

**DOCKETED**

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<b>Project Title:</b>	Compliance - Application for Certification for PG&E Geysers Unit 17 (78-NOI-3)
<b>TN #:</b>	231324
<b>Document Title:</b>	2018 Annual Compliance Report for the Lake View Power Plant (Unit 17)
<b>Description:</b>	2018 Annual Compliance Report for the Lake View Power Plant (Unit 17) at the Geysers
<b>Filer:</b>	William King
<b>Organization:</b>	Geysers Power Company, LLC
<b>Submitter Role:</b>	Applicant
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**GEYSERS POWER COMPANY, LLC**  
10350 Socrates Mine Road  
Middletown, CA 95461

GWQ-19-058

December 23, 2019

Eric Veerkamp, Compliance Project Manager  
Energy Facilities Siting and Environmental Protection Division  
California Energy Commission  
1516 Ninth Street, MS-15  
Sacramento, California 95814-5512

Mr. Veerkamp:

Subject: **79-AFC-1C** 2018 Annual Compliance Report, Unit 17 (Lake View)

In fulfillment of the Compliance Plan's annual reporting requirement, Geysers Power Company, LLC hereby submits the following report for Unit 17 (Lake View).

If you have any comments or questions, please contact me at (707) 431-6097.

Sincerely,

Bill King  
Project Manager, EHS  
Calpine Corporation

**79-AFC-1C**

**CALIFORNIA ENERGY COMMISSION**

**FINAL DECISION**

**CONDITIONS FOR CERTIFICATION**

**GEYSERS POWER PLANT**

**UNIT 17**

**2018 ANNUAL COMPLIANCE REPORT**

**2018 Annual Compliance Report to the California Energy Commission  
79-AFC-1C Geysers Unit 17 Power Plant**

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**2018 Annual Compliance Report to the California Energy Commission  
79-AFC-1 Geysers Unit 17 Power Plant**

## **EXECUTIVE SUMMARY**

Section 25532 of the Public Resources Code provides that the California Energy Commission (CEC) shall establish a monitoring system to assure that any facility certified by the CEC is constructed and operated in compliance with air, water quality, public health, safety, and other applicable regulations, guidelines, and conditions adopted or established by the CEC.

On February 26, 1979, Pacific Gas and Electric Company (PG&E) filed an Application for Certification (AFC) for Geysers Power Plant Unit 17. In order for the AFC to be granted the CEC issued the "Final Commission Decision Document for Geysers Power Plant Unit 17". In November 1999, the CEC license transferred from PG&E to Geysers Power Company, LLC (GPC). The license requires GPC to be responsible for administering and monitoring various Conditions for Certification as contained in the Final Commission Decision, in accordance with the Compliance Plan for Unit 17, including submitting an Annual Report that summarizes compliance tasks conducted during the previous year.

According to the guidance provided to PG&E by CEC staff on July 12, 1995, only the on-going compliance tasks are now addressed in the Annual Reports.

The status of the compliance tasks in each of the following areas are summarized below:

**Air Quality:** Three on-going compliance tasks

**Public Health:** Five on-going compliance tasks

**Biological Resources:** One on-going compliance tasks

**Water Quality, Hydrology and Water Resources:** Two on-going compliance tasks

**Solid Waste Management:** Three on-going compliance tasks

**Safety:** One on-going compliance task

**Transmission Line Engineering -- Safety and Nuisance:** Two on-going compliance tasks. Please note, GPC cannot comply with these tasks, as it does not own the transmission lines.

This Annual Report meets the aforementioned requirements found in the CEC's Final Decision for Geysers Power Plant Unit 17.

**2018 Annual Compliance Report to the California Energy Commission  
79-AFC-1C Geysers Unit 17 Power Plant**

**SECTION 1: AIR QUALITY**

Compliance Plan Condition	Agency	Compliance Task	Status	Task implementation
<b>Condition: 1-1</b>	NSCAPCD CEC CARB	GPC shall summarize in an annual compliance report any interactions with the NSCAPCD. GPC shall immediately inform the CEC and CARB in writing of any formal appeals filed with the NSCAPCD.	On-going	The Annual Compliance Report is provided below.

**Annual Compliance Report:** Geysers Power Company LLC (GPC) interactions with the NSCAPCD occur during the course of the year as routine reports, and non-routine submittals.

**Quarterly Operating Reports Submittals:** The following Quarterly reports were submitted to the NSCAPCD and CEC CPM with the required elements addressed in the report sections entitled: Continuous Compliance Monitor Availability; Summary of H2S Abatement Incidents Requiring Corrective Action and Monitor Irregularities; Source Test Results. The required elements pertaining to this CEC licensed Power Plant was submitted to the CEC Compliance Manager as follows:

- Fourth Quarter 2017 (Oct – Dec)      Submittal to NSCAPCD, 1/31/2018, ref. GPC18-002
- First Quarter 2018 (Jan – Mar)      Submittal to NSCAPCD, 4/28/2018, ref. GPC18-037
- Second Quarter 2018 (Apr – June)      Submittal to NSCAPCD, 7/26/2018, ref. GPC18-074
- Third Quarter 2018 (July – Sep)      Submittal to NSCAPCD, 10/22/2018, ref. GPC18-086

**Other Routine Reports Submittals:**

- Annual Title V Operating Permit Compliance Report and Certification of Compliance for the year 2017, to NSCAPCD, 6/26/2018, ref. GPC18-013
- Criteria Pollutant Report: Year 2018 to NSCAPCD, 2/14/2019, ref. GPC19-016
- Semi-annual Deviation Reports to NSCAPCD: 2<sup>nd</sup> half 2017, 2/1/2018, ref. GPC18-005 (No deviations); 1<sup>st</sup> half 2018, 7/31/2018, ref GPC-18-078 (Deviation reported: Criteria Pollutant Report due 2/14/2018).
- 2018 annual request for a statement of compliance verification, 7/1/2018, ref. GPC19-046.

**Non-routine Submittals:**

- NESHAP Notifications – **None**
- Breakdown reports – **None**
- Applications for Authority to Construct equipment modifications or replacement: **None**

**Significant interactions with the NSCAPCD:**

- NSCAPCD staff conducted a compliance inspection of the facility on 5/10/2018.
- GPC LLC application for renewal of the Tile V Operating Permit, 9/20/2018, ref GPC18-052
- NSCAPCD issued a statement of compliance verification for 2012-2017 on 1/30/2019; for 2018 on 7/8/2019
- No Appeals filed;
- No Variances filed;
- No Notices of Violations were issued

**2018 Annual Compliance Report to the California Energy Commission  
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**SECTION 1: AIR QUALITY (continued)**

<b>Compliance Plan Condition</b>	<b>Agency</b>	<b>Compliance Task</b>	<b>Status</b>	<b>Task implementation</b>
<b>Condition: 1-2</b>	NSCAPCD CEC	GPC shall provide the CEC with a copy of all quarterly reports and testing / monitoring reports submitted to the NSCAPCD concerning Unit 17.	On-going	The 2018 Annual Compliance Report provides references to reports submitted to NSCAPCD in the Year 2018. The required elements pertaining to this CEC licensed Power Plant were submitted to the CEC Compliance Manager. No Notices were received from the NSCAPCD other than the annual invoice for permit renewal.
<b>Condition: 1-3</b>	NSCAPCD CEC	GPC shall obtain NSCAPCD and CEC written approval before using any equipment other than the Hydrogen peroxide/catalyst and Stretford/ Surface Condenser systems as approved in the CEC decision to control H2S emission.	As needed	No alternative H <sub>2</sub> S emissions abatement systems have been proposed.

**SECTION 2: PUBLIC HEALTH**

<b>Compliance Plan Condition</b>	<b>Agency</b>	<b>Compliance Task</b>	<b>Status</b>	<b>Task implementation</b>
<b>Condition: 2-1</b>	CDHS/RHB	During first year of operations, provide CDHS/RHB with quarterly sampling results of Radon-222 concentrations entering the plant.	On-going	First, second, third, and fourth quarter samples of main steam supply Radon 222 concentrations were collected in 2018. Calculated resulting concentrations of Radon 222 exiting the cooling tower stacks are below 1.6 pCi/l.
<b>Condition: 2-2</b>	CDHS/RHB	If Radon-222 concentration exceeds 3.0 pCi/l in the cooling tower exhaust, CDHS/RHB must be notified by written report with 30 days of detection.	On-going	Measurements of main steam Radon 222 used to calculate radon concentrations in the cooling tower exhaust are consistently below California's standard (3.0 pCi/l for indoor radon exposure).
<b>Condition: 2-3</b>	CDHS/RHB	GPCLLC will notify CDHS/RHB and the CEC within 24 hours if levels of Radon-222 exceed 6.0 pCi/l in the cooling tower exhaust. A special report will follow outlining corrective actions taken.	On-going	Measurements of main steam Radon 222 used to calculate radon concentrations in the cooling tower exhaust are consistently below California's standard of 3.0 pCi/l for indoor radon exposure. Confirmation sampling and written special reports to CDHS/RHB have never been necessary.

**2018 Annual Compliance Report to the California Energy Commission  
79-AFC-1C Geysers Unit 17 Power Plant**

**SECTION 2: PUBLIC HEALTH (continued)**

<b>Compliance Plan Condition</b>	<b>Agency</b>	<b>Compliance Task</b>	<b>Status</b>	<b>Task implementation</b>
<b>Condition: 2-4</b>	NSCAPCD CARB CEC	Submit an ambient or participate in developing and implementing a generic program for monitoring ambient baseline concentrations of mercury (vapor and particulate state), arsenic and ammonia at the populated areas of Cobb Valley.	On-going	GPC continues to fully participate in the Geysers Air Monitoring Program (GAMP).
<b>Condition: 2-5</b>	NSCAPCD CEC	GPC shall submit to the CEC and APCO quarterly steam reports and analysis within 30 days of the quarterly sampling.	As-requested	GPC conducts steam sampling at the request of the NSCAPCD. NSCAPCD Permits to Operate PTO-88-62 and PTO-79-23 Condition 10 and Rule 455 c requires testing as prescribed by the Control Officer

**SECTION 5: BIOLOGICAL RESOURCES**

<b>Compliance Plan Condition</b>	<b>Agency</b>	<b>Compliance Task</b>	<b>Status</b>	<b>Task implementation</b>
<b>Condition: 5-3</b>	CEC	Install a guzzler adjacent to the wildlife water impound. Monitor and maintain the guzzler for the operational life of Unit 17. Implement brush conversion per AFC, p. 7-25. Submit statement upon implementation	On-going	The guzzler inspection on March 2 and 9, 2019 (Attachment 1) found the U17 guzzler to be in good condition. Prescribed burning requirements for Unit 17 are satisfied through GPC's participation in the Sonoma County Vegetation Management Plan. CAL FIRE takes the lead in this program. CAL FIRE did not conduct any control burns in The Geysers during 2018.

**SECTION 6: WATER QUALITY, HYDROLOGY AND WATER RESOURCES**

<b>Compliance Plan Condition</b>	<b>Agency</b>	<b>Compliance Task</b>	<b>Status</b>	<b>Task implementation</b>
<b>Condition: 6-1</b>	NCRWQCB	Condensate spill letters and lab results will be kept on file and be made available to the CEC or public upon request.	On-going	GPC files reports of spills with the NCRWQCB. These reports are available for inspection upon request.



**2018 Annual Compliance Report to the California Energy Commission  
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**SECTION 6: WATER QUALITY, HYDROLOGY AND WATER RESOURCES (continued)**

<b>Compliance Plan Condition</b>	<b>Agency</b>	<b>Compliance Task</b>	<b>Status</b>	<b>Task implementation</b>
<b>Condition: 6-2</b>	NCRWQCB	The CEC added new revision to Condition 6-2 on March 12, 2004, which provides the following: The project owner shall provide the Compliance Project Manager with copies of all local and state water quality permits related to the use and disposal of reclaimed municipal wastewater within thirty (30) days of receipt. In the annual compliance reports, the project owner shall provide the CPM with data on the annual quantity of water reinjected at the facility, and a copy of the report submitted to the California Department of Health Services on the additional uses of recycled water per Provision #2 of the December 5, 2003 California Department of Health Services approval letter.	On-going	83.55 million gallons of recycled Santa Rosa wastewater were pumped to the Unit 17 cooling tower in 2018. A copy of GPC's letter GWQ-19-020 dated July 23, 2019 is provided for CPM review (Attachment 2).  Total water injected within the Unit 17 area in 2018 was 575,283,030 gallons. In addition to reclaimed Santa Rosa Wastewater, this value includes recirculated condensate.

**SECTION 11: SOLID WASTE MANAGEMENT**

<b>Compliance Plan Condition</b>	<b>Agency</b>	<b>Compliance Task</b>	<b>Status</b>	<b>Task implementation</b>
<b>Condition: 11-1</b>	DTSC	Each month GPC shall submit Completed hazardous waste manifests to DTSC in compliance with Section 66475 of Title 22, CAC.	On-going	GPC submits hazardous waste manifests to DTSC on a monthly basis.
<b>Condition: 11-2</b>	CEC DTSC	GPC shall keep on file, at the project site, copies of hazardous waste manifests which shall be made available to the CEC staff upon request.	On-going	The CEC notified PG&E on March 23, 1995, that verification language will not be formally changed, but the CEC agreed that, for purposes of Waste Management Condition 11-2, "PG&E shall keep on file records of the hazardous waste manifests." As the new owner, GPC keeps copies of the hazardous waste manifests on file at The Geysers. These are available to the CEC staff upon request.
<b>Condition: 11-3</b>	CEC DTSC	GPC shall notify the CEC if it files an in-lieu application with DTSC for the operation of the hazardous waste facility.	On-going	GPC operates under state and federal regulations as a hazardous waste generator: and does not intend to operate hazardous waste facilities that require a permit.

**SECTION 12: SAFETY**

**2018 Annual Compliance Report to the California Energy Commission  
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<b>Compliance Plan Condition</b>	<b>Agency</b>	<b>Compliance Task</b>	<b>Status</b>	<b>Task implementation</b>
<b>Condition: 12-2</b>	CAL/OSHA	GPC shall note any CAL/OSHA inspections in its periodic Compliance Reports.	On-going	There were no CAL/OSHA inspections at the Unit 17 power plant during 2018.

**SECTION 13: TRANSMISSION LINE ENGINEERING--SAFETY AND NUISANCE**

<b>Compliance Plan Condition</b>	<b>Agency</b>	<b>Compliance Task</b>	<b>Status</b>	<b>Task implementation</b>
<b>Condition: 13-3</b>	CEC	GPC shall maintain a record of non-compliance and maintenance inspections. These records shall be made available to authorized staff upon request.	On-going	GPC does not own the transmission facilities so cannot comply with this task.
<b>Condition: 13-4</b>	CEC Cal/OSHA	GPC shall note any Cal/OSHA inspections involving the operation of the transmission line in its periodic compliance reports.	On-going	GPC does not own the transmission facilities so cannot comply with this task.

**2018 Annual Compliance Report to the California Energy Commission  
79-AFC-1C Geysers Unit 17 Power Plant**

**LIST OF ACRONYMS**

AFC	Application for Certification
ARB	Air Resources Board
CAL/OSHA	California Occupational Safety and Health Administration
CEC	California Energy Commission
CDF&W	California Department of Fish and Wildlife
CDF	California Department of Forestry
CDHS/RHB	California Department of Health Services Radiological Health Branch
CPM	Compliance Program Manager
CVRWQCB	Central Valley Regional Water Quality Control Board
DTSC	California Department of Toxic Substances Control
GAMP	Geysers Air Monitoring Program
GPC	Geysers Power Company LLC
LCAQMD	Lake County Air Quality Management District
LCBO	Lake County Building Official
PG&E	Pacific Gas and Electric Company
NCRWQCB	North Coast Regional Water Quality Control Board
NSCAPCD	Northern Sonoma County Air Pollution Control District
SCBO	Sonoma County Building Official
UBC	Uniform Building Code

# ATTACHMENT 1

**CEC Guzzler Inspection Notes**  
**Inspected March 2 and 9, 2019 by Allen Sonnevile**

Unit 17

- Guzzler in good condition.



- The sedimentation pond outlet is dry and appears to be plugged.



## **ATTACHMENT 2**



**GEYSERS POWER COMPANY, LLC**

10350 Socrates Mine Road  
Middletown, CA 95461  
707.431.6000

GWQ-19-020

July 23, 2019

Janice M. Thomas, P.E.  
Drinking Water Field Operations Branch  
California Department of Health Services  
50 D Street, Suite 200  
Santa Rosa, CA 95404

**Subject: 2018 Geysers Power Plant Units Recycled Water Use Report**

Dear Ms. Thomas:

Use of Santa Rosa Waste Water (SRWW) first began at Unit 17 on July 22, 2004 where it supports cooling tower basin levels by replacing blowdown water at a rate of 400-500 gpm. When tower basin water levels are sufficiently high, SRWW bypasses the tower and enters the onsite sediment pond, where it mixes with condensate then gravity fed to the Unit 11 sediment pond prior to reinjection at the OS-16 well. Tabulated below are various uses of SRWW during 2018.

2018 Total	U17 Tower	U20 Tower	Unit 7/8 Sediment Pond	Aidlin Injection and/or Burner
Million Gallons	83,550,307	122,389,385	377,179,975	112,539,666

Minor amounts of SRWW were used for incidental purposes as identified in Section 3.2 of the Engineering Report. These uses may consist of dust control, construction, fire-fighting and industrial process water. Additionally, SRWW was used for various drilling activities in Sonoma County during 2018. Appropriate signage and labeling was directed by the User Supervisor (Jaime Griep) for these activities.

If you have any questions, please contact me at (707) 431-6097.

Sincerely,

  
Bill King  
Calpine-Geysers EHS