

DOCKETED

Docket Number:	82-AFC-01C
Project Title:	Compliance - Application for Certification for PG&E Geysers Unit 20
TN #:	210233
Document Title:	Final Permission for Exec. Order B-36-16 Expedited Processing & N. Sonoma Air Pollution Control Dist Authority to Construct(ATC)
Description:	N/A
Filer:	Camile Remy-Obad
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	2/8/2016 3:59:50 PM
Docketed Date:	2/8/2016

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



February 5, 2016

Mr. James Kluesener
Vice President, Geothermal Regional Operations
Geysers Power Company, LLC
10350 Socrates Mine Road
Middletown, CA 95461

RE: Geysers Power Company Grant (Unit 20) Geothermal Project (82-AFC-1C)
Expedited Processing Pursuant to Executive Order B-36-15

Dear Mr. Kluesener:

After the September 12, 2015 Valley Fire, the Geysers Power Company requested expedited processing and approval of emergency reconstruction activities at the Grant (Unit 20) Geothermal Project. On January 5, 2016, based upon the information and attachments provided in that request, I authorized under Governor Brown's Executive Order B-36-15, the repair, reconstruction and/or in-kind replacement of the Unit 20 cooling tower to remediate the wildfire damage and restore power plant operations (TN# 207192).

The Executive Order states in part that "[t]he Energy Commission shall expedite the processing of all applications or petitions for amendments to power plant certifications issued by the Energy Commission for the purpose of remediating any wildfire damage and to restore power plant operation by authorizing emergency construction activities including demolition, alteration, replacement, repair or reconstruction necessary for power plant operation. Title 20, section 1769 of the California Code of Regulations is hereby waived for any such petition, and the Executive Director of the Energy Commission shall approve such petitions as he deems necessary."

Air Quality staff worked with the Northern Sonoma County Air Pollution Control District (NSCAPCD) on the Authority to Construct (ATC) permit revisions - the replacement cooling tower is functionally equivalent to the damaged cooling tower, except for superior air emissions performance. On January 29, 2016, the NSCAPCD issued a revised final ATC air permit for the in-kind Unit 20 replacement cooling tower (see attached). Based upon Energy Commission staff's review and the Executive Order B-36-15, I deem the revised ATC, when incorporated into the project Final Decision, necessary for wildfire remediation and to restore power plant operations. I hereby direct staff to docket the ATC (attached), and incorporate these provisions into the Energy Commission's Unit 20 Final Decision.

Sincerely,

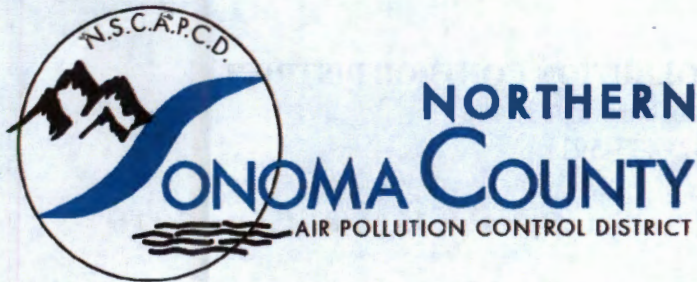
A handwritten signature in black ink, appearing to read 'R. P. Oglesby', with a long horizontal line extending to the right.

Robert P. Oglesby
Executive Director

Mr. James Kluesener
January 5, 2016
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Attachment: Northern Sonoma County Air Pollution Control District Final Authority to Construct (January 26, 2016).

cc: **Robert B. Weisenmiller**, Chair, California Energy Commission
Karen Douglas, Commissioner, California Energy Commission
David Hochschild, Commissioner, California Energy Commission
Andrew McAllister, Commissioner, California Energy Commission
Janea A. Scott, Commissioner, California Energy Commission
Tennis Wick, Director, Sonoma County Permit and Resource Management Department
Alexander Saschin, Northern Sonoma County Air Pollution Control District
Richard Burns, Field Manager, U.S. Bureau of Land Management
Elizabeth Johnson, Geothermal Officer, California Department of Conservation
Joseph Austin, District Deputy, CA Department of Conservation, Division of Oil, Gas, and Geothermal Resources
Honorable Jose Simon III, Chairperson, Middletown Rancheria of Pomo Indians
Honorable Chris Wright, Chairperson, Dry Creek Rancheria Band of Pomo Indians
Honorable Scott Gabaldon, Chairperson, Mishewal Wappos of Alexander Valley
Honorable Marjorie Mejia, Chairperson, Lytton Rancheria of California
Shin-Roei Lee, Assistant Executive Director, North Coast Regional Water Quality Control Board
Guy Childs, Central Valley Regional Water Quality Control Board
Dennis Peters, External Affairs Manager, California ISO
Ed Randolph, Energy Division Director, California Public Utilities Commission
Tina Bartlett, Regional Manager, California Department of Fish and Wildlife, North Central Region 2
Scott Wilson, Regional Manager, California Department of Fish and Wildlife, Bay Delta Region 3
Kellie Berry, Sacramento Valley Division Chief, U.S. Fish and Wildlife Service, Region 8
Ryan Olah, Coast Bay Division Chief, U.S. Fish and Wildlife Service, Region 8
Dale Wierman, California Department of Forestry, Environmental Protection
Greg Allen, California Air Resources Control Board, Stationary Source Branch



150 Matheson Street, Healdsburg, CA 95448 • PH: (707) 433-5911 • FX: (707) 433-4823

January 29, 2016

**Geysers Power Company, LLC
c/o Calpine Corporation
10350 Socrates Mine Road
Middletown, CA 95461**

ATTENTION: Brian Berndt

SUBJECT: Application # 15-21, Unit 20 Cooling Tower Reconstruction

Dear Mr. Berndt:

Attached is your Authority to Modify/Temporary Permit to Operate, 15-21. Please review the Authority to Modify/Temporary Permit to Operate for any omissions or errors. Per Rule 250, the applicant may appeal the decision of the Air Pollution Control Officer within ten (10) days of issuance of the Authority to Construct/Temporary Permit to Operate.

A copy of the Authority to Modify/Temporary Permit to Operate must be displayed near the source. In the event that the Authority to Modify cannot be so placed, the Authority to Modify shall be maintained readily available at all times on the operating premises.

Please notify the District by letter at least three (3) days before initial operation of the equipment is to take place so that we may observe the equipment in operation and verify compliance with the Authority to Modify.

If you have any questions regarding this matter please call the District at (707) 433-5911.

Sincerely,

Alex V. Saschin

Alex V. Saschin
Air Quality Engineer

NORTHERN SONOMA COUNTY AIR POLLUTION CONTROL DISTRICT

150 Matheson Street Healdsburg CA 95448

Telephone (707) 433-5911

Authority to Modify and Temporary Permit to Operate # 15-21 (82-45A)

COMPANY:

Geysers Power Company, LLC

c/o Calpine Corporation

10350 Socrates Mine Road

Middletown CA 95461

EQUIPMENT DESCRIPTION:

GEOTHERMAL POWER PLANT, UNIT NO. 20 CONSISTING OF:

1. TURBINE, 1,905,550 LB STEAM/HR MAXIMUM FOUR FLOW (DOUBLE-ROTOR) OR TWO FLOW (SINGLE ROTOR + "JACKSHAFT")
2. GENERATOR, 119 MEGAWATT
3. CONDENSER WITH STEAM OPERATED TWO AND THREE STAGE GAS EJECTOR SYSTEM
4. *COOLING TOWER, CROSS-FLOW, MECHANICAL DRAFT TYPE WITH 0.001% RATED MIST ELIMINATORS AND WITH 11 200 HP FANS*
5. TWO 100% CONDENSATE PUMPS, EACH 200 HP AND EACH 4700 GPM
6. FOUR 25% CIRCULATING WATER PUMPS, EACH 1250 HP AND EACH 42,000 GPM
7. THREE AUXILIARY CONDENSATE PUMPS, EACH 15 HP
8. CIRCULATING WATER H₂S ABATEMENT SYSTEM CONSISTING OF:
 - A. ABATEMENT SOLUTION STORAGE TANK, 5400 GALLON
 - B. ONE 100% PUMP AND ONE 100% SPARE
 - C. MASS FLOW METER AND FLOW ALARM
9. GLAND STEAM LEAK OFF SYSTEM CONSISTING OF:
 - A. GLAND STEAM SEAL LEAK OFF CONDENSER
 - B. GLAND SEAL LEAK OFF BLOWER
 - C. GLAND STEAM SEAL LEAK OFF SEPARATOR

Reconstruction of Cooling Tower.

LOCATED AT:

GEYSERS, SONOMA COUNTY, CA

Whereas application for an Authority to Construct/Temporary Permit to Operate has been made by the Geysers Power Company, LLC (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. Emission limits

1. The maximum cumulative hydrogen sulfide (H₂S) emissions from the plant shall not exceed 10.4 pounds per hour (4.7 kg/hr).
2. Annual emissions from the cooling tower shall not exceed, on a calendar year basis, 20.6 tons per year of hydrogen sulfide (H₂S), 17.0 tons per year particulate matter less than 10 microns in diameter (PM-10) and 12.0 tons per year particulate matter less than 2.5 microns in diameter (PM-2.5).

B. Operational limits and Requirements

1. The permit holder shall install drift eliminators rated at 0.001% or less at the cooling tower.

C. Monitoring and Testing

1. Within 30 days of start-up the permit holder shall conduct a performance evaluation of the new cooling tower, including particulate matter and H₂S emission rates.
2. The operator shall submit to the District, for prior approval, a performance evaluation test plan at least 15 days prior to conducting the tests.
3. Compliance with the particulate mass emission limitation from the cooling tower shall be based on the evaporative cooling tower manufacturers design drift eliminator drift rate, 0.001 percent, multiplied by the circulating water rate and, total dissolved solids (TDS) and total suspended solids (TSS). A circulating water sample shall be collected and analyzed for TDS and TSS on a monthly basis.

D. 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 H2S, PM-10 and PM-2.5 annual emissions to date.

E. Reporting

1. Within 30 days of conducting the performance tests pursuant to Condition A.1. The permit holder shall submit to the District the test results from the performance tests as outlined in the performance evaluation plan.

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 reported to the District Office no later than one (1) hour after its detection during normal office hours (8:00 am to 4:30 pm) or one (1) hour after the start of the next regular business day, whichever is sooner. [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:

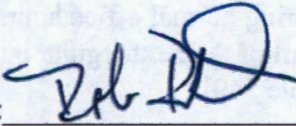
- a. To enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this PERMIT; and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this PERMIT; and
- c. To 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. The violation of any of these terms and conditions shall be grounds for revocation of this PERMIT, and shall be a violation of District Rules and Regulations under Rule 240. This permit can be reviewed annually and can be amended by the District as allowed by Rule 240(h).

DATE: 11/26/16

PERMIT NUMBER 15-21
(PTO 82-45A)

BY: 
Rob Bamford
Air Pollution Control Officer

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