modification to establish an intertie connection between the two NCPA gen-tie lines would require an oversized truck for potholing and an electrical bucket truck, generating approximately two trips for each oversized truck. The proposed change would generate a negligible number of temporary vehicle trips and would comply with all applicable LORS. There is no traffic and transportation COC applicable to the proposed change. The proposed change would not conflict with LORS addressing the traffic circulation system, substantially increase hazards, or result in inadequate emergency access. Therefore, the proposed intertie would have less than significant impact.

- **TRANSMISSION LINE SAFETY AND NUISANCE**

The proposed project changes would be located within the switchyard of the NCPA-2 power plant site in previously disturbed and developed areas. The proposed project modifications indicated that the reconfiguration is expected to be 120-200 feet of new conductor to drop to an intertie switch. There would be minor potholing or excavation done to accommodate the foundation of the support structures for the switchyard, but there would be no further grading or ground disturbance.

The proposed project change does not include any other activities to the transmission lines and would have a less than significant impact to the transmission line outside of the project boundary. The project impacts on transmission line safety and nuisance would be less than significant, and the project would not require a change to any of the COC and would comply with all applicable LORS.

- **TRANSMISSION SYSTEM ENGINEERING**

The proposed modifications for switchyard would not impact the transmission grid if the two power plants are operating under the Operating Agreement with PG&E. Therefore, there would be no impacts to transmission system engineering. In addition, the project would comply with applicable LORS and would not require a change to any of the Transmission System Engineering COC in the Final Joint Environmental Study and the CEC Decision.

- **VISUAL RESOURCES**

The proposed intertie switch would be installed on existing disturbed land within the existing NCPA-2 switchyard within the boundary of the facility. There is no visual resources COC applicable to the proposed project change. The facility is wholly surrounded by Bureau of Land Management land and the change would not be perceptible from public views of the site. The proposed project change would have no impact on applicable visual resources-related federal, state, and local LORS. Also, it would not have any substantial adverse effect on a scenic vista, scenic resources, the existing visual character, or the quality of public views of the project site and its surroundings. Additionally, it would not create a new source of substantial light or glare adversely affecting day or nighttime views in the area.

- **WASTE MANAGEMENT**

The proposed changes would have no impact on waste management because no additional waste would be generated that is in excess of the projected waste streams that have been analyzed and are being monitored as part of the COC established in the Final Environmental Study and the CEC Decision.

- **WORKER SAFETY AND FIRE PROTECTION**

The installation of the intertie switch would have no impacts on the worker safety and fire protection system and would comply with all Cal/OSHA regulations and all other applicable worker safety LORS.

Environmental Justice

Environmental Justice – Figure 1 shows 2020 census blocks in the six-mile radius of NCPA-2 with a minority population greater than or equal to 50 percent. The population in these census blocks represents an environmental justice (EJ) population based on race and ethnicity as defined in the United States Environmental Protection Agency's *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*. Staff conservatively obtains demographic data within a six-mile radius around a project site based on the parameters for dispersion modeling used in staff's air quality analysis. Air quality impacts are generally the type of project impacts that extend the furthest from a project site. Beyond a six-mile radius, air emissions

have either settled out of the air column or mixed with surrounding air to the extent the potential impacts are less than significant. The area of potential impacts would not extend this far from the project site for most other technical areas included in staff’s EJ analysis.

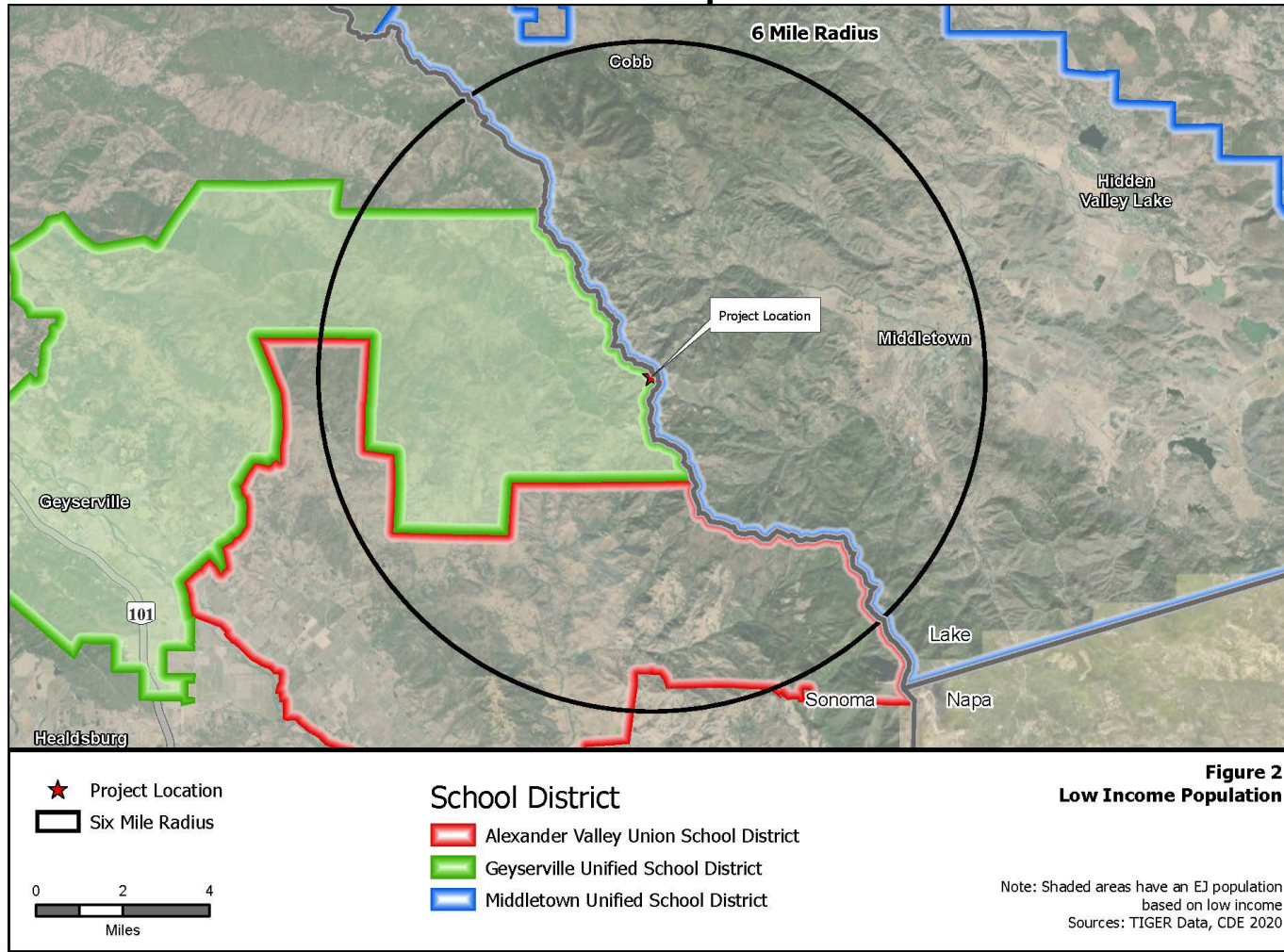
Based on California Department of Education data in the **Environmental Justice – Table 1** and presented in **Environmental Justice – Figure 2**, staff concluded that the percentage of those living in the Geyserville Unified School District (in a six-mile radius of the project site) and enrolled in the free or reduced-price meal program is larger than those in the reference geography, and thus are considered an EJ population based on low income as defined in *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*.

Environmental Justice – Table 1
Low Income Data within the Project Area

SONOMA COUNTY SCHOOL DISTRICT IN SIX-MILE RADIUS	Enrollment Used for Meals	Free or Reduced-Price Meals	
Alexander Valley Union Elementary	115	26	22.6%
Geyserville Unified	209	106	50.7%
REFERENCE GEOGRAPHY			
Sonoma County	66,450	30,268	45.6%
LAKE COUNTY SCHOOL DISTRICTS IN SIX-MILE RADIUS	Enrollment Used for Meals	Free or Reduced-Price Meals	
Middletown Unified	1,655	887	53.6%
REFERENCE GEOGRAPHY			
Lake County	9,540	7,166	75.1%
Source: CDE 2020. California Department of Education, DataQuest, Free or Reduced-Price Meals, District level data for the year 2019-2020, http://dq.cde.ca.gov/dataquest/ .			

The following technical areas (if affected) consider impacts to EJ populations: Air Quality, Cultural Resources (indigenous people), Hazardous Materials Management, Land Use, Noise and Vibration, Public Health, Socioeconomics, Soil and Water Resources, Traffic and Transportation, Transmission Line Safety and Nuisance, Visual Resources, Waste Management, and Worker Safety and Fire Protection.

Environmental Justice – Figure 2 Low Income Population



Environmental Justice Conclusions

For the following technical areas that address EJ and would be affected by the project change: Air Quality, Cultural Resources, Noise and Vibration, Public Health, Socioeconomics, Traffic and Transportation, and Transmission Line Safety and Nuisance, staff concludes that impacts would be less than significant, and thus impacts on the EJ population, represented in **Table 1** and **Figures 1** and **2**, would be less than significant.

CEC STAFF CONCLUSIONS

Pursuant to California Code of Regulations, Title 20, section 1769(a)(3)(A), CEC staff has determined for this petition that approval by the Commission at a noticed business meeting or hearing is not required and the proposed changes meet the criteria for approval by staff because:

- i. there is no possibility that the change may have a significant impact on the environment, or the change is exempt from the California Environmental Quality Act;
- ii. the change would not cause the project to fail to comply with any applicable laws, ordinances, regulations, or standards; and
- iii. the change will not require a change to, or deletion of a condition of certification adopted by the commission in the final decision or subsequent amendments.

Staff also concludes that the proposed changes do not meet the criteria requiring production of subsequent or supplemental review as specified in California Code of Regulations, Title 14, section 15162(a).

WRITTEN COMMENTS

This Statement of staff Approval of the proposed project changes has been filed in the docket for this project. Pursuant to the California Code of Regulations, Title 20, section 1769(a)(3)(C), any person may file an objection to staff's determination within 14 days of the filing of this statement on the grounds that the project change does not meet the criteria set forth in section 1769(a)(3)(A). Absent any objections as specified in the California Code of Regulations, Title 20, section 1769(a)(3)(C), this petition will be approved 14 days after this statement is filed.

Written comments or objections to staff's determination may be submitted using the CEC's e-Commenting feature, as follows: Go to the CEC's project webpage and click on the [Submit e-Comment](#) link.

When your comments are filed, you will receive an email with a link to them.

Written comments or objections may also be mailed to:

California Energy Commission
Docket Unit, MS-4
Docket No. **79-AFC-02C**
715 P Street
Sacramento, CA 95814-5512

All comments and materials filed with the Docket Unit will be added to the facility Docket Log and be publicly accessible on the CEC's project webpage.

If you have questions about this notice, please contact Anwar Ali, Office of Compliance Monitoring and Enforcement, Compliance Project Manager, at (916) 698-9874, or via at anwar.ali@energy.ca.gov.

For information on public participation, please contact the Public Advisor at (916) 957-7910, or by email at publicadvisor@energy.ca.gov.

News media inquiries should be directed to the CEC's Media Office at (91) 654-4989 or by e-mail at mediaoffice@energy.ca.gov.

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