

DOCKETED

Docket Number:	80-AFC-01C
Project Title:	Sacramento Municipal Utility District SMUDGE0 #1
TN #:	232608
Document Title:	Sonoma (Unit 3) Petition for Modification
Description:	N/A
Filer:	Deric Wittenborn
Organization:	Ellison Schneider Harris & Donlan LLP
Submitter Role:	Applicant
Submission Date:	3/31/2020 4:38:55 PM
Docketed Date:	4/1/2020



March 31, 2020

Mr. Eric Veerkamp
Compliance Project Manager
Siting, Transmission and
Environmental Protection (STEP) Division
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814
E-Mail: Eric.Veerkamp@energy.ca.gov

**RE: Sonoma Geothermal Project (Unit 3) (80-AFC-01C): Petition for Modification:
Installation of a Standby Pump for the Cooling Tower Wet-Down System**

Dear Mr. Veerkamp:

On behalf of the Geysers Power Company, LLC (“Project Owner”), attached is a Petition for Modification (“Petition”) for the Sonoma Geothermal Project (“Sonoma”).

If you have any questions, please contact Barbara McBride at
Barbara.McBride@calpine.com.

Sincerely,

/s/

Jeffery D. Harris
Chase K. Maxwell
Ellison Schneider Harris & Donlan LLP
2600 Capitol Avenue, Suite 400
Sacramento, CA 95816
Tel: (916) 447-2166
Email: jdh@eslawfirm.com
ckm@eslawfirm.com

**Sonoma Geothermal Project
Unit 3
(80-AFC-01C)**

**Petition for Modification
for the Installation of a Standby Pump
for the Cooling Tower Wet-Down System**

Submitted by
Geysers Power Company, LLC.



March 31, 2020

SONOMA GEOTHERMAL PROJECT (UNIT 3)

80-AFC-01C

PETITION FOR MODIFICATION

Pursuant to Section 1769 of the California Energy Commission's ("CEC's") Siting Regulations, Geysers Power Company, LLC ("Project Owner") hereby submits this *Petition for Modification for the Installation of a Standby Pump for the Cooling Tower Wet-Down System* (the "Petition") for the Sonoma Geothermal Project, Unit 3 ("Sonoma" or "Project").

The Petition requests approval to install a permanent standby diesel engine-powered pump for the cooling tower wet-down system. The Commission recently approved a similar amendment allowing for installation of a permanent standby diesel engine-powered pump for the cooling tower wet-down system at the Lake View Geothermal Power Plant Unit 17 (79-AFC-1C; TN #: 231785).

As set forth below, the proposed modifications will not have a significant effect on the environment and the Project will continue to comply with applicable laws, ordinances, regulations, or standards ("LORS").

I. Section 1769(a)(1)(A): Description of the proposed change, including new language for affected conditions of certification.

The Project Owner is in the process of recommissioning the fire system at the Project, which includes repair and like-kind replacement of certain components of the existing system, and, in some cases, will require modifications to the existing fire system. As part of the recommissioning process, the Project Owner is proposing installation of a permanent emergency standby pump for the cooling tower wet down system.

The permanent stationary emergency standby wet down pump proposed for installation is a skid-mounted diesel engine driven pump that includes auxiliaries, including the pump control system. The diesel engine, pump, dual-walled diesel fuel tank, pump controller, and batteries are all contained on a single skid. Fuel lines will not extend off of the skid. Piping and flanges will be provided by the pump supplier to the edge of the skid to allow for connections to off-skid piping that will be routed above ground to the cooling tower wetting system header. The foundations for the skids are being installed within the power plant yards, and will be approximately three feet deep. Excavation for the foundations will be in existing asphalt-covered, previously disturbed ground. Other than the skid foundation and pipe support foundations that are being installed in similar ground conditions as the pump foundations, no other trenching is anticipated for this project.

The water supply will be from the cooling tower basin and the pump outlet is through the wetting system header. It will be mounted and wired/connected to the engine at the factory. The engine will be manually started by the plant operator in the event of a cooling tower submersible pump outage or an impending wildfire.

The Northern Sonoma County Air Pollution Control District's ("NSCAPCD") has issued the Authority to Construct/Temporary Permit to Operate ("ATC") for the standby pump, which

is provided in Attachment A. The ATC limits total operating hours used for testing and maintenance of the standby pump to no more than 50 hours in any 12-month period. This does not include hours that the pump may be used during an emergency. Pursuant to the ATC, the Project Owner will maintain in a NSCAPCD-approved log record of total engine operating hours, emergency use hours of operation, and maintenance and testing hours of operation. The standby pump will be a Tier 3 diesel drive engine. The Commission's Air Quality Conditions of Certification should be revised as necessary to ensure conformity with the attached ATC.

II. Section 1769(a)(1)(B): Discussion of the necessity for the change and explanation of why the change should be permitted.

Wet down systems are designed to prevent the ignition of cooling tower surfaces, and are demonstrated to be successful in preventing the ignition of cooling towers in geothermal facilities during outages. In the case of Sonoma, the wet down system provides increased protection from wildland fire embers. The permanent emergency standby pump will be used as needed in emergency situations, such as a facility evacuation necessitated by a threat from a wildland fire. In such a case, the emergency standby wet-down pump will be manually started prior to evacuation of the facility, and will provide continued wet down of the cooling tower for approximately 24 hours or longer.

III. Section 1769(a)(1)(C): A description of any new information or change in circumstances that necessitated the change.

The Project was designed and constructed in the early 1980s. The Project Owner has undertaken a review and recommissioning of the Project's fire protection and prevention systems for the betterment of the Project.

IV. Section 1769(a)(1)(D): An analysis of the effects that the proposed change to the project may have on the environment and proposed measures to mitigate any significant environmental effects.

There is no possibility that the modifications described above will result in adverse environmental impacts. These are minor modifications to an existing facility, and do not require any new ground disturbance outside of the existing Project site, do not change the Project footprint, and do not significantly alter the appearance of the facility. The modifications will not impact existing levels of operational noise.

Potential construction emissions from the proposed modification will be minimal and short term. Therefore, no significant construction emissions are expected from the proposed modification.

Potential operational impacts have been evaluated by the NSCAPCD and are based on estimated emissions from the diesel fire pump, using manufacturer's data for the Cummins Model CFP7E-F40 and anticipated operations of approximately 50 hours per year. The operational emission limits and requirements are provided in the attached ATC.

V. Section 1769(a)(1)(E): An analysis of how the proposed change would affect the project's compliance with applicable laws, ordinances, regulations, and standards.

The proposed modifications will not impact the Project's ability to comply with all applicable LORS.

VI. Section 1769(a)(1)(F): A discussion of how the proposed change would affect the public.

The proposed modifications will not adversely affect the public. There will be no significant effects and the project will comply with applicable LORS. The facilities affected are all within the site.

VII. Section 1769(a)(1)(G): A list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of any affected project linears and 1,000 feet of the project site.

Consistent with privacy considerations, a list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of the project site will be provided directly to the Compliance Project Manager.

VIII. Section 1769(a)(1)(H): A discussion of the potential effect of the proposed change on nearby property owners, residents, and the public.

The proposed modifications will have no potentially significant environmental effects and will be in compliance with all applicable LORS. Therefore, the proposed modifications will have no adverse impacts on property owners, the public, or any parties in the application proceeding.

IX. Section 1769(a)(1)(I): A discussion of any exemptions from the California Environmental Quality Act, commencing with section 21000 of the Public Resources Code, that the project owner believes may apply to approval of the proposed change.

The proposed modifications are categorically exempt from the California Environmental Quality Act ("CEQA") pursuant to Title 14 of the California Code of Regulations as activities that constitute a minor alteration of the existing Project that involves no expansion of an existing use. (14 C.C.R. § 15301.)

ATTACHMENT A

**Northern Sonoma County Air Pollution Control District
Authority to Construct/Temporary Permit to Operate 20-30**

NORTHERN SONOMA COUNTY AIR POLLUTION CONTROL DISTRICT

150 Matheson Street Healdsburg CA 95448
Telephone (707) 433-5911

Authority to Construct/Temporary Permit to Operate 20-03

COMPANY: Geysers Power Company
10330 Socrates Mine Road
Middletown, CA, 95461

EQUIPMENT DESCRIPTION:

S-1 204 HP Emergency Standby Wet-Down Pump Diesel Drive Engine,
Cummins Model CFP7E-F40 (Tier 3, Manufactured 2020)

LOCATED AT: Sonoma Power Plant (Unit 3)
10330 Socrates Mine Road
Healdsburg, CA

Whereas application for an Authority to Construct/Temporary Permit to Operate has been made by the Geysers Power Company (hereinafter called the Operator) pursuant to Regulation 1 of the Rules and Regulations of the Northern Sonoma County Air Pollution Control District (hereinafter called the District), and said application has been reviewed and considered by the Air Pollution Control Officer of said District (hereinafter referred to as the Control Officer or NSCAPCD).

This is your Authority to Construct/Temporary Permit to Operate (hereinafter called PERMIT) subject to the following terms and conditions:

PERMIT CONDITIONS

A. Production Limit

1. Total operating hours used for testing and maintenance of S-1, emergency standby wet-down pump diesel drive engine, shall not exceed 50 hours in any consecutive 12-month period. The total hours of operation do not include use during emergencies.

B. Emission Limits

1. Visible particulate emissions shall not exceed an opacity as to obscure an observer's view to a degree equal to or greater than Ringelmann 2.0 or 40 per cent opacity for a period or periods exceeding 3 minutes in any one hour.

2. Particulate emissions shall not exceed an emission rate of 0.11 g/bhp-hr.
3. Combined non-methane hydrocarbons and nitrogen oxide emissions shall not exceed an emission rate of 2.54 g/bhp-hr.
4. Carbon monoxide emissions shall not exceed and emission rate of 1.19 g/bhp-hr.

C. Operational Limits and Requirements

1. S-1, emergency standby wet-down pump diesel drive engine, shall only be used because of a failure or loss of all or part of normal electrical power service, except for testing and maintenance as defined in CA HSC 93115.4 (30).
2. S-1, emergency standby wet-down pump diesel drive engine, shall be equipped with a non-resettable hour counting meter to indicate the number of hours the engine is operated.
3. S-1, emergency standby wet-down pump diesel drive engine, shall be operated exclusively on California Air Resources Board (CARB) Diesel Fuel.
4. S-1, emergency standby wet-down pump diesel drive engine, shall be operated according to manufacturer specifications.

D. Monitoring and Testing:

1. At any time as specified by the Control Officer, the operator of this source shall conduct a District approved source test to determine NO_x and particulate emissions from the diesel powered generator. The test results shall be provided to the District within 30 days of the test.

E. Recordkeeping

1. In order to demonstrate compliance with the above permit conditions, records shall be maintained in a District approved log, shall be kept on site, and made available for District inspection for a period of 5 years from the date on which a record is made. The records shall include the following information summarized on a monthly basis:
 - a. total engine operating hours.
 - b. emergency use hours of operation.
 - c. maintenance and testing hours of operation.

F. Administrative Requirements

1. Facilities Operation

- a. Operation under this permit must be conducted in compliance with all data and specifications included in the application which attest to the operator's ability to comply with District Rules and Regulations. This permit must be posted in a conspicuous place nearby or, as per rule 240.
- b. All equipment of this PERMIT shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [NSCAPCD Rule 240.d]

2. Permit Expiration

This Authority to Construct is valid for one year and may be extended by an additional year with the payment of the annual renewal fee. After construction of the listed equipment, the permit to operate shall remain valid provided the annual renewal fees are paid in accordance with District Rule 300 and all Permit conditions are met. [NSCAPCD Rule 300.5.1]

3. Severability

The provisions of this PERMIT are severable, and, if any provision of this PERMIT is held invalid, the remainder of this PERMIT shall not be affected.

4. Notification Requirements

- a. Applicant shall notify the District at least 3 days prior to the start-up of this source
- b. Upsets and Breakdowns - In the event of any failure of process or abatement equipment to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in District Rules or in conditions to this PERMIT the Operator shall notify the District as provided by Rule 540 regarding upset breakdown conditions to petition for shelter from enforcement actions. In order to qualify for such shelter an initial notification of the equipment failure must be given within one hour of the failures discovery. [NSCAPCD Rule 540]:
- c. Transfer of Ownership - In the event of any changes in control or ownership of facilities to be constructed or modified, this PERMIT together with its terms and conditions shall be binding on all subsequent owners and operators. The Applicant shall notify the succeeding owner and operator of the existence of this PERMIT and its conditions by letter, a copy of which shall be forwarded to the Control Officer. [NSCAPCD Rule 240.j.]

5. Right to Entry

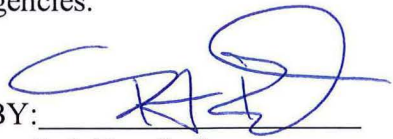
The Control Officer, The Chairman of the California Air Resources Board, The Regional Administrator of USEPA, and/or their authorized representatives, upon the presentation of credentials, shall be permitted:

- a. To enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this PERMIT; and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this PERMIT; and
- c. To inspect any equipment, operation, or method required in this PERMIT; and
- d. To sample emissions from the source.
[NSCAPCD Rule 240.e]

THIS PERMIT BECOMES VOID UPON ANY ALTERATION OF EQUIPMENT

This permit does not authorize the emission of air contaminants in excess of those allowed by the Health and Safety Code of the State of California or the Rules and Regulations of the Northern Sonoma County Air Pollution Control District. This permit cannot be considered as permission to violate existing laws, ordinances, regulation or statutes of other governmental agencies.

DATE: 3/9/2020

BY: 
Rob Bamford
Air Pollution Control Officer

Permit Number 20-03

s:\permits\ac\2003atc.doc