DOCKETED	
Docket Number:	80-AFC-01C
Project Title:	Sacramento Municipal Utility District SMUDGEO #1
TN #:	264526
Document Title:	2024 Annual Compliance Report - Sonoma (U3)
Description:	N/A
Filer:	Haley DeLong
Organization:	Geysers Power Company, LLC
Submitter Role:	Applicant
Submission Date:	6/30/2025 3:47:36 PM
Docketed Date:	6/30/2025

CALPINE

GEYSERS POWER COMPANY, LLC

10350 SOCRATES MINE ROAD

MIDDLETOWN, CA 95461

GPC-25-089

June 30, 2025

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

Subject: 2024 Annual Compliance Report – Unit 3 (Sonoma) Power Plant (80-AFC-01C)

Dear Mr. Heiser:

In fulfillment of the Compliance Plan's annual reporting requirement, Geysers Power Company, LLC hereby submits the 2024 Annual Compliance Report (ACR) for Unit 3 (Sonoma), Docket Number 80-AFC-01C, as required by Condition COM-5.

If you have any comments or questions, please contact me at (707) 431-6062.

Sincerely,

DocuSigned by:
Saima Baig
0F6F9758F4134D0...

Saima Baig
EHS Manager
Calpine Corporation

cc:
Mr. Neal Craig
Bureau of Land Management
2550 N. State Street
Ukiah, California 95482

Geysers Sonoma Plant (Unit 3)
80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024 Reporting Period

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 19, 1980, the Sacramento Municipal Utility District filed an Application for Certification (AFC) for SMUDGEO #1. In order for the AFC to be granted the CEC issued the "Final Decision Document for SMUDGEO NO. 1" (aka, Sonoma Power Plant). Since July 17, 1998 when SMUD sold this Power Plant, transfer of ownership requires Geysers Power Company LLC (GPC or Project Owner) to be responsible for administering and monitoring various Conditions for Certification as contained in the Final Commission Decision. One of the requirements contained in the CEC's Final Commission Decision for Sonoma Power Plant requires GPC to submit an Annual Report that summarizes compliance tasks conducted during the previous year.

During the purchase of the Sonoma Power Plant, in 1998, GPC's counsel received a letter from Ms. Jeri Zene Scott, CEC Compliance Project Manager, which included a list of "on-going" and "as needed" conditions. GPC has addressed the remaining conditions, based on the "Compliance Plan for the SMUDGEO No. 1 Geothermal Project."

Two amendments to the Final Decision have been approved by the CEC, resulting in the inclusion of additional on-going compliance tasks for reporting in the Annual Compliance Report.

First, on October 20, 2020, the CEC Final Decision was amended to revise the Air Quality Conditions of Certification and approved the installation of the wet down system permanent diesel engine at Sonoma (TN#: 235329). The new Air Quality Conditions of Certification requires on-going reporting of certain monitoring and other activities at Sonoma.

Second, on November 16, 2020, additional Compliance Conditions of Certification were adopted for Unit 19 (TN#: 235703): GEN-1, COM-1 through 11, FIRE PREVENTION-1 and FIRE PROTECTION-1 through 5. Condition COM-5 requires submission of Periodic and Annual Compliance Reports and details specific reporting requirements that should be included in each Annual Compliance Report (ACR). The following sections of this ACR corresponds with the reporting requirements set forth in Condition COM-5. The conditions with annual reporting requirements are discussed under Section 3 and summarized below:

Geysers Sonoma Plant (Unit 3)
80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024 Reporting Period

Technical Area	Conditions with Annual Reporting Requirements
Air Quality	AQ-A5, AQ-A7, AQ-C8, AQ-DE1, AQ-E2, AQ-E3, AQ-E4, AQ-F1, AQ-G11, AQ-SC2, AQ-SC3
Compliance	COM-5
Fire Prevention	Fire Prevention-1
Fire Protection	Fire Protection-3
Public Health	PH 2-1
Transmission Line Safety and Nuisance	TLSN 13-2
Water Quality, Hydrology and Water Resources	WQ 6-5

In accordance with Condition Compliance-5 of the License, the Project Owner reports as follows:

1. Updated Compliance Matrix

A copy of the updated compliance matrix showing the status of all conditions of certification (with the exception of fully satisfied conditions) is included as an attachment under COMPLIANCE-5.

2. Summary of current project operating status and explanation of any significant changes to facility operating status during the year

The Sonoma Power Plant is currently operational and there were no significant changes to facility operating status during the year. During the 2024 operational year, the following outages occurred:

Event	Summary	Start	End
Forced Outage	High Back Pressure/CWP's Tripped	1/8/24 14:50	1/8/24 16:26
Forced Outage, Transmission supplier	230 kV Transmission Line Tripped During Storm	2/19/24 21:20	2/20/24 7:00
Planned Outage (BOP)	Planned Outage for Maintenance	10/19/24 2:04	10/19/24 19:24
Planned Outage, Transmission supplier	Transmission Supplier Planned outage	12/14/24 6:30	12/14/24 18:30
Forced Outage	Unit Tripped at 2100 due to a Failed PLC Module.	12/18/24 21:00	12/19/24 0:55

3. Required Annual Compliance Report Documents

The following documents are required by the Conditions of Certification to be submitted annually. The following table indicates which of these submissions are included with this ACR.

Condition of Certification	Submittal Title
AQ-A5/ AQ-A7 / AQ-C8/ AQ-E2/ AQ-DE1/ AQ-SC2	**Attachment AQ-E2a**: Annual Criteria Pollutant Report for 2024 **Attachment AQ-E2b**: Engine operating data summary for the 2024 calendar year

Geysers Sonoma Plant (Unit 3)
80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024 Reporting Period

Condition of Certification	Submittal Title
AQ-E3	**Compliance Statement**: The Geysers greenhouse gas emissions report for 2024 was submitted to CARB via the Cal-eGGRT reporting tool.
AQ-E4	**Compliance Statement:** In 2024, there were no steam stacking events that occurred at Sonoma Power Plant.
AQ-F1	**Compliance Statement:** District Regulations: GPC complies with the following District regulations: a. Regulation 1 Rule 400-General Limitations b. Regulation 1 Rule 410-Visible Emissions c. Regulation 1 Rule 430-Fugitive Dust Emissions d. Regulation 1 Rule 492 (40 CFR part 61 Subpart M)-Asbestos e. Regulation 1 Rule 540-Equipment Breakdown f. Regulation 2-Open Burning – no open burning is performed at Unit 3 Federal Regulations: g. 40 CFR Part 68 Risk Management Plan - Unit 3 is exempt from the Risk Management Plan because quantities of flammable hydrocarbons are less than 67,000 lbs. Ref.: EPA notice dated March 13, 2000. h. 40 CFR Part 82-Chlorinated Fluorocarbons - All work performed on appliances containing chlorinated fluorocarbons is performed by HVAC Technicians certified through EPA approved training programs in accordance with the Clean Air Act Section 608 and 40 CFR part 82, Subpart F. i. An Emergency Diesel Engine Maintenance Plan for the Fire Pump Engine permitted under PTO No. 05-54 is implemented in the plant work management system to ensure that the required annual maintenance tasks are performed as required. The facility became subject to 40 CFR Part 63, Subpart ZZZZ in a previous reporting period. All applicable requirements of Subpart ZZZZ were identified, and a compliance plan was provided to the NSCAPCD and the CEC on January 18, 2024. No changes have occurred since that time that would re-trigger this notification requirement.
AQ-G11	**Attachment AQ-G11:** Annual Compliance Certification for 2024
AQ-SC3 / COM-5	**Attachment COM-5**: Compliance Matrix This Annual Compliance Report is being submitted to the CEC in accordance with AQ-SC3 and COM-5. An updated Compliance Matrix is attached in accordance with COM-5.

Geysers Sonoma Plant (Unit 3)
80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024 Reporting Period

Condition of Certification	Submittal Title
PH 2-1	**Attachment PH 2-1:** Table of Quarterly Radon-222 Concentration Analysis in Non-Condensable Gases for 2024
FIRE PREVENTION - 1	The Basis of Design was approved by the CEC on December 5, 2022. The CEC-approved BOD/Recommissioning Plan for this Unit expressly states there is no testing of the wet down system(s) under the plan, and it does not designate an inspection, testing, and maintenance protocol for the wet-down system(s). Therefore, conditions have not arisen that trigger the compliance action required by the condition.
FIRE PROTECTION - 3	Inspection, Testing, and Maintenance (ITM) reports are submitted to the CEC under confidential designation and annual reporting commenced for the 2023 ITM reports. All 2024 confidential ITM reports were submitted on April 23, 2025.
TLSN 13-2	The annual visual transmission line inspection was completed on October 29, 2024, and the annual vegetation inspection was completed on April 29, 2024.
WQ 6-5	**Attachment WQ 6-5**: 2024 Geysers Power Plant Units Recycled Water Use Report. A copy of the report is attached.

4. Cumulative List of All Known Post-Certification Changes Approved by the CEC or CPM

- Order Approving Settlement – 11/19/2020 – CEC TN 235703
- Order Approving Petition to Amend the Facility license (install permanent emergency diesel engine for cooling tower wet-down system) – 10/20/2020 – CEC TN 235329
- Executive Director Approval for Expedited Processing Pursuant to Executive Order B-36-15 (Emergency Reconstruction of Cooling Tower due to Wildfire Damage) – 1/5/2016 – CEC TN 210231
- Expedited Processing Pursuant to Executive Order B-36-15 – Approval of Emergency Construction Activities – 1/13/2016 – CEC TN 207294
- Order Approving Termination of the MOU & LOU Between CEC and USGS and Amendment of the Final Decision – 8/25/2010 – CEC TN 58491
- Approval of Petition to Use Reclaimed Wastewater and Approval of Verification Changes – 3/12/2004 – CEC TN 29183
- Commissioner Order Approving Ownership Transfer from Calpine Geysers Company, L.P. to Geysers Power Company – 4/14/1999 – CEC TN 9069
- Commissioner Order Approving Ownership Transfer from SMUD to Calpine Geysers Company, L.P. – 7/14/1998 – CEC TN 8804

5. Submittal deadlines not met

All 2024 compliance submittals have been submitted and there are no outstanding compliance materials for the 2024 operating year.

Geysers Sonoma Plant (Unit 3)
80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024 Reporting Period

6. Filings Submitted to or Permits Issued by Other Governmental Agencies:

- Quarterly Compliance Reports for Sonoma County Title V compliance to NSCAPCD
- Title V Operating Permit 2024 Annual Compliance Certification for the Power Plants submitted to NSCAPCD
- 2024 PSD H_2S Abatement System Performance Results: Geysers Power Company LLC's Sonoma, Lake View, Grant, Quicksilver and Calistoga Power Plants submitted to CEC & NSCAPCD
- Sonoma County AB2588 Air Toxics "Hot Spots" Emission Inventory Report for the Inventory Year 2024 (electronic data submission) submitted to NSCAPCD
- Criteria Pollutant Year 2024 Emission Inventory for GPC Plants submitted to NSCAPCD
- Monthly submission of completed hazardous waste manifests to DTSC
- Annual Hazardous Waste Report submitted to DTSC
- Semi Annual Deviation Report submitted to NSCAPCD
- 2024 Annual Pollutant Criteria submitted to CEC and NSCAPCD
- Sulfur Hexafluoride (SF_6) Geothermal Resource Tracer Testing Exemption - Progress Report submitted to CARB

7. Projection of Scheduled Compliance Activities for Next Year

- Annual Asbestos Notification: 2025 Nonscheduled Maintenance Projects at Geysers Power Company LLC Facilities Located in Sonoma County submitted to NSCAPCD
- AQ-A1: Perform monthly source test cooling tower H_2S
- AQ-A2: Perform annual performance test on turbine exhaust system
- Compliance-5: Evaluate Site Contingency Plan for unplanned facility closure
- Fire Protection-3: Perform inspections, testing, and maintenance of fire systems
- Fire Protection-3: Annual filing of all 2025 ITM reports
- Fire Protection-4 and Fire Protection-5: Reporting of corrective actions needed to address items identified for correction in quarterly ITM reports (as needed)
- Public Health 2-1: Perform quarterly sampling and analysis of radon-222 concentrations in non-condensable gases entering the power plant in the incoming steam line, or vent off-gas line, or H_2S abatement off-gas line
- Soils 8-2: Perform inspection, maintenance and repair of the sediment collection and dam ditch system
- Water Quality 6-2: Perform inspection, maintenance and repair of the spill containment and storm water drainage systems
- Transmission Line Safety and Nuisance 13-3: Maintain and inspect the transmission line

8. Additions to the Compliance Record

- Sonoma Geothermal Power Plant (Unit 3) – Addition of a Bypass Line Around Exciter Cooling Water Pipes TVC Project (WA-70) Closeout and As-Built Document Package (dated January 31, 2025)

- On-going logging of monitoring and calibration of H_2S monitoring devices, continuous strip chart record and appropriate sampling line, and other additions pursuant to AQ-A1.
- On-going analyses of results of source tests and other tests requested by the NSCAPCD or CEC pursuant to the AQ conditions of certification.
- 2024 Geysers Power Plant Units Recycled Water Use Report to the State WRCB-Division of Drinking Water.

9. Evaluation of the Site Contingency Plan

No modifications were made to the Site Contingency Plan during the 2024 reporting period.

10. Listing of complaints, notices of violations, official warnings, and citations

No complaints, notices of violations, official warnings or citations were received in the 2024 reporting period.

CONDITION OF CERTIFICATION
AQ-A5/ AQ-A7 / AQ-C8/ AQ-E2/ AQ-DE1/ AQ-SC2

Attachment AQ-E2a: Annual Criteria Pollutant Report for 2024

Geysers Sonoma Plant (Unit 3) 80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024

CALPINE

GEYSERS POWER COMPANY, LLC

10350 SOCRATES MINE ROAD

MIDDLETOWN, CA 95461

707.431.6000

GPC-25-016

February 12, 2025

Craig Tallman
Air Quality Engineer
Northern Sonoma County Air Pollution Control District
625 Center Street
Healdsburg, CA 95448
Submitted via email to Craig.Tallman@sonoma-county.org

Subject: Criteria Pollutants Inventory Report Year 2024, For NSCAPCD Plants

Dear Mr. Tallman:

Enclosed is the year 2024 Criteria Pollutants Inventory Report for Geysers Power Plant generating units located in the Northern Sonoma County Air Pollution Control District. This inventory is submitted pursuant to the Title V Operating Permits for Units 3, 5/6, 7/8, 11, 12, 14, 17, 18, 20, Condition II.A.V.2.

Included in the table of pollutants is the information required annually for the Aidlin Power Plant Permits to Operate #19-16 and #19-17 Condition E.3. Not included in the table, but required by the Aidlin permit, is the average annual supplied steam ammonia concentration, which is 583 ppm $_{(w)}$. There were also no changes in the operating protocols used to determine plant chemical feed charts and targets or calibration and maintenance programs.

Please call me at (707) 431-6858, if you have any questions on this subject.

Sincerely,

Haley DeLong
Air Program Manager

Enclosure[1] (CEC Licensed Units: 3, 17, 18, and 20)

cc: John Heiser, CEC Compliance Project Manager (electronic copy)

[1] Data are copied to the CEC compliance project managers as a separate enclosure containing only the information required for CEC licensed facilities pursuant to: Unit 17 CEC Docket 79-AFC-1C, Unit 18 CEC Docket 79-AFC-3C, Unit 20 CEC Docket 82-AFC-1C, and Unit 3 CEC Docket 80-AFC-1C

Geysers Power Company, LLC
Annual Emissions Report For Inventory Year 2024 Including Criteria Air Pollutants

Unit Name/Unit No.	FACID	Gross Generation (MWHrs)	Gross Steam Rate (Klbs / MWHr)	Unit Operating Hour (hrs)	Avg. Circ. Water Flowrate (Gal/Min)	[1] TSDS (ppm_w)	Cooling Tower Drift Rate	Cooling Tower PM: PM_{10} & $PM_{2.5}$ (tons)	[2] TOG (Methane) Emissions (tons)	[3] NH_3 Emissions (tons)	[4] Avg. H_2S Conc. (ppm_w)	H_2S (tons)	[5] CO_{2e} (tons)	Stretford Cooler PM (tons)	Total PM: PM_{10} & $PM_{2.5}$ (tons)
Sonoma (Unit 3)	100006021	508,352	15.6	8740	106,000	808	0.00001	1.9	256	106	73	7.4	11412		1.9
Lakeview (Unit 17)	100006014	549,052	15.2	8035	105,000	2473	0.00002	10.8	939	112	329	3.9	48936	1.1	11.8
Socrates (Unit 18)	100006015	465,373	15.5	8697	96,000	604	0.00001	1.4	142	105	68	7.0	7911	2.6	4.0
Grant (Unit 20)	100006016	309,010	16.7	8376	96,000	835	0.00001	1.7	68	75	38	2.2	3779	6.0	7.7

[1] Annual average of monthly samples of cooling tower water total suspended and dissolved solids, (TSDS).

[2] Total organic gasses in supplied steam measured as methane.

[3] Ammonia emissions expressed as NH_3 are determined from mass balance and steam and water analyses.

[4] H_2S concentration in the supplied steam from the average of weekly samples.

[5] CO_{2e} is regulated not as a criteria air pollutant.

CONDITION OF CERTIFICATION
AQ-A5/ AQ-A7 / AQ-C8/ AQ-E2/ AQ-DE1/ AQ-SC2

Attachment AQ-E2b: Engine Operating Data Summary for 2024

Geysers Sonoma Plant (Unit 3) 80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024

Cooling Tower Wet-down Diesel Engine-Driven Pump Operating Data
Unit 3 – Sonoma Power Plant
January 1, 2024 - December 31, 2024

Facility	*Ultra Low Sulfur Diesel Fuel Use (Gallons)[1]*	*Engine Use (Total Hours)*	*Engine Use by Category*	*Engine Use by Category (Hours)*
Sonoma (Unit 3) License: 80-AFC-01C Condition: AQ-DE1 / AQ-E2	150.1	12.2	Testing/Maintenance	12.2
			Emergency Use	0.0

[1]Fuel use estimated using manufacturer's fuel consumption rating (12.3 gal/hr) x total hours of engine operation

CONDITION OF CERTIFICATION
AQ-G11

Attachment AQ-G11: Annual Compliance Certification for 2024

Geysers Sonoma Plant (Unit 3) 80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024

ATTACHMENT

Geysers Power Company LLC,

Sonoma Power Plant Title V Operating Permit, Compliance Certification Report

For The Period January 1, 2024 through December 31, 2024

I certify that all information submitted herein is true, accurate and complete. Based on belief formed after reasonable inquiry, the Geysers Power Company LLC, Sonoma PP Geothermal Power Plant is in compliance with the applicable federal, state, and local requirement(s) as identified in the attached Geysers Power Company LLC, Sonoma PP Title V Operating Permit Annual Compliance Certification Report.

DocuSigned by:
Robert Parker
800FC4F0072C44B...

6/16/2025 | 1:26 PM CDT

Signature of Responsible Official **Date**

Robert Parker – VP Operations, Geysers

Geysers Power Company LLC, Sonoma Power Plant Title V Operating Permit
COMPLIANCE CERTIFICATION REPORT
01/01/24 through 12/31/24

CONTENTS

I. EQUIPMENT LIST

A. PERMITTED SOURCE LIST Each of the following sources has been issued a Permit to Operate pursuant to the requirements of NSCAPCD Regulation 1, Chapter II Permits. The equipment and capacities listed in Tables I.A and I.B are based on information provided by the permit holder. Routine maintenance, repair, or replacement with identical or equivalent equipment that does not result in an increase, or potential increase, in emissions of any air pollutant subject to District control does not require a permit modification. Replacement equipment that is within 5% of the listed capacity shall be considered equivalent for the purposes of this permit.

Pumps listed with a capacity range may be replaced with pumps within the listed range without notification to the District. Any replacement of pumps outside the listed range shall receive District approval prior to replacement;

Power Plant			
S-#	**Sonoma Description**	**Nominal Capacity**	**Notes**
1	Steam Turbine	1,100,000 lb Steam/hr; maximum plant gross steam flow	***No Changes***
2	Generator	78 MW gross nameplate capacity	***No Changes***
3	Surface Condenser with Gas Removal System consisting of 2 stages of steam ejectors and vacuum pump	8.3×10^8 lb steam/hr	***No Changes***
4	Cooling Tower, Cross Flow Mechanical Draft Type with 0.001% rated drift eliminators with 12x150 hp fans	142,080 gpm maximum 150 hp each	***No Changes***
5	Turbine Bypass	908,000 lb Steam/hr	***No Changes***
6	Gland Steam Seal Leakoff System consisting of:		
A	Gland Steam Seal Leakoff Condenser		***No Changes***
B	Gland Steam Seal Leakoff Exhaust Blower	5 HP	***No Changes***
C	Gland Steam Seal Leakoff Separator		***No Changes***
7	Emergency Standby Diesel Powered Fire Pump	PTO 05-54 380 HP, Cummins Model NT-855-F2	***No Changes***

B. Abatement Device List

Hydrogen Sulfide Control System consisting of:			
A-#	**Description**	**Nominal Capacity**	**Notes**
1	**Stretford Air Pollution Control System consisting of:**		***No Changes***
A	Venturi Scrubber		***No Changes***
B	H2S Absorber, 2'10" D x 7' H.	95 gpm	***No Changes***
C	Two Oxidizer Tanks 15'D x 19'H, with 1 oxidizer blower, 125 HP, 2,000 cfm, and 2 oxidizer blowers, 60 HP, 900 cfm each	20,000 gallons each	***No Changes***
D	Sulfur Slurry Tank 11"D x 14' H	9,500 gallons	***No Changes***
E	Sulfur Filter		***No Changes***
F	Pump Tank 15' D x 14' H	18,000 gallons	***No Changes***
G	Pump Tank Evaporative Cooler, 0.002% drift		***No Changes***
H	Condensate Tank 4' D x 5' H	470 gallons	***No Changes***
I	Make-Up Tank 4' D x 5' H	470 gallons	***No Changes***
J	25% Caustic Supply Tank	10,250 gallons	***No Changes***
K	Main pumps consisting of		***No Changes***
a	Scrubbing Solution Circulating Pump and Spare	60 hp each, 1,037 gpm	***No Changes***
b	Vacuum Pumps and Spare, 10 HP		***No Changes***
c	Make-Up Pumps and Spare 1 HP		***No Changes***
d	Sulfur Slurry Tank Pumps and Spare 1.5 HP		***No Changes***
e	Caustic Supply Pump 0.5HP		***No Changes***
L	Stretford Bypass		***No Changes***
M	Sulfur Melter		***No Changes***
2	**Secondary H2S Abatement System Consisting of:**		
A	Direct Condensate Reinjection/ Condensate Reroute and/or		***No Changes***
B	Hydrogen Peroxide Injection/Storage System		***No Changes***
C	Metal Chelate/Storage System		***No Changes***

II. PERMIT CONDITIONS

Permit conditions are designated federally (**F**), state (**S**), and/or locally (**L**) enforceable.

A. POWER PLANT AND ABATEMENT SYSTEMS		***Compliance***	***NOTES/MEANS/METHODS***
I. Emission Limits			
Emission Limits for H_2S			
1. The Sonoma power plant and associated abatement systems shall comply with Regulation 1 Rule 455 (b)-Geothermal Emission Standards. Total emissions of H_2S shall not exceed 8.6 pounds averaged over any one-hour period. Total H2S emissions shall be the cumulative emissions to the atmosphere from the power plant and associated abatement equipment. *ref. Rule 455(b),* ***PTO 97-30B Cond. 20, PTO 97-30A Cond. 16.***	**S** **L**	***Yes***	***Source Tests are conducted monthly, as required in condition III.1 to verify compliance with this condition. Results of the NSCAPCD Method 102 source tests, as well as excursions and exceedances, are reported to the District in the quarterly compliance reports.***
2. The operator of this source shall not discharge or cause the discharge into the atmosphere of more than a total of 8.0 pounds/hour of H_2S from the Sonoma Power Plant. ***ref. PSD NC 80-01 Cond. VIII.C.***	**F** **S** **L**	***Yes***	***Source Tests are conducted monthly, as required in condition III.1. to verify compliance with this condition. Results of the NSCAPCD Method 102 source tests, as well as excursions and exceedances, are reported to the District in the quarterly compliance reports.***
3. The exit concentration in the process piping leading from the Stretford System shall not exceed 10 ppmv H_2S averaged over any consecutive 60-minute period unless operating under a Stretford bypass allowance or a District approved Alternative Compliance Plan (ACP). ***ref. PTO 97-30A Cond. 17.***	**S** **L**	***Yes***	***Continuous monitoring is in service and maintained to verify compliance. An automatic alarm notifies the operator prior to exceeding the limit. Excursions and exceedances are documented in follow-up reports and in the quarterly compliance reports. No deviations to this condition occurred during the reporting period.***
4. The power plant and associated abatement systems shall comply with Regulation 1 Rule 455 (a)-Geothermal Emission Standards; no person shall discharge into the atmosphere from any geothermal operation sulfur compounds, calculated as sulfur dioxide, in excess of 1,000 ppmv. *ref. Rule 455(a)*	~~**F**~~ **S** **L**	***Yes***	***Plant systems that contain sulfur oxides are designed to limit emissions to concentrations less than the limit. Continuous monitoring of process piping gas concentration prior to release in the cooling tower is in service and maintained to verify compliance. No deviations to this condition occurred during the reporting period.*** ***Condition I.4 is based on Rule 455(b) which was removed from the SIP and is therefore should no longer be considered Federally enforceable.***

5. Annual emissions from the cooling tower shall not exceed, on a calendar year basis, 14.5 tons per year of hydrogen sulfide (H_2S). *ref, Rule 240(d).*	**S L**	***Yes***	***Source tests are performed monthly as required by Condition III.1 to determine the H_2S emission rate. The monthly emission rates are averaged and multiplied by the annual hours of operation to calculate the annual emissions. H_2S emissions were below the annual emissions limit for the reporting period.***
Emission Limits for Particulate Matter			
6. The power plant and associated abatement systems shall comply with Regulation 1 Rule 420 (d) Non-Combustion Sources- Particulate Matter; no person shall discharge particulate matter into the atmosphere from a non-combustion source in excess of 0.2 grains per cubic foot of exhaust gas or in total quantities in excess of the amount shown in Table I. (40 lb/hr) whichever is the more restrictive condition. *ref. Rule 420(d)*	**F S L**	***Yes***	***Calculation of the PM discharge rate is based upon monthly total solids analyses and the cooling water flow rate. PM emission calculation is per Permit specified condition III.4. Calculations indicate that the plant was in compliance with this limit during the reporting period.***
7. Annual emissions from the cooling tower shall not exceed, on a calendar year basis, 20.3 tons per year particulate matter less than 10 microns in diameter (PM-10) and 15.3 tons per year particulate matter less than 2.5 microns in diameter (PM-2.5) *ref. Rule 240(d)*	**S L**	***Yes***	***Particulate emission rate determined as required by III.4. The results of that determination are used to determine the annual emission. Calculations indicate that the plant was in compliance with these limits during the reporting period.***
II. Operational Limits and Requirements			
1. The permit holder shall not operate the plant unless untreated gases are vented to the Stretford Air Pollution Control System unless operating under a Stretford bypass allowance. Stretford bypasses shall be limited to no more than 6 allowances per calendar year. Each Stretford bypass allowance shall be carried out as expeditiously as possible and shall not exceed a total duration of 8 hours. During a Stretford bypass allowance main steam flow shall not exceed 150,000 pounds per hour. Direct condensate re-injection shall be maximized to reduce H_2S in the cooling towers. The permit holder shall notify the District in writing at least 1 day prior to conducting a Stretford bypass. Stretford bypass allowances shall only be utilized during Stretford maintenance procedures. The secondary H_2S abatement system and the Stretford abatement system shall be kept in good working order and operated as necessary in order to limit H2S and particulate emissions on a continuous basis from the power plant as specified in condition I.1, I.2, I.3, I.4, and I.5. *ref. Rule 240.d,* ***PTO 97-30A Cond. 15A, PTO 97-30B Cond. 14 &19.***	**S L**	***Yes***	***The H_2S abatement systems are operated and maintained in accordance with operating practices and a maintenance program described in the Title V application.***

2. In the event that chemical secondary condensate treatment is necessary and except for justifiable reasons during performance testing or under operation of an ACP, for which the permit holder has received prior District written approval, the circulating water shall be kept to the following specification: Circulating water abatement solution concentration shall be maintained at or above the ppmw concentration recommended in the power plant operating guidelines as necessary to abate H_2S emissions from the power plant to the emission limit specified in Condition I.1. *ref.* ***PTO 97-30B Cond. 19***	**S L**	***Yes***	***Abatement solution in the circulating water is added as needed to comply with the emissions limit specified in Condition I.1.*** ***Operators perform "Hach" Ferreover colorimetric tests required by this condition as a part of their daily routine plant compliance checks when applicable.***
3. Any continuously operated abatement solution feed systems shall have a readily accessible flowmeter readable in appropriate units and equipped with alarms signaling no or low flow. Flowmeter accuracy shall be plus or minus 10% of flow. ***ref. PTO 97-30B Cond.***	**S L**	***Yes***	***There are no continuously operated abatement solution feed systems at Unit 3.***
4. All the abatement systems shall be properly winterized and maintained to ensure proper and reliable functioning. All primary pressure gauges and flow meters associated with abatement equipment shall be readily identified, maintained in good operating condition and calibrated on a quarterly basis. Alarm systems associated with abatement equipment shall be tested on a quarterly basis. Calibration and maintenance shall be performed according to manufacturer's recommendations or per the permit holder's maintenance schedule as needed to maintain the equipment in good working order. ***ref. PTO 97-30A Cond. 14, PTO 97-30B Cond. 19.***	**S L**	***Yes***	***Maintenance practices are in place to ensure compliance with this condition. There are no primary pressure gauges and flow meters associated with abatement equipment at Unit 3. Alarms related to the CCM are tested on a routine basis.***
5. Untreated vent gas shall be emitted to the atmosphere only during upset/breakdown situations pursuant to Regulation 1 Rule 540. During periods of cold start-ups the vent gas H_2S treatment system shall be operated as necessary to preclude the release of untreated vent gases to the atmosphere above the permitted emission limits specified in Condition I.1 and I.4***. ref. PTO 97-30B Cond. 19.***	**S L**	***Yes***	***Plant design and operating practices preclude the release of untreated vent gas during startup operations. There were no untreated gas releases during this reporting period. Emergency gas release vents are equipped with automatic alarm systems that indicate if they are activated.***
6. All areas in the immediate vicinity and under the permit holder's responsibility shall be properly treated to control fugitive dust. *ref. PTO 97-30B Cond. 21.*	**S L**	***Yes***	***Fugitive dust is controlled with general clean-up and housekeeping.***
7. Fugitive Leaks			
a. Non-condensable gas leaks: Valves, flanges, seals on pumps and compressors, piping and duct systems shall be inspected, maintained and repaired to prevent the emission of non-condensable gases to the atmosphere. Valves, flanges and seals shall be tightened, adjusted, or have gasket material added using the best modem practices for the purpose of stopping or reducing leakage to the atmosphere.	**F S L**	***Yes***	***A review of maintenance records indicate that the plant is in compliance. A review of daily compliance checklists indicated that the operators inspect the system for fugitive leaks.***

Non-condensable gas leaks shall not (i) exceed (as measured within 1 cm of such leak) 1000 ppm(vol) H_2S nor 10,000 ppm(vol) methane nor (ii) exceed emission limits of Rule 455. Such leaks shall be repaired within 24 hours, unless the leak is from essential equipment. If the leak is from essential equipment, the leak must be minimized within 24 hours using best modem practices and eliminated at the next prolonged outage of the process unit unless an extension is approved by the APCO. Essential Equipment is defined as equipment which cannot be taken out of service without shutting down the process unit which it serves. Leak Minimization is defined as the tightening, adjusting, or addition of packing material which surrounds the leak, or the replacement of the valve or flange for the purpose of stopping or reducing leakage to the atmosphere, using best modem practices			***Plant operations and maintenance follow the procedure outlined in this permit condition to identify fugitive emissions.*** ***Maintenance records are available to inspectors to verify that fugitive emissions are minimized and controlled in a timely manner.*** ***Fugitive leak inspections are performed more frequently than once per quarter. The operator conducts daily rounds to inspect the plant which include identifying any leaks and entering the information into the plant log and submitting a work-order requesting repair.***
b. Steam and Condensate leaks: Valves, flanges, seals on pumps and compressors, piping and duct systems shall be inspected, maintained and repaired to prevent the emission of steam and condensate to the atmosphere. Valves, flanges and seals shall be tightened, adjusted, or have gasket material added using the best modem practices for the purpose of stopping or reducing leakage to the atmosphere. Valves, flanges, drip legs, threaded fittings and seals on pipelines shall be maintained to prevent or reduce the emission of steam and condensate to the atmosphere as noted below: Liquid leak rate in pressurized steam and condensate lines shall not exceed 20 ml in 3 minute. Liquid leak rates in excess of20 ml in 3 minutes shall be repaired within 15 calendar days, excepting those leaks from essential equipment. If the leak is from essential equipment, the leak must be minimized within 15 days using best modem practices and eliminated at the next prolonged outage of the process unit unless an extension is approved by the APCO. Essential Equipment is defined as equipment which cannot be taken out of service without shutting down the process unit which it serves. Leak Minimization is defined as the tightening, adjusting, or addition of packing material which surrounds the leak, or the replacement of the valve or flange for the purpose of stopping or reducing leakage to the atmosphere, using best modem practices The permit holder shall check the power plant for fugitive leaks at least once per quarter. ***ref PTO 97-30B Cond. 21***.	**S L**	***Yes***	***A review of maintenance records indicate that the plant is in compliance. A review of daily compliance checklists indicated that the operators inspect the system for fugitive leaks.*** ***Plant operations and maintenance follow the procedure outlined in this permit condition to identify fugitive emissions.*** ***Maintenance records are available to inspectors to verify that fugitive emissions are minimized and controlled in a timely manner.*** ***Fugitive leak inspections are performed more frequently than once per quarter. The operator conducts daily rounds to inspect the plant which include identifying any leaks and entering the information into the plant log and submitting a work-order requesting repair.***

8. Alternative Compliance Plan			
a. The permit holder may propose an Alternative Compliance Plan (ACP) which allows for operating flexibility of the power plant while maintaining compliance with all applicable emission limits of Conditions I.2, I.4. and I.5. The ACP shall list operating parameters such as power output (MW) and abatement solution concentration levels which shall be met in order to meet all applicable emission limits listed above. The ACP shall be submitted to the APCO for approval. The APCO shall approve, disapprove or modify the plan within 30 days of receipt of the ACP. An APCO approved ACP shall consist of all parametric operating guidelines which shall be used to determine compliance with Conditions I.2, I.4, and I.5. The ACP shall list the specific operating conditions the ACP will supersede.	**F** **S** L	***Yes***	***No ACP is currently in place as allowed under this condition.***
b. The permit holder may propose an Alternative Compliance Plan (ACP) which allows for operating flexibility of the power plant while maintaining compliance with all applicable emission limits of Conditions I.1, and I.3. The ACP shall list operating parameters such as power output (MW) and abatement solution concentration levels which shall be met in order to meet all applicable emission limits listed above. The ACP shall be submitted to the APCO for approval. The APCO shall approve, disapprove or modify the plan within 30 days of receipt of the ACP. An APCO approved ACP shall consist of all parametric operating guidelines which shall be used to determine compliance with Conditions I.1, and I.3. The ACP shall list the specific operating conditions the ACP will supersede.	**S** **L**	***Yes***	***No ACP is currently in place as allowed under this condition.***
Facilities Operation			
9. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Permit shall at all times be maintained in good working order. The equipment shall be operated in a manner necessary to meet all emission limits of the permit. *ref. Rule 240(d**), PSD NC 80-01 Cond. II**.*	**F** **S** **L**	***Yes***	***The Plant operator conducts daily rounds to inspect the plant. Any equipment or system in need of repair is identified and the information is entered into the plant log and a work order is submitted requesting repair. Weekly compliance checks indicate compliance with this condition.***
10. The cooling tower shall be maintained in good operating condition. The permit holder shall conduct an integrity inspection of the cooling tower during each scheduled plant overhaul and carry out any repairs necessary to correct all deficiencies encountered. *ref. Rule 240(d)*	**S** **L**	***Yes***	***Routine plant inspections by operators include the cooling tower to identify areas in need of repair. Plant maintenance makes repairs during plant overhauls. A review of plant overhaul work planning indicated that cooling tower repair work is included.***

11. The permit holder shall operate and maintain the following air pollution control equipment at the Sonoma Power Plant: a. The non-condensable gas stream exiting from the surface condenser shall be ducted to an operating Stretford process unit. b. Condensate exiting from the surface condenser shall be treated as necessary to reduce the levels of dissolved hydrogen sulfide. The permit holder shall use a Hydrogen Peroxide/ Iron Catalyst system to accomplish this reduction. With prior written EPA approval, the permit holder may use an alternative secondary treatment system. c. The permit holder shall have installed equipment to allow the turbine to be bypassed during plant startup, and scheduled and unscheduled outages of the turbine. This bypass shall allow all other pollution control devices to continue to treat all incoming steam. At no times shall the permit holder allow the venting of untreated steam to the atmosphere from the Sonoma Power Plant. d. The permit holder shall have installed drift controls on the power plant cooling towers to minimize emissions of particulate matter. ***ref. PSD NC 80-01 Cond.VIII.B.***	**F** **S** **L**	***Yes***	***a. By design the non-condensable gasses are ducted to the Stretford system.*** ***b. A secondary abatement system, including condensate re-route is in place, and is permitted by the NSCAPCD.*** ***c. A turbine bypass is in place to abate steam during plant startup and scheduled and unscheduled outages of the turbine.*** ***d. Based upon manufacturers specifications, the cooling tower drift eliminators meet the requirement of this condition.***
12. The permit holder shall, in each calendar year, limit unscheduled outages for the Sonoma Power Plant to no more than 3 stacking events. The permit holder shall have on file with the District an approved operating protocol describing the methods that will be used to meet the 3 stacking event performance standard. The protocol must include a description of the operational procedures between the steam supplier and permit holder, permit holder's operational procedures, and equipment to meet the above standard. The terms and requirements of the protocol may be modified by the Control Officer for good cause upon written request from the permit holder. In the event the permit holder is not able to meet the standards specified above, the following shall be required: The permit holder shall prepare and submit a revised "plan" to the Control Officer, within 30 days of the end of the month in which the outage limit is exceeded, to achieve the outage standards set forth in this permit condition. At a minimum, the measures to be considered in the "plan" shall include: improved coordination of the power plant and steam field operations, improved alarming and control systems, increased duration of manned operation of the power plant, improved preventative maintenance, and design modifications as may be indicated by the operating history of this unit. Within 30 days of receipt of the "plan" the Control Officer shall determine whether the "plan" is satisfactory and, if so, shall approve the "plan". Upon approval, the	**S** **L**	***Yes***	***All occurrences meeting the condition criteria are reported to the District in the quarterly compliance reports.*** ***There were no stacking events during the reporting period.*** ***A protocol is in place to meet the requirements of this condition.*** ***Steam lines interconnecting the power plants allow steam to be shifted to other operating plants if an outage occurs. No outages have resulted in steam stacking since interconnection of the steam lines was completed.***

revised "plan" shall supersede the old plan and become a part of the terms and conditions of this permit. ***ref. PT0 97-30B Cond.17.***			
III. Monitoring, Testing and Analysis			
Performance Tests			
1. The permit holder shall, on a monthly basis, conduct a source test of the cooling tower to determine the H_2S emission rate to verify compliance with condition I.1.1. A source test shall also be conducted every time the Stretford bypass allowance is utilized. District Method 102 shall be utilized to determine the H2S emission rate. The permit holder may propose an Alternative Compliance Plan (ACP) which allows for operating flexibility of the power plant, including periods when accessing the cooling tower is not possible, while maintaining compliance with all applicable emission limits of Condition I.1. The ACP shall list operating parameters such as power output (MW), target pH, abatement solution concentration levels, and burner/scrubber exit concentrations which shall be met in order to meet all applicable emission limits listed above. The ACP shall be submitted to the APCO for approval. The APCO shall approve, disapprove or modify the plan within 30 days of receipt of the ACP. An APCO approved ACP shall consist of all parametric operating guidelines which shall be used to determine compliance with Condition I.1. The ACP shall list the specific operating conditions the ACP will supersede. ***ref. PTO 97-30B Cond. 20.***	**S L**	***Yes***	***NSCAPCD Approved version of Method 102 (Modified Method 102) Source tests were performed each month and reported to the District in the quarterly reports.*** ***All test results and determinations indicated compliance with this condition.***
1a. The permit holder shall conduct or cause to be conducted performance tests on the turbine exhaust system to determine the H_2S emission rate to verify compliance with condition I.2. Performance tests shall be conducted in accordance with Northern Sonoma County APCD Method 102, unless otherwise specified by EPA. The permit holder shall furnish the Northern Sonoma County APCD, the California Air Resources Board and the EPA (Attn: Air-5) a written report of such tests. All performance tests shall be conducted at the maximum operating capacity of the plant. Performance tests shall be conducted at least on a yearly basis and at such times as shall be specified by EPA. ***ref. PSD SFB 81-03 Cond. IX.E.***	**F S L**	***Yes***	***An annual report including all Geysers plants with PSD permits is sent to the agencies listed in this condition. Reference letter GPC25-026 dated 2/19/2025.***
2. The permit holder shall provide platforms, electrical power and safe access to sampling ports to enable representatives of the District, ARB and EPA to collect samples from the main steam supply, treated and untreated condensate, circulating water upstream of the cooling tower, cooling tower stacks, untreated and treated non-condensable gas stream to and from the Stretford abatement facility, any off gas bypass vents to the atmosphere and any Stretford tanks or evaporative coolers. ***ref. PTO 97-30B Cond. 12, PSD NC 80-01 Cond. VIII D***.	**F S L**	***Yes***	***Sample taps used by plant personnel for chemical sampling and analysis are also available for use by CARB and District personnel. Safety Orientations and Job Safety Analysis are available for District and ARB representatives and highly encouraged for sampling activities.***
3. The permit holder, as requested by the Control Officer, shall conduct a District approved performance test for particulate matter (PM), H_2S, other species (i.e. benzene, mercury, arsenic, TRS, mercaptans, radon, other nitrogen compounds	**S L**	***Yes***	***Tests for listed species are performed at the request of the District utilizing District approved methods and***

	(amines) and compounds listed under NESHAPS and/or AB2588 from the power plant evaporative cooling tower and/or the Stretford evaporative cooling tower. Upon written request of the Control Officer, the permit holder shall submit to the District at least 45 days prior to testing a detailed performance test plan. The District shall approve, disapprove or modify the plan within 45 days of receipt of the plan. The permit holder shall incorporate the District's comments or modifications to the plan which are required to assure compliance with the District's regulations. The Control Officer shall be notified 15 days prior to the test date in order to arrange for an observer to be present for the test. The test results shall be provided to the District within 45 days of the test date unless a different submittal schedule is approved in advance by the Control Officer. ***ref. PTO 97-30B Cond 11.***			***approved test plan. No test requests by the District are currently active.***
4.	Compliance with the particulate mass emission limitation shall be estimated using calculations based on the evaporative cooling tower manufacturers design drift eliminator drift rate, 0.001 percent for the main cooling tower and 0.002% for the Stretford cooling tower, 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. ***ref. PTO 97-30A Cond. 16, PTO 97-30B Cond. 22***	**F S L**	***Yes***	***Monthly analysis by plant chemical staff and calculations done in accordance with the condition. Calculation of the particulate emissions is based upon monthly samples and analysis of the cooling tower water TSS and TDS. These calculations indicate that the unit was in compliance with this condition during the reporting period.***
5.	Main steam supply H_2S concentrations shall be determined minimally on a weekly basis and any additional times as required by the operating protocol or ACP. *ref. Rule 240(d).*	**S L**	***Yes***	***A protocol on file with the District describes the method used to determine H_2S concentration. A review of the records indicates that the requirements of this condition are being met.***
6.	In the event that chemical secondary condensate treatment is necessary the permit holder shall perform a condensate H_2S concentration test, on a frequency that is defined in the Alternative Compliance Plan or an abatement solution concentration test of the cooling tower circulating water once per operating shift when abatement solution is necessary in order to achieve compliance with Condition I.1. The testing equipment shall be kept calibrated per the manufacturer's specifications. *ref. Rule 240(d).*	**S L**	***Yes***	***Operators perform tests required by this condition as a part of their daily routine plant compliance checks when applicable.***
7.	Instruments used for the measurement of H_2S or Total Organic Gases to satisfy District permit conditions or regulations shall receive District approval prior to use. Test plans shall be submitted for District approval of instruments used for the measurement of H_2S or Total Organic Gases to satisfy District permit conditions or regulations. *ref. Rule 240(d)*	**S L**	***Yes***	***The NSCAPCD has approved the following instruments that are used to measure H2S: ASI Model; 102, Jerome Instruments Model 631, "Dräger" brand sampling and analysis tubes. Organic gases are analyzed utilizing an "Aglient" Model 3000C G.C.***

8. In the event that chemical secondary condensate treatment is necessary all sampling protocols, chemical feed charts, targets and operational guidelines for using said charts and targets, necessary to abate H_2S emissions from the power plant to the emission limits specified in Conditions I.1 and I.2 must be developed using good engineering judgment and supporting data. The APCO may review such sampling protocols, chemical feed charts, targets and guidelines upon request. If the APCO determines that any of the protocols, feed charts, targets, or guidelines are not sufficient to maintain compliance with Conditions I.1 and I.2, the APCO shall require the permit holder to develop revised protocols, feed charts, targets and guidelines. *ref. Rule 240(d)*	**S** **L**	***Yes***	***Protocols related to this condition were submitted and approved by the District in the initial Title V application.*** ***Plant unit engineers specify targets and guidelines based on good engineering judgment and recent chemical analyses. Targets and operating requirements are available electronically via the plant intranet and they are typically posted on an erasable board in the operating control room.***
Continuous Compliance Monitoring (CCM)			
9. The permit holder shall operate a continuous compliance monitor capable of measuring the concentrations of H_2S in the exhaust stream from the Stretford absorber in order to verify compliance with conditions I.1 and I.3. The monitoring system must alarm the operator when H_2S in the treated gas is in excess of 10 ppmv. The permit holder shall respond to the alarm with appropriate mitigative measures. Mitigative measures taken shall be logged in the power plant abatement log book. In the event H_2S concentrations are in excess of 10 ppmv and the range of the CCM is exceeded, the permit holder shall test for H2S using an approved alternative method (ex Draeger tester, wet chemical tests) once every hour during the excess. The monitor shall have a full range of at least 25 ppmv. The monitor shall meet the following operational specifications: an accuracy of plus or minus 10% of full scale, provide measurements at least every 3 minutes, provide a continuous strip chart record or a District approved alternative, and provide monthly data capture of at least 90%. The District must be notified when the concentration of H_2S exceeds the hourly average limit of 10 ppmv. A one-point calibration shall be performed at least once per week. A three-point calibration shall be performed at least once per quarter. The Control Officer may allow modifications to the above specifications under an ACP upon written request with justification by the permit holder as long as emissions from the power plant do not exceed the "total" H_2S emission limitations of condition I.1. Written notification from the Control Officer must be received by the permit holder prior to any change in monitoring specifications. ***Ref. PTO 97-30A Cond. 16 & 17.***	**S** **L**	***Yes***	***A monitor meeting the requirements of this condition is in place and operational. Plant records indicate that the continuous monitor consistently meets the requirements of this condition. Verification of these requirements is sent to the NSCAPCD in the quarterly reports. There were no deviations from this condition during the reporting period. Plant records indicate that calibrations are performed as required.***

Ambient Air Monitoring			
10. The permit holder shall maintain and operate one H2S/meteorological monitoring station, PM-10 high volume station at a location approved in advance by the Control Officer for the life of the facility. The permit holder shall install and operate additional monitoring stations, such as a PM 2.5 monitoring station, if required by the Control Officer, California Air Resources Board or EPA. Participation by the permit holder in a joint air monitoring program, such as the Geysers Air Quality Monitoring Program (GAMP), shall be deemed to satisfy all ambient air quality monitoring requirements of this permit provided the term of monitoring is equivalent. The Control Officer can alter, suspend, or cancel this requirement provided no ambient air quality standard applicable to this facility is threatened or that sufficient other monitoring is available by the District, Lake County AQMD or other third party. ***ref. PTO 97-30B Cond. 23.***	**F S L**	***Yes***	***Geysers Power Company LLC participates in GAMP.***
IV. Record keeping			
1. All records and logs shall be retained for a period of at least 5 years from the date the record or log was made and shall be submitted to the NSCAPCD upon request.	**F S L**	***Yes***	***Files are retained for a minimum of 5 years and are submitted upon NSCAPCD request.***
2. In the event that chemical secondary treatment is necessary the permit holder shall maintain a weekly abatement solution inventory log available for on-site inspection. *ref. Rule 240(d)*	**S L**	***Yes***	***Operators conduct on-site inspections. Daily and monthly chemical inventory files are kept and available for inspection.***
3. The permit holder shall maintain a strip chart or other District approved data recording device of H2S readings measured by the CCM. All measurements, records, and data shall be maintained by the permit holder for at least five (5) years. The permit holder shall report all exceedances of Condition I.3 in the quarterly report as required in V.1. The report shall include a description of all measures taken to bring the Stretford system back into compliance with Condition I.3. The permit holder shall include in the report a copy of the output from the H2S CCM or alternative District approved data during the upset condition. *ref. Rule 240(d)*	**S L**	***Yes***	***The District has approved Digital strip chart recorders to archive data in electronic format for later retrieval and review of CCM measurements. These data are available in the plant file system.*** ***All exceedances of Condition I.2 are reported in the quarterly reports. There were no reportable exceedances during this reporting period.***
4. The permit holder shall maintain copies of the source test results as required in condition III.1 for a minimum of 5 years. *ref. PTO 97-30B Cond. 20.*	**S L**	***Yes***	***Source test data is available in the plant chemistry laboratory files on site, and in the plant archives.***
5. Fugitive Leak Records			
a. Any non-condensable gas leak in excess of the limitations of condition II.7.a which has been detected by the permit holder and is awaiting repair shall be identified in a manner which is readily verifiable by a District inspector. Any leak in the above listed pieces of equipment exceeding the limitation s of II.7.a and not identified by	**S L**	***Yes***	***Operators conduct on-site inspections Daily plant inspections by operators identify leaks described by this condition. Plant maintenance records are***

the permit holder and which is found by the District shall constitute a violation of this Permit. The permit holder shall maintain a current listing of such leaks awaiting repair and shall make this list available to the District upon request. ***Ref. PTO 97-30B Cond. 21.***			***available upon request to verify leak identification and repair.***
b. Any valve, flange, drip leg threaded fitting or seal on a pipeline or condensate collection system with a leak in excess of the limitations of condition II.7.b which has been detected by the permit holder and is awaiting repair shall be identified in a manner which is readily verifiable by a District inspector. Any leak in the above listed pieces of equipment exceeding the limitations of II.7.b and not identified by the permit holder and which is found by the District shall constitute a violation of this Permit. The permit holder shall maintain a current listing of such leaks awaiting repair and shall make this list available to the District upon request. ***ref. PTO 97-30B Cond. 21***.	**S L**	***Yes***	***Operators conduct on-site inspections Daily plant inspections by operators identify leaks described by this condition. Plant maintenance records are available upon request to verify leak identification and repair.***
6. The permit holder shall maintain records detailing: a. any periods of significant abatement equipment malfunction, reasons for malfunctions and corrective action. b. the dates and hours in which the emission rates were in excess of the emission limitations specified in permit conditions I.**1**, I.4, and I.5. c fugitive steam and non-condensable gas emission source inspections. Leak rates, repairs and maintenance. d. total dissolved solids and total suspended solids in the circulating water.	**F S L**	***Yes***	***a. Operator logs and incident reports.*** ***b. Operator logs and incident reports.*** ***c. Recurring maintenance records.*** ***d. Plant Chemistry Lab data records.***
7. The permit holder shall maintain records detailing: a. hours of operation. b. types, concentrations and amounts of chemicals used for Stretford absorbing solution and used for condensate treatment including target levels for abatement solution concentration in the circulating water. c. a summary of any irregularities that occurred with a continuous compliance monitor. d. the dates and hours in which the emission rates were in excess of the emission limitations specified in permit conditions I.**2**, I.3. e. periods of scheduled and unscheduled outages and the cause of the outages. f. time and date of all pump and flowmeter calibrations required by this permit. g. time and date of all alarm system tests. h. leaking equipment awaiting repair; time and date of detection and final repair. i. total H2S, PM-10 and PM 2.5 annual emissions to date. *ref. Rule 240(d)*	**S L**	***Yes***	***a. Plant logs and data acquisition system (J-5 and EDNA).*** ***b. Operator logs, EDNA, and purchasing records.*** ***c. Technicians log of maintenance of continuous monitors, EDNA, incident reports.*** ***d. Incident reports, logs, and EDNA.*** ***e. Operator logs and EDNA.*** ***f. Plant operating logs and maintenance records.*** ***g. Plant operating logs and maintenance records.*** ***h. Plant maintenance records (Maximo).*** ***i. Chem lab database***

V. Reporting			
1. A quarterly report shall be submitted to the District which contains the following information: a. CCM availability for the given quarter. b. any periods of significant abatement equipment malfunction, reasons for malfunctions and corrective action taken. c. Time and date of any monitor indicating an hourly average exceed of10 ppmv of H2S. d. Source test results. e. Steam stacking events The quarterly report shall be submitted to the District within 30 days of the end of each quarter. The reports are due by May 1, August 1, November 1 and February 1 for each corresponding quarter. *ref. Rule 240(d)*	**S** **L**	***Yes***	***Quarterly Reports were submitted as required or on a date agreed upon with NSCAPCD.*** ***Ref. Geysers Power Company LLC letters:*** ***GPC-24-037, 1st Quarter - 4/24/24*** ***GPC-24-075, 2nd Quarter - 7/23/24*** ***GPC-24-086, 3rd Quarter - 10/15/24*** ***GPC-25-001, 4th Quarter - 1/27/25***
2. An annual report shall be submitted to the District which contains the following information: a. average mainsteam H_2S and ammonia concentrations. b. average total dissolved and suspended solids and average flowrate of the cooling tower water. c. annual ammonia emissions. d. gross megawatt hours generated. e. steaming rate, gross average (gross steam flow; lb/ gross MW). f. update to any changes in operating protocols used to determine plant chemical feed charts and targets; calibration and maintenance programs. g. total organic gasses emitted as methane. h. hours of plant operation. i. annual CO2e emissions. j. Annual H2S, PM-10 and PM-2.5 emissions The annual report shall be submitted to the District within 45 days of the end of each calendar year. r*ef. Rule 240(d)*	**S** **L**	***Yes***	***Geysers Power Company LLC submitted the required 2024 annual Criteria Pollutants Inventory Report to the NSCAPCD, on 2/12/2025 ref GPC letter GPC-25-016.***
3. The permit holder shall submit reports to the California Air Resources Board (CARB) in accordance with provisions of CCR Title 17, Division 3, Chapter 1, Subchapter 10, Article 2, Regulation for Mandatory Reporting of Greenhouse Gas Emissions.	**S** **L**	***Yes***	***The 2024 report was submitted Cal e-GGRT to CARB, Facility ARB ID:101527. Verification by the independent third party is in progress.***
Outages which result in Steam Stacking			
4. The permit holder shall, on a quarterly basis, provide a written report to the District with the outage events, cause of each outage and the balance of events for the year for all outages which result in steam stacking. The Control Officer may change the frequency of reporting. The permit holder shall inform the District when total	**S** **L**	***Yes***	***The required outage information is included in the quarterly compliance reports. No stacking events occurred during the reporting period.***

outages have reached 3 in any consecutive 12 month period. The District shall be notified within 5 days of the 3rd outage. *ref.* ***PTO 97-30B. Cond. 17.***			
B. PLANT WIDE PERMIT CONDITIONS			
The plant shall comply with the following District regulations. The text of the referenced regulations can be found in Appendix A of this Title V Operating Permit. 1. Regulation 1 Rule 400-General Limitations 2. Regulation 1 Rule 410-Visible Emissions 3. Regulation 1 Rule 430-Fugitive Dust Emissions 4. Regulation 1 Rule 492 (40 CFR part 61 Subpart M)-Asbestos 5. Regulation 1 Rule 540-Equipment Breakdown 6. Regulation 2- Open Burning 7. If in the event this stationary source, as defined in 40 CFR part 68.3, becomes subject to part 68, this stationary source shall submit a risk management plan (RMP) by the date specified in part 68.10. As specified in Parts 68, 70 and 71, this stationary source shall certify compliance with the requirements of part 68 as part of the annual compliance certification required by 40 CFR part 70 or 71. 8. 40 CFR Part 82- Chlorinated Fluorocarbons 9. If in the event this stationary source, as defined in 40 CFR part 63, becomes subject to part 63, this stationary source shall notify the District within 90 days of becoming subject to the regulation. The stationary source shall identify all applicable requirements of part 63 and submit a plan for complying with all applicable requirements. a. An Emergency Diesel Engine Fire Pump Maintenance Plan shall be prepared in the Plant work management system to implement 40 CFR part 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines Table 2C item 1. And Table 6 item 9. **i)** Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or **ii)** Develop and follow your owners maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions **iii)** Change oil and filter every 500 hours of operation or annually, whichever comes first. Or perform analysis per 40 CFR 63.6625. Oil analysis must be performed at the same frequency specified above for changing the oil The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity	**F** **S** **L**	***Yes***	***1- 3 Reviewed Quarterly compliance reports and District Inspections.*** ***4 Reviewed Asbestos Notification letters. Notifications were submitted as required during the reporting period. GPC24-058, dated 12/10/2024.*** ***5. Reviewed Quarterly compliance records "Incidents Requiring Corrective Action".*** ***6. No open burning is performed at this location.*** ***7. The Plant is exempt from the Risk Management Plan because quantities of flammable hydrocarbons are less than 67,000 lbs. See EPA notice dated April 20, 1999.*** ***8. All work performed on appliances containing chlorinated fluorocarbons is performed by HVAC Technicians certified through EPA approved training programs in accordance with the Clean Air Act Section 608 and 40 CFR part 82, Subpart F.*** ***9. The facility became subject to 40 CFR Part 63, Subpart ZZZZ in a previous reporting period. All applicable requirements of Subpart ZZZZ were identified, and a compliance plan was provided to the NSCAPCD on January 18, 2024. No changes have occurred since that time that would re-trigger this notification requirement. In addition, the annual maintenance for the fire pump engine was completed during the reporting period.***

of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not condemning limits are not exceeded, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **iv)** Inspect air cleaner every 1,000 hours of operation or annually, whichever comes fires, and replace as necessary. **v)** Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.			
C. ADMINISTRATIVE REQUIREMENTS			
Payment of Fees			
1. This Permit shall remain valid during the 5-year term as long as the annual renewal fees are paid in accordance with Regulation 1 Rule 300 and Rule 360 of the District. Failure to pay these fees will result in forfeiture of this permit. Operation without a permit subjects the source to potential enforcement action by the District and the EPA pursuant to section 502(a) of the Clean Air Act. *ref. Reg 5.670*	**F** **S** **L**	***Yes***	***Geysers Power Company LLC submitted the required Permit Fees: Payment of Annual Renewal Fees Fiscal Year 2024-2025, GPC-24-032, dated 8/26/24. Federal Program Fees fiscal year 2023/2024: GPC-24-042, dated 6/6/24.***
Right to Entry and Inspection			
2. The Control Officer, the Chairman of the California Air Resources Board, The Regional Administrator of the EPA 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 areas 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. *ref. Reg 5.610(e)*	**F** **S** **L**	***Yes***	***Agency representatives are admitted to the project upon presentation of credentials. After receiving a safety advisory no restrictions are placed on access to plant premises, sample locations and records.***

	Compliance with Permit Conditions			
3.	This Title V Operating Permit expires on August 8, 2026. The permit holder shall submit a complete application for renewal of this Title V Operating Permit no later than 6 months prior to expiration and no earlier than one year prior to expiration. If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after August 7, 2026. *ref Reg 5.660*	**F S L**	***Yes***	***Application was submitted 6 months prior to expiration; ref. GPC-21-021 dated February 4, 2021. The current permit renewal was issued on August 8, 2021. The next application is due by February 8, 2026.***
4.	The permit holder shall comply with all conditions of this permit. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and may be grounds for enforcement action, including monetary civil penalties, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. *ref. Reg 5.610(f)(3)*	**F S L**	***Yes***	***No NOVs were issued to the Sonoma Power Plant during the compliance reporting period.***
5.	In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permit holder to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. *ref. Reg 5.610(f)(4)*	**F S L**	***Yes***	
6.	The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. *ref. Reg 5.610 f)(5)*	**F S L**	***Yes***	
7.	This permit does not convey any property rights of any sort, nor any exclusive privilege. *ref. Reg 5.610(f)(2)*	**F S L**	***Yes***	
8.	The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists, per Regulation 5.570, for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. *ref. Reg 1 Rule 200, Reg 5.430*	**F S L**	***Yes***	***There are no active information requests.***
	Reporting			
9.	All deviations from permit requirements, including those attributable to upset conditions (as defined in the permit) must be reported to the District at least once every six months. For emissions of a hazardous air pollutant (HAP) or a toxic air pollutant (as defined in an applicable regulation) that continue for more than an hour in excess of the permit requirements, the report must be made within 24 hours of the occurrence. For emissions of any regulated air pollutant, excluding those HAP emission requirements listed above, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours. All	**F S L**	***Yes***	***The Semi-annual Deviation Reports were submitted during the reporting period. Ref. Letter GPC-24-078, dated July 31, 2024 for the first half of 2024, and reference GPC-25-005, dated January 30, 2025, for the second half of 2024.***

reports of deviation from permit requirements shall include the probable cause of the deviation and any preventative or corrective action taken. A progress report shall be made on a compliance schedule at least semi-annually and shall include the date when compliance will be achieved, an explanation of why compliance was not, or will not be, achieved by the scheduled date, and a log of any preventative or corrective action taken. The reports shall be certified by the responsible official as true, accurate and complete. Ref. Reg 5.625			
Severability			
10. In the event that any provision of this permit is held invalid all remaining portions of the permit shall remain in full force and effect. *ref. Reg 5.610(g)*	**F S L**	***Yes***	
Transfer of Ownership			
11. In the event of any changes in control or ownership of facilities to be modified and/or operated, this Permit is transferable and shall be binding on all subsequent owners and operators. The permit holder 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. *ref. Rule 240(j)*	**F S L**	***Yes***	***No ownership changes occurred during the reporting period.***
Records			
12. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of entry and shall include: date place and time of sampling, operating conditions at the time of sampling, date, place and method of analysis and the results of the analysis. *ref. Reg 5.61*	**F S L**	***Yes***	***Plant policy requires files to be maintained to meet the requirements of this condition.***
Emergency Provisions			
13. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1 Rule 540 of the District's Rules and Regulations, by following the procedures contained in Regulation 1, Rule 540 (b). The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1, Rule 540 (b)(3). *ref. Reg 5.640*	**F S L**	***Yes***	
14. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit caused by conditions beyond permit holders reasonable control by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. Any variance granted by the Hearing Board from any term	**F S L**	***Yes***	***No variances are currently requested or in force.***

or condition of this permit which lasts longer than 90 days will be subject to EPA approval. *ref. Reg 1 Rule 600*			
15. Notwithstanding the foregoing, the granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement unless the Title V Operating Permit has been modified pursuant to Regulation 5 or other EPA approved process. *ref. Reg 1 Rule 600*	**F S L**	***Yes***	
Malfunction			
16. The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, or of a process to operate in a normal manner which results in an increase in emissions above allowable emissions limit stated in Condition I.2. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under Condition I.2, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulations which such malfunction may cause. ***ref. PSD NC 80-01 Cond. III.***	**F S L**	***Yes***	***NSCAPCD is notified for any such failures as specified in the condition.***
Permit Posting			
17. Operation under this permit must be conducted in compliance with all data 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 such a manner as to be clearly visible and accessible at a location near the source. In the event that the permit cannot be so placed, the permit shall be maintained readily available at all times on the operating premises. *ref. Rule 240(i)*	**S L**	***Yes***	***Operators conduct on-site inspections. This permit is located in the control room and is available electronically to Operators in the control room.***

Compliance Certification			
18. Compliance certifications shall be submitted annually by the responsible official of this facility to the Northern Sonoma County Air Pollution Control District and to the EPA. Each compliance certification shall be accompanied by a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report. r*ef. Reg 5.650*	**F S L**	***Yes***	***This submittal includes the required Compliance Certification for this Permit. The cover letter contains a written statement by the responsible official certifying truth, accuracy, and completeness.***
19. This Permit does not authorize the emission of air contaminants in excess of those allowed by the Health & 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, regulations or statutes of other governmental agencies. *ref. Rule 240(d)*	**S L**	***Yes***	
Permit Modification			
20. The permit holder shall comply with all applicable requirements in NSCAPCD Regulation 1 Chapter II- Permits and New Source Review. *ref. Regulation 1 Rule 200*.	**F S L**	***Yes***	***No permit modifications were initiated during the reporting period.***

CONDITION OF CERTIFICATION
COMPLIANCE-5

Attachment COM-5: Compliance Matrix

Geysers Sonoma Plant (Unit 3) 80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
AQ	A1	Operations/Ongoing	The Sonoma power plant and associated abatement systems shall comply with Regulation 1 Rule 455(b) –Geothermal Emission Standards. Total emissions of hydrogen sulfide (H2S) emissions shall not exceed 8.6 pounds per hour averaged over any one hour-period. Total H2S emissions shall be the cumulative emissions to the atmosphere from the power plant and associated abatement equipment. [ref. Rule 455(b), PTO 97-30B Cond. 20, PTO 97-30A Cond. 16]	The project owner shall verify compliance by conducting a monthly source test on the cooling tower as indicated in **AQ-C1**, weekly determinations of the H2S content in the main steam supply as required in **AQ-C5**, or as required in an approved Alternative Compliance Plan.	Ongoing	Source Tests are conducted monthly, as required in AQ-C1 to verify compliance with this condition. Results of the NSCAPCD Method 102 source tests, as well as excursions and exceedances, are reported to the District in the quarterly compliance reports.
AQ	A2	Operations/Ongoing	The project owner shall not discharge or cause the discharge into the atmosphere of more than a total of 8.0 pounds/hour of H2S from the Sonoma Power Plant. (ACP). [ref. PSD NC 80-01 Cond. VIII.C.]	The project owner shall verify compliance by conducting an annual performance test on the turbine exhaust system to determine the H2S emission rate as required in AQ-C1A.	Ongoing	Source Tests are conducted monthly, as required in condition AC-C1A to verify compliance. Results of the NSCAPCD Method 102 source tests, as well as excursions and exceedances, are reported to the District in the quarterly compliance reports.
AQ	A3	Operations/Ongoing	The exit concentration in the process piping leading from the Stretford system shall not exceed 10 ppmv H2S, averaged over any consecutive 60-minute period, unless operating under a Stretford bypass allowance or a District approved Alternative Compliance Plan (ACP). [ref. PTO 97-30A Cond. 17]	The project owner shall verify compliance by operating a continuous compliance monitor as required in AQ-C9.	Ongoing	Continuous monitoring is in service and maintained to verify compliance. An automatic alarm notifies the operator prior to exceeding the limit. Excursions and exceedances are documented in follow-up reports and in the quarterly compliance reports. No deviations to this condition occurred during the reporting period.
AQ	A4	Operations/Ongoing	The project owner shall comply with Regulation 1 Rule 455 (a)-Geothermal Emission Standards; no person shall discharge into the atmosphere from any geothermal operation sulfur compounds, calculated as sulfur dioxide, in excess of 1,000 ppmv. [ref. Rule 455(a)]	The project owner shall verify compliance by adhering to all monitoring and testing requirements.	Ongoing	GPC is in compliance.
AQ	A5	Operations/Ongoing	Annual emissions from the cooling tower shall not exceed, on a calendar year basis, 14.5 tons per year of hydrogen sulfide (H2S). [ref. Rule 240(d)]	The project owner shall maintain records of total H2S as indicated in Condition AQ-D7 and submit reports as indicated in Condition AQ-E2. Records shall be based on required source testing in Condition AQ-C1, and an annual summation from January through the end of December.	Ongoing	GPC is in compliance. Source tests are performed monthly as required by AQ-A5 to determine the H2S emission rate. The monthly emission rates are averaged and multiplied by the annual hours of operation to calculate the annual emissions. Total H2S emissions were less than the annual emissions limit.
AQ	A6	Operations/Ongoing	The power plant and associated abatement systems shall comply with Regulation 1 Rule 420 (d) Non-Combustion Sources-Particulate Matter; no person shall discharge particulate matter into the atmosphere from a non-combustion source in excess of 0.2 grains per cubic foot of exhaust gas or in total quantities in excess of the amount shown in Table I. (40 lb/hr) whichever is the more restrictive condition. [ref. Rule 420(d)]	The project owner shall perform a source test to determine compliance as requested by the NSCAPCD or CPM. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	Calculation of the PM discharge rate is based upon monthly total solids analyses and the cooling water flow rate. PM emission calculation is per Permit specified condition III.4. Calculations confirm that the plant was in compliance with this limit during the reporting period.
AQ	A7	Operations/Ongoing	Annual emissions from the cooling tower shall not exceed, on a calendar year basis, 20.3 tons per year particulate matter less than 10 microns in diameter (PM-10) and 15.3 tons per year particulate matter less than 2.5 microns in diameter (PM-2.5). [ref. Rule 240(d)]	The project owner shall verify compliance through monitoring as indicated in AQ-C4. The project owner shall maintain records according to AQ-D6 and AQ-D7 and submit reports as indicated in AQ-E2. Records shall be based on required sampling and an annual summation from January to December.	Ongoing	GPC is in compliance. Particulate emission rate was determined and monitored as required by AQ-C4. The results of that determination are used to determine the annual emission. Total 2024 PM10 & PM2.5 emissions were less than the annual emissions limit.
AQ	AE1	Operations/Ongoing	S-8, 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 percent opacity for a period or periods exceeding 3 minutes in any one hour.	The project owner shall perform a Visible Emissions Evaluation to determine compliance as requested by the NSCAPCD or CPM. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	No requests were made to perform a Visible Emissions Evaluation during the reporting period
AQ	AE2	Operations/Ongoing	S-8, particulate emissions shall not exceed an emission rate of 0.11 g/bhp-hr.	The project owner shall verify compliance according to Condition AQ-CE1. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	The S-8 engine meets Tier 3 emission standards.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
AQ	AE3	Operations/Ongoing	S-8, combined non-methane hydrocarbons and nitrogen oxide emissions shall not exceed an emission rate of 2.54 g/bhp-hr.	The project owner shall perform a source test to verify compliance with the emission rate upon request of the District or CPM. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	The S-8 engine meets Tier 3 emission standards rated below the permitted limits.
AQ	AE4	Operations/Ongoing	S-8, carbon monoxide emissions shall not exceed an emission rate of 1.19 g/bhp-hr.	The project owner shall perform a source test to verify compliance with the emission rate upon request of the District or CPM. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	The S-8 engine meets EPA Tier 3 emission standards and is rated below the permitted limits.
AQ	B1	Operations/Ongoing	The project owner shall not operate the plant unless untreated gases are vented to the Stretford Air Pollution Control System unless operating under a Stretford bypass allowance. Stretford bypasses shall be limited to no more than 6 allowances per calendar year. Each Stretford bypass allowance shall be carried out as expeditiously as possible and shall not exceed a total duration of 8 hours. During a Stretford bypass allowance main steam-flow shall not exceed 150,000 pounds per hour. Direct condensate re-injection shall be maximized to reduce H2S in the cooling towers. The project owner shall notify the District in writing at least 1 day prior to conducting a Stretford bypass. Stretford bypass allowances shall only be utilized during Stretford maintenance procedures. The secondary H2S abatement system and the Stretford abatement system shall be kept in good working order and operated as necessary in order to limit H2S and particulate emissions on a continuous basis from the power plant as specified in Conditions AQ-A1, AQ-A2, AQ-A3, AQ-A4, and AQ-A5. [ref. Rule 240.d, PTO 97-30A Cond. 15A, PTO 97-30B Cond. 14, 19]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	The H2S abatement systems are operated and maintained in accordance with operating practices and a maintenance program described in the Title V application.
AQ	B10	Operations/Ongoing	The cooling tower shall be maintained in good operating condition. The project owner shall conduct an integrity inspection of the cooling tower during each scheduled plant overhaul and carry out any repairs necessary to correct all deficiencies encountered. [ref. Rule 240(d)]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	GPC is in compliance. Routine plant inspections by operators include the cooling tower to identify areas in need of repair. Plant maintenance staff makes repairs during plant overhauls. Records are available on request.
AQ	B11	Operations/Ongoing	The project owner shall operate and maintain the following air pollution control equipment at the Sonoma Power Plant: A.The non-condensable gas stream exiting from the surface condenser shall be ducted to an operating Stretford process unit. B.Condensate exiting from the surface condenser shall be treated as necessary to reduce the levels of dissolved hydrogen sulfide. The project owner shall use a Hydrogen Peroxide/ Iron Catalyst system to accomplish this reduction. With prior written EPA approval, the project owner may use an alternative secondary treatment system. C.The project owner shall have installed equipment to allow the turbine to be bypassed during plant startup, and scheduled and unscheduled outages of the turbine. This bypass shall allow all other pollution control devices to continue to treat all incoming steam. At no times shall the project owner allow the venting of untreated steam to the atmosphere from the Sonoma Power Plant. D.The project owner shall have installed drift controls on the power plant cooling towers to minimize emissions of particulate matter. [ref. PSD NC 80-01 Cond. VIII.B]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	GPC is in compliance with items A-D. Records are available upon request.
AQ	B12	Operations/Ongoing	The project owner shall, in each calendar year, limit unscheduled outages for the Sonoma Power Plant to no more than 3 stacking events. The project owner shall have on file with the District an approved operating protocol describing the methods that will be used to meet the 3-stacking event performance standard. The protocol must include a description of the operational procedures between the steam supplier and project owner, project owner's operational procedures, and equipment to meet the above standard. The terms and requirements of the protocol may be modified by the Air Pollution Control Officer or CPM for good cause upon written request from the project owner. In the event the project owner is not able to meet the standards specified above, the following shall be required: The project owner shall prepare and submit a revised "plan" to the Air Pollution Control Officer and CPM, within 30 days of the end of the month in which the outage limit is exceeded, to achieve the outage standards set forth in this permit condition. At a minimum, the measures to be considered in the "plan" shall include: improved coordination of the power plant and steam field operations, improved alarming and control systems, increased duration of manned operation of the power plant, improved preventative maintenance, and design modifications as may be indicated by the operating history of this unit. Within 30 days of receipt of the "plan" the Air Pollution Control Officer shall determine whether the "plan" is satisfactory and, if so, shall approve the "plan". Upon approval, the revised "plan" shall supersede the old plan and become a part of the terms and conditions of this permit. [ref. PTO 97-30B Cond. 17]	The project owner shall submit revised plans to the CPM for approval. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	All occurrences meeting the condition criteria are reported to the District in the Quarterly Compliance Reports. A protocol is in place to meet the requirements of this condition. Steam lines interconnecting the power plants allow steam to be shifted to other operating plants if an outage occurs. No outages have resulted in steam stacking since interconnection of the steam lines was completed. No unplanned stacking events occurred during this reporting period.
AQ	B2	Operations/Ongoing	In the event that chemical secondary condensate treatment is necessary and except for justifiable reasons during performance testing or under operation of an ACP, for which the project owner has received prior District written approval, the circulating water shall be kept to the following specification: Circulating water abatement solution concentration shall be maintained at or above the ppmw concentration recommended in the power plant operating guidelines as necessary to abate H2S emissions from the power plant to the emission limit specified in Condition AQ-A1. [ref. PTO 97-30B Cond. 19]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	Abatement solution in the circulating water is added as needed to comply with the emissions limit specified in Condition AQ-A1.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
AQ	B3	Operations/Ongoing	Any continuously operated abatement solution feed systems shall have a readily accessible flowmeter readable in appropriate units and equipped with alarms signaling no or low flow. Flowmeter accuracy shall be plus or minus 10% of flow. [ref. PTO 97-30B Cond. 14]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	There are no continuously operated abatement solution feed systems at Unit 3.
AQ	B4	Operations/Ongoing	All the abatement systems shall be properly winterized and maintained to ensure proper and reliable functioning. All primary pressure gauges and flow meters associated with abatement equipment shall be readily identified, maintained in good operating condition and calibrated on a quarterly basis. Alarm systems associated with abatement equipment shall be tested on a quarterly basis. Calibration and maintenance shall be performed according to manufacturer's recommendations or per the project owner's maintenance schedule as needed to maintain the equipment in good working order. [ref. PTO 97-30A Cond. 14, PTO 97-30B Cond. 19]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	Maintenance practices are in place to ensure compliance with this condition. There are no primary pressure gauges and flow meters associated with abatement equipment at Unit 3. Alarms related to the CCM are tested on a routine basis.
AQ	B5	Operations/Ongoing	Untreated vent gas shall be emitted to the atmosphere only during upset/breakdown situations pursuant to Regulation 1 Rule 540. During periods of cold start-ups the vent gas H2S treatment system shall be operated as necessary to preclude the release of untreated vent gases to the atmosphere above the permitted emission limits specified in Conditions AQ-A1 and AQ-A4. [ref. PTO 97-30B Cond. 19]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	Plant design and operating practices preclude the release of untreated vent gas during startup operations. There were no untreated gas releases during this reporting period. Emergency gas release vents are equipped with automatic alarm systems that indicate if they are activated.
AQ	B6	Operations/Ongoing	All areas in the immediate vicinity and under the project owner's responsibility shall be properly treated to control fugitive dust. [ref. PTO 97-30B Cond. 21]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	GPC complies with NSCAPCD Regulation 1 Rule 430. A fugitive dust control plan is in place
AQ	B7	Operations/Ongoing	Fugitive Leaks A.Non-condensable gas leaks: Valves, flanges, seals on pumps and compressors, piping and duct systems shall be inspected, maintained, and repaired to prevent the emission of non-condensable gases to the atmosphere. Valves, flanges and seals shall be tightened, adjusted, or have gasket material added using the best modern practices for the purpose of stopping or reducing leakage to the atmosphere. Non-condensable gas leaks shall not (i) exceed (as measured within 1 cm of such leak) 1,000 ppmv H2S nor 10,000 ppmv methane nor (ii) exceed emission limits of Rule 455. Such leaks shall be repaired within 24 hours, unless the leak is from essential equipment. If the leak is from essential equipment, the leak must be minimized within 24 hours using best modern practices and eliminated at the next prolonged outage of the process unit unless an extension is approved by the APCO. Essential Equipment is defined as equipment which cannot be taken out of service without shutting down the process unit which it serves. Leak Minimization is defined as the tightening, adjusting, or addition of packing material which surrounds the leak, or the replacement of the valve or flange for the purpose of stopping or reducing leakage to the atmosphere, using best modern practices. B.Steam and Condensate leaks: Valves, flanges, seals on pumps and compressors, piping and duct systems, shall be inspected, maintained and repaired to prevent the emission of steam and condensate to the atmosphere. Valves, flanges and seals shall be tightened, adjusted, or have gasket material added using the best modern practices for the purpose of stopping or reducing leakage to the atmosphere. Valves, flanges, drip legs, threaded fittings, and seals on pipelines shall be maintained to prevent or reduce the emission of steam and condensate to the atmosphere as noted below: Liquid leak rate in pressurized steam and condensate lines shall not exceed 20 ml in 3 minutes. Liquid leak rates in excess of 20 ml in 3 minutes shall be repaired within 15 calendar days, excepting those leaks from essential equipment. If the leak is from essential equipment, the leak must be minimized within 15 days using best modern practices and eliminated at the next prolonged outage of the process unit unless an extension is approved by the APCO. Essential Equipment is defined as equipment which cannot be taken out of service without shutting down the process unit which it serves. Leak Minimization is defined as the tightening, adjusting, or addition of packing material which surrounds the leak, or the replacement of the valve or flange for the purpose of stopping or reducing leakage to the atmosphere, using best modern practices The project owner shall check the power plant for fugitive leaks at least once per quarter. [ref. PTO 97-30B Cond. 21]	The project owner shall keep records according to Condition AQ-D5. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	A & B. Records of compliance in accordance to Condition AQ-D5 are available on request.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
AQ	B8	Operations/Ongoing	Alternative Compliance Plan A.The project owner may propose an Alternative Compliance Plan (ACP) which allows for operating flexibility of the power plant while maintaining compliance with all applicable emission limits of Conditions AQ-A2, AQ-A4, and AQ-A5. The ACP shall list operating parameters such as power output (MW) and abatement solution concentration levels which shall be met in order to meet all applicable emission limits listed above. The ACP shall be submitted to the APCO for approval. The APCO shall approve, disapprove or modify the plan within 30 days of receipt of the ACP. An APCO approved ACP shall consist of all parametric operating guidelines which shall be used to determine compliance with Conditions AQ-A2, AQ-A4, and AQ-A5. The ACP shall list the specific operating conditions the ACP will supersede. B.The project owner may propose an Alternative Compliance Plan (ACP) which allows for operating flexibility of the power plant while maintaining compliance with all applicable emission limits of Conditions AQ-A1 and AQ-A3. The ACP shall list operating parameters such as power output (MW) and abatement solution concentration levels which shall be met in order to meet all applicable emission limits listed above. The ACP shall be submitted to the APCO for approval. The APCO shall approve, disapprove or modify the plan within 30 days of receipt of the ACP. An APCO approved ACP shall consist of all parametric operating guidelines which shall be used to determine compliance with Conditions AQ-A1 and AQ-A3. The ACP shall list the specific operating conditions the ACP will supersede.	The project owner shall submit any ACP to the CPM for review at the time it is submitted to the District. The project owner shall submit the District's approval, disapproval or plan modification to the CPM in the quarterly report.	Ongoing	A& B. No compliance plan is currently in place as allowed by this condition
AQ	B9	Operations/Ongoing	All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this license shall at all times be maintained in good working order. The equipment shall be operated in a manner necessary to meet all emission limits of the permit. [ref. Rule 240(d)]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	GPC verifies compliance by adhering to all testing, monitoring, and reporting requirements.
AQ	BE1	Operations/Ongoing	S-8, 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).	The project owner shall maintain records according to Condition AQ-DE1. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	The generator is only used to provide emergency electrical power during failure or loss of all or part of normal electrical power service except for testing and maintenance.
AQ	BE2	Operations/Ongoing	S-8, 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.	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	The S-8 wet-down pump diesel drive engine is equipped with a working nonresettable hour counting meter.
AQ	BE3	Operations/Ongoing	S-8, emergency standby wet-down pump diesel drive engine, shall be operated exclusively on California Air Resources Board (CARB) Diesel Fuel.	The project owner shall maintain records according to Condition AQ-DE1. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	The GPC purchasing department contracts with fuel vendors who only supply Ultra-low Sulfur Diesel.
AQ	BE4	Operations/Ongoing	S-8, emergency standby wet-down pump diesel drive engine, shall be operated according to manufacturer specifications.	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	The S-8 wet-down pump diesel drive engine is operated according to manufacturer specifications.
AQ	BE5	Operations/Ongoing	Total operating hours used for testing and maintenance of S-8, 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.	The project owner shall maintain records according to Condition AQ-DE1. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	GPC logs and tracks the recorded hours to ensure testing and maintenance diesel engine run time does not exceed 50 hours in any consecutive 12- month period.
AQ	C1	Operations/Ongoing	The project owner shall, on a monthly basis, conduct a source test of the cooling tower to determine the H2S emission rate to verify compliance with Condition AQ-A1. A source test shall also be conducted every time the Stretford bypass allowance is utilized. District Method 102 shall be utilized to determine the H2S emission rate. The project owner may propose an Alternative Compliance Plan (ACP) which allows for operating flexibility of the power plant, including periods when accessing the cooling tower is not possible, while maintaining compliance with all applicable emission limits of Conditions AQ-A1. The ACP shall list operating parameters such as power output (MW), target pH, abatement solution concentration levels, and burner/scrubber exit concentrations which shall be met in order to meet all applicable emission limits listed above. The ACP shall be submitted to the APCO for approval. The APCO shall approve, disapprove or modify the plan within 30 days of receipt of the ACP. An APCO-approved ACP shall consist of all parametric operating guidelines which shall be used to determine compliance with Condition AQ-A1. The ACP shall list the specific operating conditions the ACP will supersede. [ref. PTO 97-30B Cond. 20]	The project owner shall submit source test results according to Condition AQ-E1. The project owner shall submit any ACP to the CPM for review. The project owner shall submit the District's approval, disapproval, or plan modification to the CPM in the following quarterly report.	Ongoing	NSCAPCD Approved version of Method 102 (Modified Method 102) Source tests were performed each month, and reported to the District in the quarterly reports. All test results and determinations demonstrated compliance with this condition.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
AQ	C10	Operations/Ongoing	Ambient Air Monitoring The project owner shall maintain and operate one H2S/meteorological monitoring station, PM10 high volume station at a location approved in advance by the Air Pollution Control Officer for the life of the facility. The project owner shall install and operate additional monitoring stations, such as a PM2.5 monitoring station, if required by the Air Pollution Control Officer, California Air Resources Board or U.S.EPA. Participation by the project owner in a joint air monitoring program, such as the Geysers Air Quality Monitoring Program (GAMP), shall be deemed to satisfy all ambient air quality monitoring requirements of this permit provided the term of monitoring is equivalent. The Air Pollution Control Officer can alter, suspend, or cancel this requirement provided no ambient air quality standard applicable to this facility is threatened or that sufficient other monitoring is available by the District, Lake County AQMD or other third party. [ref. PTO 97-30B Cond. 23]	If the project owner does not participate in GAMP, the project owner shall submit to the NSCAPCD, ARB, and CPM, for their review and approval, a detailed ambient monitoring plan.	Ongoing	GPC participates in GAMP.
AQ	C1A	Operations/Ongoing	The project owner shall conduct or cause to be conducted performance tests on the turbine exhaust system to determine the H2S emission rate to verify compliance with Condition AQ-A2. Performance tests shall be conducted in accordance with Northern Sonoma County APCD Method 102, unless otherwise specified by the U.S. EPA. The project owner shall furnish the Northern Sonoma County APCD, the California Air Resources Board and the U.S. EPA (Attn: Air-5) a written report of such tests. All performance tests shall be conducted at the maximum operating capacity of the plant. Performance tests shall be conducted at least on a yearly basis and at such times as shall be specified by the U.S. EPA. [ref. PSD NC 80-01 Cond. VIII.D]	The project owner shall submit source test results according to Condition AQ-E1.	Ongoing	An annual report including all GPC plants with PSD permits is sent to the agencies listed in this condition.
AQ	C2	Operations/Ongoing	The project owner shall provide platforms, electrical power and safe access to sampling ports to enable representatives of the District, ARB and U.S. EPA to collect samples from the main steam supply, treated and untreated condensate, circulating water upstream of the cooling tower, cooling tower stacks, untreated and treated non-condensable gas stream to and from the Stretford abatement facility, any off gas bypass vents to the atmosphere and any Stretford tanks or evaporative coolers. [ref. PTO 97-30B Cond. 12, PSD NC 80-01 Cond. VIII.D]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	Sample taps used by plant personnel for chemical sampling and analysis are also available for use by CARB and District personnel. Safety Orientations and Job Safety Analysis are available for District and ARB representatives.
AQ	C3	Operations/Ongoing	The project owner, as requested by the Air Pollution Control Officer or CPM, shall conduct a District approved performance test for particulate matter (PM), H2S, other species (i.e. benzene, mercury, arsenic, TRS, mercaptans, radon, other nitrogen compounds (amines) and compounds listed under NESHAPS and/or AB2588 from the power plant evaporative cooling tower and/or the Stretford evaporative cooling tower. Upon written request of the Air Pollution Control Officer, the project owner shall submit to the District at least 45 days prior to testing a detailed performance test plan. The District shall approve, disapprove or modify the plan within 45 days of receipt of the plan. The project owner shall incorporate the District's comments or modifications to the plan which are required to assure compliance with the District's regulations. The Air Pollution Control Officer and CPM shall be notified 15 days prior to the test date in order to arrange for an observer to be present for the test. The test results shall be provided to the District and CPM within 45 days of the test date unless a different submittal schedule is approved in advance by the Air Pollution Control Officer. [ref. PTO 97-30B Cond. 11]	The project owner shall conduct performance tests as requested by the Air Pollution Control Officer or CPM. The project owner shall submit results to the CPM within 45 days if the test was requested by the CPM or in the quarterly reports according to Condition AQ-E1 if the test was requested by the Air Pollution Control Officer.	Ongoing	No requests to perform testing were requested during the reporting period.
AQ	C4	Operations/Ongoing	Compliance with the particulate mass emission limitation shall be estimated using calculations based on the evaporative cooling tower manufacturers design drift eliminator drift rate, 0.001 percent for the main cooling tower and 0.002% for the Stretford cooling tower, multiplied by the circulating water rate or Stretford solution circulating 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. [ref. PTO 97-30A Cond. 16, PTO 97-30B Cond. 22]	The project owner shall maintain records according to Conditions AQ-D6 and AQ-D7 and submit reports as indicated in Condition AQ-E2.	Ongoing	Calculations confirm that the plant was in compliance with this condition during the reporting period. Reports are submitted in accordance to AQ-E2
AQ	C5	Operations/Ongoing	Main steam supply H2S concentrations shall be determined minimally on a weekly basis and any additional times as required by the operating protocol or ACP. [ref. Rule 240(d)]	The project owner shall maintain records according to Conditions AQ-D6 and AQ-D7 and submit reports as indicated in Condition AQ-E1 and AQ-E2.	Ongoing	The requirements of this condition were met during the reporting period. A protocol on file with the District describes the method used to determine H2S concentration.
AQ	C6	Operations/Ongoing	In the event that chemical secondary condensate treatment is necessary the project owner shall perform a condensate H2S concentration test, on a frequency that is defined in the Alternative Compliance Plan or an abatement solution concentration test of the cooling tower circulating water once per operating shift when abatement solution is necessary in order to achieve compliance with Condition AQ-A1. The testing equipment shall be kept calibrated per the manufacturer's specifications. [ref. Rule 240(d)]	The project owner shall maintain records according to Conditions AQ-D6 and AQ-D7 and submit reports as indicated in Conditions AQ-E1 and AQ-E2. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	Operators perform tests required by this condition as a part of their daily routine plant compliance checks when applicable.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
AQ	C7	Operations/Ongoing	Instruments used for the measurement of H2S or Total Organic Gases to satisfy District permit conditions or regulations shall receive District approval prior to use. Test plans shall be submitted for District approval of instruments used for the measurement of H2S or Total Organic Gases to satisfy District permit conditions or regulations. [ref. Rule 240(d)]	The project owner shall submit any District approvals to the CPM in the quarterly reports. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	The NSCAPCD has approved the following instruments that are used to measure H2S: ASI Model; 102, Jerome Instruments Model 631, "Dräger" brand sampling and analysis tubes. Organic gases are analyzed utilizing an "Agilent" Model 3000C G.C.
AQ	C8	Operations/Ongoing	In the event that chemical secondary condensate treatment is necessary all sampling protocols, chemical feed charts, targets and operational guidelines for using said charts and targets, necessary to abate H2S emissions from the power plant to the emission limits specified in Conditions AQ-A1 and AQ-A2 must be developed using good engineering judgment and supporting data. The APCO or CPM may review such sampling protocols, chemical feed charts, targets and guidelines upon request. If the APCO or CPM determines that any of the protocols, feed charts, targets, or guidelines are not sufficient to maintain compliance with Conditions AQ-A1 and AQ-A2, the APCO or CPM shall require the project owner to develop revised protocols, feed charts, targets and guidelines. [ref. Rule 240(d)]	The project owner shall submit any revised protocol, feed charts, targets and guidelines or summary to the CPM in the annual reports required by Condition AQ-E2. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request. The CPM shall consult with the APCO and the project owner when developing revised protocols, feed charts, targets and guidelines.	Ongoing	Protocols related to this condition were submitted and approved by the District in the initial Title V application. Plant unit engineers specify targets and guidelines based on good engineering judgment and recent chemical analyses. A copy of the Annual Report required by AQ-E2 is provided to the CPM at the time of submittal to NSCAPCD, and is also provided as attachment AQ-E2a. Additional records are available upon request.
AQ	C9	Operations/Ongoing	Continuous Compliance Monitoring (CCM) The project owner shall operate a continuous compliance monitor capable of measuring the concentrations of H2S in the exhaust stream from the Stretford absorber in order to verify compliance with conditions AQ-A1 and AQ-A3. The monitoring system must alarm the operator when H2S in the treated gas is in excess of 10 ppmv. The project owner shall respond to the alarm with appropriate mitigative measures. Mitigative measures taken shall be logged in the power plant abatement log book. In the event H2S concentrations are in excess of 10 ppmv and the range of the CCM is exceeded, the project owner shall test for H2S using an approved alternative method (ex Draeger tester, wet chemical tests) once every hour during the excess. The monitor shall have a full range of at least 25 ppmv. The monitor shall meet the following operational specifications: an accuracy of plus or minus 10% of full scale, provide measurements at least every 3 minutes, provide a continuous strip chart record or a District approved alternative, and provide monthly data capture of at least 90%. The District must be notified when the concentration of H2S exceeds the hourly average limit of 10 ppmv. A one-point calibration shall be performed at least once per week. A three-point calibration shall be performed at least once per quarter. The Air Pollution Control Officer may allow modifications to the above specifications under an ACP upon written request with justification by the project owner as long as emissions from the power plant do not exceed the "total" H2S emission limitations of condition AQ-A1. Written notification from the Air Pollution Control Officer must be received by the project owner prior to any change in monitoring specifications. [ref. PTO 97-30A Cond. 16, 17]	The project owner shall provide the District and CPM with a summary of the monitor's availability and any irregularities that occurred with the continuous monitor. The summary shall be provided to the CPM in the quarterly reports required by Condition AQ-E1.	Ongoing	The continuous compliance monitor meeting the requirements of this condition is in place and operational. Plant records show no deviations from this condition during the reporting period. Quarterly reports are submitted in accordance with AQ-E1.
AQ	CE1	Operations/Ongoing	At any time as specified by the Air Pollution Control Officer or CPM, project owner shall conduct a District approved source test to determine NOx and particulate emissions from the diesel-powered generator, S-8. The test results shall be provided to the District and CPM within 30 days of the test.	The project owner shall perform an approved source test upon request of the District or CPM. Test results shall be submitted to the District and CPM.	Ongoing	Tests for NOx and particulate emissions are performed at the request of the District utilizing District approved methods. No test requests were made by the District during the reporting period.
AQ	D1	Operations/Ongoing	All records and logs shall be retained for a period of at least 5 years from the date the record or log was made and shall be submitted to the NSCAPCD or CPM upon request.	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	Records and logs are retained for a minimum of five years and available upon request.
AQ	D2	Operations/Ongoing	In the event that chemical secondary treatment is necessary the project owner shall maintain a weekly abatement solution inventory log available for on-site inspection. [ref. Rule 240(d)]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	Operators conduct on-site inspections. Daily and monthly chemical inventory files are kept and available for inspection.
AQ	D3	Operations/Ongoing	The project owner shall maintain a strip chart or other District approved data recording device of H2S readings measured by the CCM. All measurements, records, and data shall be maintained by the project owner for at least five (5) years. The project owner shall report all exceedances of Condition AQ-A3 in the quarterly report as required in Condition AQ-E1. The report shall include a description of all measures taken to bring the Stretford system back into compliance with Condition AQ-A3. The project owner shall include in the report a copy of the output from the H2S CCM or alternative District approved data during the upset condition. [ref. Rule 240(d)]	The project owner shall comply with all recordkeeping and reporting provisions. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	The District has approved Digital strip chart recorders to archive data in electronic format for later retrieval and review of CCM measurements per AQ-A3 and reported in the quarterly reports. There were no reportable exceedances during this reporting period. Records are available upon request.
AQ	D4	Operations/Ongoing	The project owner shall maintain copies of the source test results as required in Condition AQ-C1 for a minimum of 5 years. [ref. PTO 97-30B Cond. 20]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	Records and logs are retained for a minimum of five years and submitted upon request.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
AQ	D5	Operations/Ongoing	Fugitive Leak Records A.Any non-condensable gas leak in excess of the limitations of Condition AQ-B7(a) which has been detected by the project owner and is awaiting repair shall be identified in a manner which is readily verifiable by a District inspector. Any leak in the above listed pieces of equipment exceeding the limitations of Condition AQ-B7(a) and not identified by the project owner and which is found by the District shall constitute a violation of this license. The project owner shall maintain a current listing of such leaks awaiting repair and shall make this list available to the District and CPM upon request. [ref. PTO 97-30B Cond. 21] B.Any valve, flange, drip leg threaded fitting or seal on a pipeline or condensate collection system with a leak in excess of the limitations of Condition AQ-B7(b) which has been detected by the project owner and is awaiting repair shall be identified in a manner which is readily verifiable by a District inspector. Any leak in the above listed pieces of equipment exceeding the limitations of Condition AQ-B7(b) and not identified by the project owner and which is found by the District shall constitute a violation of this license. The project owner shall maintain a current listing of such leaks awaiting repair and shall make this list available to the District and CPM upon request. [ref. PTO 97-30B Cond. 21]	The project owner shall comply with all recordkeeping and reporting provisions. The project owner shall report all deviations to the CPM as required in Condition AQ-G4. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	A & B. The operator conducts daily rounds to inspect the plant which include identifying any leaks and entering the information into the plant log and submitting a work order requesting repair. A review of maintenance records demonstrate that the plant is in compliance. A review of daily compliance checklists show that the operators inspect the system for fugitive leaks. Records are available on request.
AQ	D6	Operations/Ongoing	The project owner shall maintain records detailing: a.Any periods of significant abatement equipment malfunction, reasons for malfunctions, and corrective action. b.The dates and hours in which the emission rates were in excess of the emission limitations specified in permit Conditions AQ-A1, AQ-A4, and AQ-A5. c.Fugitive steam and non-condensable gas emission source inspections, leak rates, repairs, and maintenance. d.Total dissolved solids and total suspended solids in the circulating water. [ref. Rule 240 (d)]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	GPC is in compliance. Records satisfying A-D are available upon request.
AQ	D7	Operations/Ongoing	The project owner shall maintain records detailing: a.Hours of operation. b.Types, concentrations, and amounts of chemicals used for Stretford absorbing solution and used for condensate treatment, including target levels for abatement solution concentration in the circulating water. c.A summary of any irregularities that occurred with a continuous compliance monitor. d.The dates and hours in which the emission rates were in excess of the emission limitations specified in permit Conditions AQ-A1, and AQ-A2. e.Periods of scheduled and unscheduled outages and the cause of the outages. f.Time and date of all pump and flowmeter calibrations required by this permit. g.Time and date of all alarm system tests h.Leaking equipment awaiting repair; time and date of detection and final repair. i.Total H2S, PM-10 and PM 2.5 annual emissions to date. [ref. Rule 240(d)]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	GPC is in compliance. Records satisfying A-I are available upon request.
AQ	DE1	Operations/Ongoing	In order to demonstrate compliance with the above permit conditions for S-8, 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. d.Type and amount of fuel purchased.	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request. The project owner shall report hours of operation, identifying the reason for operation, to the CPM in the annual reports required by Condition AQ-E2.	Ongoing	See attachment AQ-E2b for a summary of engine operating information.
AQ	E1	Operations/Ongoing	A quarterly report shall be submitted to the District which contains the following information: a.CCM availability for the given quarter. b.Any periods of significant abatement equipment malfunction, reasons for malfunctions, and corrective action taken. c.Time and date of any monitor indicating an hourly average exceedance of 10 ppmv of H2S. d.Source test results. The quarterly report shall be submitted to the District and CPM within 30 days of the end of each quarter. The reports are due by May 1, August 1, November 1 and February 1 for each corresponding quarter. [ref. Rule 240(d)]	The project owner shall submit the quarterly reports to the CPM. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	Copies of the Quarterly Reports were submitted to the CPM at the time of submittal to NSCAPCD.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
AQ	E2	Operations/Ongoing	An annual report shall be submitted to the District and CPM which contains the following information: a.Average main steam H2S and ammonia concentrations. b.Average total dissolved and suspended solids and average flowrate of the cooling tower water. c.Annual ammonia emissions. d.Gross megawatt hours generated. e.Steaming rate, gross average (gross steam flow; lb/ gross MW). f.Update to any changes in operating protocols used to determine plant chemical feed charts and targets; calibration and maintenance programs. g.Total organic gasses emitted as methane. h.Hours of plant operation. i.Annual carbon dioxide equivalent (CO2e) emissions j.Annual H2S, PM-10 and PM-2.5 emissions. Additional requirement for reports submitted to the Energy Commission: k.Hours of operation for the emergency engine S-8. The hours of operation shall be reported according to total use, emergency use, and maintenance and testing. The annual report shall be submitted to the District within 45 days of the end of each calendar year. [ref. Rule 240(d)]	The project owner shall submit the annual reports to the CPM within 45 days of the end of each calendar year or another timeframe approved by the CPM. The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request.	Ongoing	GPC submitted the required 2024 annual Criteria Pollutants Inventory Report to the NSCAPCD, on 2/12/2025. See attachment AQ-E2a for Annual Criteria Pollutants Inventory Report. See attachment AQ-E2b for summary of engine operating hours.
AQ	E3	Operations/Ongoing	The project owner shall submit reports to the California Air Resources Board in accordance with the provisions of CCR Title 17, Division 3, Chapter 1, Subchapter 10, Article 2, Regulation for Mandatory Reporting of Greenhouse Gas Emissions.	The project owner shall provide a statement of compliance in the annual report regarding the submittal of greenhouse gas emissions reporting to the ARB. The greenhouse gas emissions report is not required to be submitted to the CPM in the periodic compliance reports. The project owner shall make the reports available to the CPM upon request.	Ongoing	The greenhouse gas emissions report for 2024 was submitted to CARB via the Cal-eGGRT reporting tool.
AQ	E4	Operations/Ongoing	Outages which Result in Steam Stacking The project owner shall on a quarterly basis, provide a written report to the District with the outage events, cause of each outage, and the balance of events for the year for all outages which result in steam stacking. The Air Pollution Control Officer may change the frequency of reporting. The project owner shall inform the District when total outages has reached 3rd in any consecutive 12-month period. The District shall be notified within 5 days of the 3rd outage. [ref. PTO 97-30B Cond. 17	The project owner shall provide the CPM with any outage report submitted to the District in the following quarterly report. The project owner shall complete a statement of compliance the annual report submitted to the CPM. The project owner shall make the site and records available to the CPM upon request.	Ongoing	The required outage information is included in the quarterly compliance reports. There were no unplanned stacking events during 2024 which involved untreated steam being released from the Sonoma plant rock muffler.
AQ	F1	Operations/Ongoing	The project owner shall comply with the following District regulations: a.Regulation 1 Rule 400-General Limitations b.Regulation 1 Rule 410-Visible Emissions c.Regulation 1 Rule 430-Fugitive Dust Emissions d.Regulation 1 Rule 492 (40 CFR part 6 Subpart M)-Asbestos e.Regulation 1 Rule 540- Equipment Breakdown f.Regulation 2- Open Burning g.40 CFR Part 82- Chlorinated Fluorocarbons If in the event this stationary source as defined in 40 CFR Part 68.3, becomes subject to Part 68, this stationary source shall submit a risk management plan (RMP) by the date specified in Part 68.10. As specified in Parts 68, 70, and 71, this stationary source shall certify compliance with the requirements of Part 68 as part of the annual compliance certification required by 40 CFR Part 70 or 71. If in the event this stationary source as defined in 40 CFR Part 63, becomes subject to Part 63, this stationary source shall notify the District and CPM within 90 days of becoming subject to the regulation. The stationary source shall identify all applicable requirements of Part 63 and submit a plan for complying with all applicable requirements.	The project owner shall make the site and records available for inspection by representatives of the District, ARB, U.S. EPA, and Energy Commission upon request. The project owner shall provide a statement of compliance in the annual compliance reports. The project owner shall report all breakdowns to the CPM as required in Condition AQ-G8.	Ongoing	GPC complies with applicable District and Federal Regulations.
AQ	G1	Operations/Ongoing	Payment of Fees The operating permits shall remain valid during the 5-year term as long as the annual renewal fees are paid in accordance with Regulation 1 Rule 300 and Rule 360 of the District. Failure to pay these fees will result in forfeiture of this permit. Operation without a permit subjects the source to potential enforcement action by the District and the EPA pursuant to section 502(a) of the Clean Air Act. [ref. Reg 5.670]	No verification needed.	Ongoing	GPC is in compliance. Annual permitting fees have been paid.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
AQ	G10	Operations/Ongoing	Permit Posting Operation under this permit must be conducted in compliance with all data 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 such a manner as to be clearly visible and accessible at a location near the source. In the event that the permit cannot be so placed, the permit shall be maintained readily available at all times on the operating premises. [ref. Rule 240(i)]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, and Energy Commission upon request.	Ongoing	GPC is in compliance. Permit is posted in the Operator control room and available electronically.
AQ	G11	Operations/Ongoing	Compliance Certification Compliance Report and certifications shall be submitted annually by the responsible official of this facility to the Northern Sonoma County Air Pollution Control District, U.S. EPA, and CPM. Each compliance certification shall be accompanied by a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report. [ref. Reg 5.650] This license does not authorize the emission of air contaminants in excess of those allowed by the Health & 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, regulations or statutes of other governmental agencies. [ref. Rule 240(d)]	The project owner shall submit the annual compliance reports and certification to the CPM.	Ongoing	GPC is compliance, see attachment for AQ-G11: Title V Annual Compliance Certification Report.
AQ	G12	Operations/Ongoing	Permit Modification The project owner shall comply with all applicable requirements in NSCAPCD Regulation 1 Chapter II - Permits and New Source Review. [ref. Rule 200]	No verification needed.	Ongoing	No permit modifications were made during the reporting period.
AQ	G2	Operations/Ongoing	Right to Entry and Inspection The Air Pollution Control Officer, the Chairman of the California Air Resources Board, the Regional Administrator of U.S. EPA, the CPM, and/or their authorized representatives, upon the presentation of credentials, shall be permitted: a.To enter the premises where the source is located or in which any records are required to be kept under the terms and conditions of the operating permits; and b.At reasonable times to have access to and copy any records required to be kept under the terms and conditions of the operating permits; and c.To inspect any equipment, operation, or method required in the operating permits; and d.To sample emissions from the source. [NSCAPCD Rule 240.e and Reg. 5.610(e)]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, and Energy Commission upon request.	Ongoing	Agency representatives are admitted to the project upon presentation of credentials. After receiving a safety advisory no restrictions are placed on access to plant premises, sample locations and records.
AQ	G3	Operations/Ongoing	Compliance with Permit Conditions The Title V Operating Permit expires on August 8, 2026. The project owner shall submit a complete application for renewal of this Title V Operating Permit no later than 6 months prior to expiration and no earlier than one year prior to expiration. If a complete application for renewal has not been submitted in accordance with these deadlines, the facility may not operate after August 7, 2026. [ref. Reg 5.660] The project owner shall comply with all conditions of this permit. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and may be grounds for enforcement action, including monetary civil penalties, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. [ref. Reg 5.610(f)(3)] In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the project owner to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. [ref. Reg 5.610(f)(4)] The filing of a request by the facility for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. [ref. Reg 5.610(f)(5)] This permit does not convey any property rights of any sort, nor any exclusive privilege. [ref. Reg 5.610(f)(2)] The project owner shall supply within 30 days any information that the District requests in writing to determine whether cause exists, per Regulation 5.570, for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. [ref. Rule 200, Reg 5.430]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, and Energy Commission upon request.	Ongoing	The current permit renewal was issued on August 8, 2021. The next application is due by February 8, 2026.
AQ	G4	Operations/Ongoing	Reporting All deviations from permit requirements, including those attributable to upset conditions (as defined in the permit) must be reported to the District and CPM at least once every six months. For emissions of a hazardous air pollutant (HAP) or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of the permit requirements, the report must be made within 24 hours of the occurrence. For emissions of any regulated air pollutant, excluding those HAP emission requirements listed above, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours. All reports of deviation from permit requirements shall include the probable cause of the deviation and any preventative or corrective action taken. A progress report shall be made on a compliance schedule at least semi-annually and shall include the date when compliance will be achieved, an explanation of why compliance was not, or will not be, achieved by the scheduled date, and a log of any preventative or corrective action taken. The reports shall be certified by the responsible official as true, accurate and complete. [ref. Reg 5.625]	The project owner shall submit deviation reports to the CPM according to the outlined timeframes. The project owner shall make the site and records available for inspection by representatives of the District, ARB, and Energy Commission upon request.	Ongoing	The semi-annual deviation reports were submitted to the NSCAPCD and CEC as required during the reporting period. There were no emissions exceeds during the reporting period.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
AQ	G5	Operations/Ongoing	Severability In the event that any provision of this permit is held invalid all remaining portions of the permit shall remain in full force and effect. [ref. Reg 5.610]	No verification needed.	Ongoing	GPC is in compliance.
AQ	G6	Operations/Ongoing	Transfer of Ownership In the event of any changes in control or ownership of facilities to be modified and/or operated, this Permit is transferable and shall be binding on all subsequent owners and operators. The project owner 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 Air Pollution Control Officer. [ref. Rule 240(j)]	The project owner shall provide a copy of the letter of notification to the CPM in the following quarterly report.	Ongoing	No ownership changes occurred during the reporting period.
AQ	G7	Operations/Ongoing	Records Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of entry and shall include: date, place, and time of sampling, operating conditions at the time of sampling, date, place, and method of analysis and the results of the analysis. [ref. Reg 5.615]	The project owner shall make the site and records available for inspection by representatives of the District, ARB, and Energy Commission upon request.	Ongoing	Records and logs are retained for a minimum of five years and available upon request.
AQ	G8	Operations/Ongoing	Emergency Provisions The project owner may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1 Rule 540 of the District's Rules and Regulations, by following the procedures contained in Regulation 1, Rule 540 (b). The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1, Rule 540 (b)(3). [ref. Reg 5.640] The project owner may seek relief from enforcement action for a violation of any of the terms and conditions of this permit caused by conditions beyond the project owner's reasonable control by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. Any variance granted by the Hearing Board from any term or condition of this permit which lasts longer than 90 days will be subject to the U.S. EPA approval. [ref. Rule 600] Notwithstanding the foregoing, the granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement unless the Title V Operating Permit has been modified pursuant to Regulation 5 or other the U.S. EPA approved process. [ref. Rule 600]	The project owner shall notify the CPM of any breakdown, as defined by Regulation 1 Rule 540 of the District's Rules and Regulations within the timeframes outlined in Regulation 1 Rule 540 of the District's Rules and Regulations. The project owner shall submit the required breakdown reports and report any variance to the CPM in the next quarterly report. The project owner shall make the site and records available for inspection by representatives of the District, ARB, and Energy Commission upon request.	Ongoing	GPC is in compliance.
AQ	G9	Operations/Ongoing	Malfunction The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above allowable emissions limit stated in Condition AQ-A2. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under Condition AQ-A2, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or of any law or regulations which such malfunction may cause. [ref. PSD NC 80-01 Cond. III]	The project owner shall submit malfunction reports to the CPM in the quarterly reports. The project owner shall make the site and records available for inspection by representatives of the District, ARB, and Energy Commission upon request.	Ongoing	GPC is in compliance.
AQ	SC1	Operations/Ongoing	The project owner shall provide the compliance project manager (CPM) copies of any Northern Sonoma County Air Pollution Control District (NSCAPCD or District) issued project air permit for the facility. The project owner shall submit any request or application for a new project air permit or project air permit modification to the CPM.	The project owner shall submit any request or application for a new project air permit or project air permit modification to the CPM at the time of its submittal to the permitting agency. The project owner shall provide the CPM a copy of all issued air permits, including all modified air permits, to the CPM within 30 days of finalization.	Ongoing	There were no air permit modification requests or new permits issued during the reporting period.
AQ	SC2	Operations/Ongoing	The project owner shall provide the CPM with copies or summaries of the quarterly and annual reports submitted to the District, U.S. EPA, or ARB. The project owner shall submit to the CPM in the required quarterly reports a summary of any notices of violation and reports, and complaints relating to the project.	The project owner shall provide the reports to the CPM within the timeframes required in the conditions of certification.	Ongoing	See attachment AQ-E2a for the annual emissions report. The quarterly compliance reports are submitted to the CPM at the time of submittal to NSCAPCD.
AQ	SC3	Operations/Ongoing	The project owner shall provide the CPM with an Annual Compliance Report demonstrating compliance with all the conditions of certification as required in the General Provisions of the Compliance Plan for the facility.	The project owner shall provide the Annual Compliance Report to the CPM within 45 calendar days after the end of the reporting period or a later date as approved by the CPM.	Ongoing	GPC is in compliance. The ACR due date agreed upon with the CPM is December 31st for the 2020 report and June 30th annually thereafter.
AQ	SC4	Operations/Ongoing	The project owner shall maintain a current equipment list for the facility.	The project owner shall provide the CPM with the equipment list upon request.	Ongoing	GPC is in compliance

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
Biological Resources	5-5	Operations/Ongoing	SMUD will prepare a decommissioning plan which includes a biological resource element for the power plant a year in advance of decommissioning. SMUD will implement the approved decommissioning plan.	A year before the power plant is due to be deactivated, SMUD shall submit eight copies of a decommissioning plan to the USGS for review and approval. USGS will provide one copy of the plan to the CEC and one copy to the CDFG. The USGS, in consultation with the CEC biology staff, CDFG, and BLM, will review the decommissioning plan and, if necessary provide recommendations for changes in the program. SMUD will submit a statement of compliance to the USGS indicating the required decommissioning actions have been completed. CEC, CDFG, BLM, and USGS will be allowed access to the leasehold to make observations as appropriate or necessary. If requirements are not complied with, SMUD will take appropriate action to correct any deficiencies. Staff of SMUD, CEC, CDFG, BLM, and USGS will attempt to resolve any problems or conflicts. If the parties cannot reach a resolution the USGS will take appropriate action to arbitrate the dispute. NOTE: this verification will need to be updated prior to decommissioning to remove USGS.	Ongoing	There were no plans to deactivate the power plant during the reporting period
Civil Engineering	9-4	Operations/Ongoing	SMUD will prepare and submit for acceptance a reclamation plan to the USGS to restore the site to the original condition as nearly as practicable at least six months prior to decommissioning of the facility.	Within 60 days after receipt, the USGS shall notify SMUD on the acceptability of the reclamation plan.	Ongoing	There were no plans to deactivate the power plant during the reporting period
COM	1	Operations/Ongoing	Unrestricted Access The project owner shall ensure that the CPM, responsible staff, and delegate agencies are granted unrestricted access to the facility site, related facilities, project-related staff, and the records maintained on-site for the purpose of conducting facility audits, surveys, inspections, or general or closure-related site visits. Although the CPM will normally schedule site visits on dates and times agreeable to the project owner, the CPM reserves the right to make unannounced visits at any time, whether such visits are by the CPM in person or through representatives from staff, delegated agencies, or consultants.	N/A	Ongoing	GPC is in compliance.
COM	2	Operations/Ongoing	Compliance Record The project owner shall maintain electronic copies of all project files and submittals on-site, or at an alternative site approved by the CPM for the operational life and closure of the project. The files shall also contain at least: 1.the facility's Application for Certification, if available; 2.all amendment petitions, staff approvals and CEC orders; 3.all site-related environmental impact and survey documentation; 4.all appraisals, assessments, and studies for the project; 5.all finalized original and amended design plans and "as-built" drawings for the entire project; 6.all citations, warnings, violations, or corrective actions applicable to the project, and 7.the most current versions of any plans, manuals, and training documentation required by the conditions of certification or applicable LORS. Staff and delegate agencies shall, upon request to the project owner, be given unrestricted access to the files maintained pursuant to this condition.	N/A	Ongoing	GPC is in compliance.
COM	3	Operations/Ongoing	A cover letter or email from the project owner or an authorized agent is required for all compliance submittals and correspondence pertaining to compliance matters. The cover letter or email's subject line shall identify the project by the docket number for the compliance phase, cite the appropriate condition of certification number(s), and give a brief description of the subject of the submittal. When submitting supplementary or corrected information, the project owner shall reference the date of the previous submittal and the condition(s) of certification applicable. All reports and plans required by the project's conditions of certification shall be submitted in a searchable electronic format (.pdf, MS Word or Excel, etc.) and include standard formatting elements such as a table of contents identifying by title and page number each section, table, graphic, exhibit, or addendum. All report and/or plan graphics and maps shall be adequately scaled and shall include a key with descriptive labels, directional headings, a distance scale, and the most recent revision date. The project owner is responsible for the content and delivery of all verification submittals to the CPM and notification that the actions required by the verification were satisfied by the project owner or an agent of the project owner. All submittals shall be accompanied by an electronic copy on an electronic storage medium, or by e-mail, as agreed upon by the CPM. If hard copy submittals are required, they should be addressed as follows: Compliance Project Manager Geysers Energy Project (Docket Number) California Energy Commission 1516 Ninth Street (MS-2000)	N/A	Ongoing	GPC is in compliance

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
COM	5	Operations/Ongoing	Periodic and Annual Compliance Reports The project owner shall continue to submit searchable electronic ACRs to the CPM, as well as other PCRs required by the various technical disciplines. ACRs shall be completed for each year of commercial operation and are due each year on a date agreed to by the CPM. Other PCRs (e.g. quarterly reports), may be specified by the CPM. The searchable electronic copies may be filed on an electronic storage medium or by e-mail, subject to CPM approval. Each ACR must include the AFC number, identify the reporting period, and contain the following: 1.an updated list showing the status of all conditions of certification (fully satisfied conditions do not need to be included in the matrix after they have been reported as completed); 2.a summary of the current project operating status and an explanation of any significant changes to facility operating status during the year; 3.documents required by specific conditions to be submitted along with the ACR; each of these items shall be identified in the transmittal letter with the conditions it satisfies, and submitted as an attachment to the ACR; 4.a cumulative list of all known post-certification changes approved by the CEC or the CPM; 5.an explanation for any submittal deadlines that were missed, accompanied by an estimate of when the information will be provided; 6.a listing of filings submitted to, or permits issued by, other governmental agencies during the year; 7.a projection of project compliance activities scheduled during the next year; 8.a listing of the year's additions to the Compliance Record; 9.an evaluation of the Site Contingency Plan, including amendments and plan updates; and 10.a listing of complaints, incidents, notices of violation, official warnings, and citations received during the year, a description of how the issues were resolved, and the status of any unresolved complaints.	N/A	Ongoing	GPC is in compliance. The ACR due date is June 30th.
COM	6	Operations/Ongoing	Confidential Information Any information that the project owner designates as confidential shall be submitted to the CEC's Executive Director with an application for confidentiality, pursuant to Title 20, California Code of Regulations, section 2505(a).	N/A	Ongoing	GPC is in compliance.
COM	7	Operations/Ongoing	Annual Energy Facility Compliance Fee Pursuant to the provisions of section 25806 (b) of the Public Resources Code, the project owner shall continue paying an annual compliance fee which is adjusted annually, due by July 1 of each year in which the facility retains its certification.	N/A	Ongoing	GPC is in compliance.
COM	8	Operations/Ongoing	Amendments and Staff Approved Project Modifications The project owner shall petition the CEC, pursuant to Title 20, California Code of Regulations, section 1769, to modify the design, operation, or performance requirements of the project or linear facilities, or to transfer ownership or operational control of the facility. Section 1769 details the required contents for a Petition to Amend a CEC Decision.	N/A	Ongoing	GPC is in compliance.
COM	9	Operations/Ongoing	Incident-Reporting Requirements Within 24 hours of its occurrence, the project owner shall report to the CPM any safety-related incident. Such reporting shall include any incident that has resulted in death to a person; an injury or illness to a person requiring overnight hospitalization; a report to Cal/OSHA, OSHA, or other regulatory agency; or damage to the property of the project owner or another person of more than $50,000. If not initially provided, a written report also will be submitted to the CPM within five business days of the incident. The report will include copies of any reports concerning the incident that have been submitted to other governmental agencies.	N/A	Ongoing	GPC is in compliance.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
COM	10	Operations/Ongoing	Non-Operation and Restoration Plans If the facility ceases operation temporarily because it is physically unable to operate (excluding maintenance or repair) for longer than three (3) months (or other CPM-approved date), the project owner shall notify the CPM. Notice of planned non-operation, excluding maintenance or repair, shall be given at least two (2) weeks prior to the scheduled date. Notice of unplanned non-operation shall be provided no later than one (1) week after non-operation begins.	N/A	Ongoing	GPC is in compliance.
COM	11	Operations/Ongoing	Facility Closure Planning The project owner shall coordinate with the CEC to plan and prepare for eventual permanent closure and license termination by filing a Facility Closure Plan. The Facility Closure Plan shall be filed 90 days before the commencement of closure activities or at such other time agreed to between the CPM and the project owner. The Facility Closure Plan shall include the information set forth in Title 20, California Code of Regulations, section 1769, but shall not be subject to the fee set forth in Public Resources Code section 25806(e).	N/A	Ongoing	GPC is in compliance.
COM	4	Pre-con	Monthly Compliance Report During the construction of approved project modifications requiring construction of 6 months or more, the project owner or authorized agent shall submit an electronic searchable version of the MCR to the CPM within ten (10) business days after the end of each reporting month. No MCR shall be required for maintenance and repair activities, regardless of duration. MCRs shall be submitted each month until construction is complete, and the final certificate of occupancy is issued by the DCBO. MCRs shall be clearly identified for the month being reported. The MCR shall contain, at a minimum: 1.A summary of the current project construction status, a revised/updated schedule if there are significant delays, and an	N/A	Ongoing	GPC is in compliance. Monthly compliance reports were submitted as part of the effort to recommission the fire protection systems. This effort concluded in November 2022.
FIRE PREVENTION	1	Operations/Ongoing	After commissioning of the non-NFPA cooling tower wet down system, the project owner shall annually conduct the inspection, testing, and maintenance protocol designated in the Basis of Design Document for the wet down system.	The project owner shall submit the test results of the annual inspection, testing, and maintenance protocol in the Basis of Design Document 30 days after completion of the test.	Ongoing	The CEC-approved BOD/Recommissioning Plan for this Unit expressly states there is no testing of the wet down system(s) under the plan, and it does not designate an inspection, testing, and maintenance protocol for the wet-down system(s). Therefore, conditions have not arisen that trigger the compliance action required by the condition.
FIRE PROTECTION	1	Operations/Ongoing	The project owner shall notify and submit design drawings to the compliance project manager (CPM) for any planned modifications that would materially change the design, operation, or performance of the fire protection or fire alarm systems.	At least 15 business days before the start of any construction that materially changes the design, operation or performance made to the fire protection or fire alarm systems, the project owner shall submit a complete set of design drawings to the CPM for review and approval, and to the DCBO for plan check against the applicable LORS and construction inspection.	Ongoing	During 2024 there were no modifications that materially changed the design, operation, or performance of the fire protection or fire alarm systems.
FIRE PROTECTION	2	Operations/Ongoing	The project owner shall maintain and update, as appropriate, the fire protection Basis of Design documents and appendices to ensure that the fire protection and fire alarm systems are documented and accurately depicted on drawings for the project site.	The project owner shall provide the CPM with an updated Basis of Design document within 30 days of completing any changes to fire protection or fire alarm systems that result in changes to the Basis of Design.	Ongoing	The Basis of Design was approved by the CEC on December 5, 2022. There have been no modifications that required an update to the BOD during the reporting period to the best of our knowledge.
FIRE PROTECTION	3	Operations/Ongoing	The project owner shall ensure that all required inspections, testing, and maintenance (ITM) are performed on the project's fire protection systems as specified and in the frequencies set forth in Title 19, California Code of Regulations, section 904(a) and on the project's fire alarm systems as specified in the applicable edition of the National Fire Protection Association (NFPA) 72 National Fire Alarm and Signaling Code.	The project owner shall provide to the CPM copies of the completed ITM reports for the project's fire protection systems and fire alarm systems within 15 days of receiving the ITM reports. The ITM reports shall be submitted quarterly for the first two years following approval of this condition, then all ITM reports shall be submitted annually thereafter.	Ongoing	ITM reports are submitted to the CEC under confidential designation and annual reporting commenced for the 2023 ITM reports. All 2024 confidential ITM reports were submitted on April 23, 2025.
FIRE PROTECTION	4	Operations/Ongoing	Whenever deficiencies or failures are identified in any of the ITM reports for the project's fire protection or fire alarm systems, the project owner shall provide the CPM with a summary of the following information from the ITM reports required by FIRE SAFETY-3: (a)A summary of all deficiencies or failures identified; (b)The corrective action the project owner has taken, or plans to take, to address each identified deficiency or failure; and (c)The completion date or an estimated completion date to implement the corrective action.	The project owner shall provide the CPM with the information from (a)-(c) within 15 days of receiving the ITM reports.	Ongoing	Confidential corrective action reports were submitted for each quarterly set of 2024 ITM reports.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
FIRE PROTECTION	5	Operations/Ongoing	In the case of a fire protection system impairment, as defined in the latest applicable edition of NFPA-25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, California Edition, that would prevent the proper functioning of any portion of the fire protection or fire alarms systems during a fire event, the project owner shall inform the CPM of the impairment along with the following information: (a)The date discovered; (b)The location of the impairment; (c)A short description, including a photograph (if applicable), of the impairment and its cause (if known), and a description of the actions to be taken to protect life and safety until the impairment is corrected; (d)The corrective action outlining how the impairment was repaired, including any engineering drawings or inspections, not already provided to the CPM or the DCBO; (e)The date the impairment was repaired; and (f)Before and after photographs (if applicable) showing the completed impairment repair.	The project owner shall provide the CPM with information from (a)-(c) within two business days of the discovery of an impairment, or within a time as approved by the CPM. The project owner shall provide the CPM with information from (d)-(f) within 5 days of correction of the impairment.	Ongoing	GPC provided timely fire protection system impairment and corrective action notifications to the CPM. GPC also provided information regarding status of identified impairments in the quarterly submissions for the Fire Protection-4 reported items.
GEN	1	Operations/Ongoing	Whenever material modifications to the facility are planned, the project owner shall design, construct, and inspect project modifications in accordance with the applicable version of the California Building Standards Code (CBSC), also known as Title 24, California Code of Regulations, which encompasses the California Building Code (CBC), California Administrative Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Energy Code, California Fire Code, California Code for Building Conservation, California Reference Standards Code, and all other applicable engineering laws, ordinances, regulations and standards (LORS) in effect at the time initial design plans are submitted to the chief building official (CBO) for review and approval (the CBSC in effect is the edition that has been adopted by the California Building Standards Commission and published at least 180 days previously). The project owner shall ensure that the provisions of the above applicable codes are enforced during the construction, addition, alteration, or demolition of the modifications. Where, in any specific case, different applicable sections of the code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. The project owner shall ensure that all contracts with contractors, subcontractors, and suppliers clearly specify that all work performed, and materials supplied comply with the codes listed above.	Within 30 days following receipt of the certificate of occupancy (if one is required by the CBO) for any material project modification completed after the effective date of this condition, the project owner shall submit to the compliance project manager (CPM) a statement of verification, signed by the responsible design engineer, attesting that all designs, construction, installation, and inspection requirements of the applicable LORS and the CEC's decision have been met in the area of facility design. The project owner shall also provide the CPM a copy of the certificate of occupancy within 30 days of receipt from the CBO. Once the certificate of occupancy has been issued, the project owner shall inform the CPM at least 30 days prior to any construction, addition, alteration, or demolition to be performed on any portion(s) of the completed facility that requires CBO approval for compliance with the above codes. The CPM will then determine if the CBO needs to approve the work.	Ongoing	On September 28, 2023, GPC submitted a Petition to Amend Screening Form regarding the addition of a 2.5-inch bypass line around the exciter cooling water piping's temperature control valve. The CEC responded and stated that the activities were not subject to California Code of Regulations, title 20, section 1769, and did not require a post-certification petition. DCBO oversight was required. This work was completed during the 2024 reporting year. The DCBO submitted the Closeout and As-Built Document Package on January 31, 2025. No other modifications were made to the facility during the reporting period.
Noise	16-1	Operations/Ongoing	Geysers Power Company shall comply with standards set forth in the most recent Sonoma County Use Permits which are 65 DBA for daytime hours (7 a.m. to 10 p.m.) and 45 DBA for nighttime hours (10 p.m. to 7 a.m.) for residences, or the provisions of the Sonoma County Zoning Ordinance as they relate to noise, if they are adopted. In the event the Sonoma County Planning Department, USGS, or Geysers Power Company receives public complaints of the noise due to construction or operation, Sonoma County and Geysers Power Company agree to promptly conduct an investigation to determine the extent of the problem. Geysers Power Company shall take reasonable measures to resolve the complaints. Within 10 days of a request by the Sonoma County Planning Department, Geysers Power Company shall conduct noise surveys at the sensitive receptors which complaints and at the facility property line nearest the complaining receptors. Geysers Power Company shall conduct surveys for the period of the construction working day and, if possible, under circumstances similar to those when the noise was perceived. The survey should be reported in terms of the LX and LEQ levels (X= 10, 50, and 90). Geysers Power Company shall identify and implement feasible mitigation measures necessary to assure compliance with the county standards.	Geysers Power Company shall promptly forward to Sonoma County the survey results, the mitigation measures applied to resolve the problem, and the results of these efforts. Sonoma County shall advise the CEC of any continuing noncompliance conditions.	Ongoing	No complaints were received during the reporting period.
Noise	16-2	Operations/Ongoing	Within 90 days after the plant reaches its rated power generation capacity and construction is complete, SMUD shall conduct a noise survey at 500 feet from the generating station or at a point acceptable to SMUD, CEC, and Sonoma County Planning Department and at the nearest sensitive receptor. The surveys will cover a 24-hour period at each survey point with results reported in terms of LX (x= 10, 50, and 90), LEQ, and LDN levels. SMUD shall prepare a report of the survey that will be used to determine the plants conformance with county standards. In the event that county standards are being exceeded, the report shall also contain a mitigation plan and a schedule to correct the noncompliance No additional noise surveys of off-site operational noise are required unless the public registers complaints or the noise from the project is suspected of increasing due to a change in the operation of the facility.	Within 30 days of the noise survey, SMUD shall submit its report to the Sonoma County Planning Department and USGS.	Ongoing	No complaints were received during the reporting period.
Noise	16-3	Operations/Ongoing	Within 180 days after the start of commercial operation, SMUD shall prepare a noise survey report for the noise-hazardous areas in the facility. The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, CAC, Article 105. The survey results will be used to determine the magnitude of employee noise exposure. If employee complaints of excessive noise arise during the life of the project, CAL/DOSH, Department of Industrial Relations, shall make a compliance determination.	SMUD shall notify CAL/DOSH, USGS and the CEC of the availability of the report.	Ongoing	No complaints were received during the reporting period.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
Public Health	2-1	Operations/Ongoing	Geysers Power Company shall conduct quarterly sampling and analysis for radon-222 concentrations in noncondensable gases in the cooling tower exhaust. An outline of the current California Department of Health Services Radiological Health Section (CDHS/RES) minimal requirements for monitoring and reporting on radon-222 follows: •The facility must be sampled at least quarterly. •The sampling and analysis methods must be shown to be accurate by comparison to known standards supplied by an acceptable source (e.g. EPA). This “standard comparison” or “calibration” shall be run with each set samples counted unless it is shown that the counting system is sufficiently stable. If calibration is unnecessary for each run, then calibration shall be required at least once per year. •Each power production unit must be sampled such that the instantaneous radon-222 emission rate (Ci/sec) to the environment is accurately determined. This radon-222 monitoring program will be conducted for at least the first two years of commercial operation. If monitoring results indicate that the radon-222 released for the Geysers Power Company facility is well within applicable standards, the program may be modified, reduced in scope, or eliminated provided the approval of CDHS/RES is obtained by Geysers Power Company. As new information and techniques become available, with concurrence of Geysers Power Company and CDHS/RES, changes may be made to the program or methods employed in monitoring radon-222.	Approximately 10 percent of samples will be taken in duplicate with the duplicate sample sent to the CDHS Sanitation and Radiation Laboratory in Berkeley for cross-check analysis as a quality control on the Geysers Power Companies laboratory analyses. Geysers Power Company will provide annual report to CDHS/RES discussing each point above. All results shall include the standard deviation associated with the counting error. The error in the sampling procedure and emission calculator shall be discussed. The report shall also indicate the maximum dose due to emissions calculated at the site boundary, and to the resident nearest the location of maximum radon-222 concentration, and the resultant expected population dose. (These dose calculations may follow a simplified methodology established by CDHS/RES.) Annual reports shall be maintained by CDHS/RES and be available to the USGS, Energy Commission staff, and the public on request. CDHS/RES shall report annually the results of the radon-222 monitoring program to the USGS and Energy Commission. This report shall include at a minimum data concerning average and high values of radon-222 emissions and incidences of the 3.0 picocuries per liter (pCi/l) and 6.0 pCi/l level exceedances (see 2-2 and 2-3 below). If the program is modified, reduced in scope, or eliminated, Geysers Power Company shall send a copy of CDHS/RES approval to USGS and Energy Commission.	Ongoing	See attachment Public Health 2-1 for table of quarterly analysis.
Public Health	2-2	Operations/Ongoing	If the radon-22 concentration exceeds 3.0 pCi/l in the cooling tower exhaust, SMUD must inform the CDHS/RES with a special report.	SMUD shall provide a written report to CDHS/RES of sample results within 30 days of confirming an exceedance of 3.0 pCi/l radon-222 in the cooling tower exhaust. Confirmation includes the reanalysis of the sample by SMUD or another qualified laboratory. Confirmation includes the reanalysis of the sample results must be accomplished in the most expedient manner possible. The procedures used shall be the most expedient manner possible. The procedures used shall be tie same as the normal analysis but may include sending samples to CDHS/RES and/or outside qualified laboratories for analysis. The confirmation of a sample should take less than five calendar days. SMUD shall notify the USGS of corrective actions taken.	Ongoing	See the attached table referenced in Public Health 2-1. There was no exceedance of 3.0 pCi/l during the reporting period.
Public Health	2-3	Operations/Ongoing	If the radon-222 concentration exceed 6.0 pCi/l in the cooling tower exhaust, Geysers Power Company shall notify the CDHS/RES and the Energy Commission CEC by telegram or telephone upon confirmation of the sample result.	Geysers Power Company shall notify CDHS/RES and the Energy Commission within 24 hours of confirming the sample results (see 2-2. above for confirmation requirements). Geysers Power Company shall notify the Energy Commission USGS of corrective actions taken.	Ongoing	See the attached table referenced in Public Health 2-1. There was no exceedance of 6.0 pCi/l during the reporting period.
Public Health	2-4	Operations/Ongoing	Geysers Power Company shall obtain ambient air measurements for benzene, silica, mercury, arsenic, ammonia, vanadium, and radon-222 and its daughters in accordance with the following requirements (see also corresponding requirements for regulated air pollutants). These requirements may be accommodated as part of any established regional data-gathering program acceptable to NSCAPCD, USGS, CARB, and Energy Commission staff. •Measurements shall be made in the populated areas in Cobb Valley downwind of the power plant, to be determined by NSCAPCD, CARB, USGS, Energy Commission staff, CARB, and Geysers Power Company.	CEC staff shall prepare a report on the agreed upon levels for pollutants. This report will be filed with the USGS and the CEC.	Ongoing	GPC participates in GAMP and ambient air measurements are analyzed through CARB and NSCAPCD.
Public Health	2-8	Operations/Ongoing	New well steam analysis will be performed by SMUD when new steam supply wells are added to guarantee that combined power plant emission (the sum of base line, power plant contributions, and new well contributions) do not change significantly (+-20 percent). Methodology for this analysis will be the same as in 2-6 above.	SMUD shall send the new well steam analysis to USGS within 30 days after the sampling.	Ongoing	GPC is in compliance.
Safety	12-2	Operations/Ongoing	On-site worker safety inspections shall be conducted by the California Division of Occupational Safety and Health (CAL/DOSH) during construction and operation of the facility or when an employee complaint has been received.	DOSH will forward to the USGS and the CAM a copy of any citations or corrective orders.	Ongoing	No Cal/OSHA inspections were performed on GPC policies/procedures during the reporting period.
Socioeconomics	3-4	Operations/Ongoing	SMUD shall participate in any proceeding conducted by the CEC or GRIPS to evaluate cumulative socioeconomics at the Geysers.	SMUD shall provide a brief summary of its participation in the annual compliance report filed with the CEC.	Ongoing	No proceedings were conducted by the CEC or GRIPS to evaluate Condition 3-4 at the Geysers.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
Solid Waste Management	11-2	Operations/Ongoing	The only Stretford process waste is sulfur cake with some entrained process chemicals. SMUD shall ensure that the sulfur cake is properly stored in an appropriate container and removed periodically to be sold or disposed at a site approved for such wastes. If a secondary treatment System is used to abate H2S emissions, the plant may produce additional hazardous wastes. Any sludge which accumulates in the cooling tower will be removed as needed and hauled by a registered hazardous waste hauler to an approved disposal site.	SMUD shall submit final design plans and "as-built" drawings to the Sonoma County CBO incorporating these design features. In addition SMUD shall each month, if waste shipments are made, submit completed hazardous waste manifests to CDHS in compliance with Section 66475 of Title 22, CAC. If a separate solids removal system is added to the condensate or circulating water system, SMUD shall submit design plans to CEC and Sonoma County CBO 60 days before start of construction and "as-built" drawings 30 days after completion of construction. Solids removed are subject to the same hazardous waste provisions as Stretford waste and cooling tower sludge.	Ongoing	All waste haulers are in compliance and on file in the DTSC database.
Solid Waste Management	11-3	Operations/Ongoing	Geysers Power Company shall ensure that any hazardous waste hauler employed has a certificate of registration from the California Department of Health Services (CDHS), Hazardous Waste Management Branch. Geysers Power Company shall require that hazardous wastes are taken to a facility permitted by CDHS to accept such wastes.	Geysers Power Company shall keep a letter on file verifying that hazardous waste haulers have CDHS certificates of registration. In addition, Geysers Power Company shall each month, if waste shipments are made, submit completed hazardous waste manifests to CDHS in compliance with section 66475 and Title 22, CAC.	Ongoing	GPC abides by DTSC Guidance for GPC's generator status.
Solid Waste Management	11-4	Operations/Ongoing	If hazardous wastes, including Stretford sulfur effluent, are stored on site for more than 60 days, Geysers Power Company shall obtain a determination from the CDHS that the requirements of a Hazardous Waste Facility Permit have been satisfied.	Geysers Power Company shall notify the Energy Commission if it files an in-lieu application with CDHS for the operation of a hazardous waste facility.	Ongoing	GPC abides by DTSC Guidance for GPC's generator status.
Structural Engineering	10-10	Operations/Ongoing	Modifications to the facility after operation has commenced which would violate the laws and standards in Section A above is considered a major change and requires USGS approval before the change is made. USGS will consult with the CEC prior to its decision of approval or no approval. At least 30 days prior to the intended start of construction of a major change, SMUD will submit 8 copies of the proposed major change to the USGS for distribution and review.	Unless the CBO and CAM notify the USGS otherwise within 20 days of receipt of the proposed major change, the major change will be deemed acceptable to the CBO and to the CEC.	Ongoing	GPC is in compliance.
Transmission Line Safety and Nuisance	13-2	Operations/Ongoing	Geysers Power Company shall construct, operate, and maintain the transmission lines in accordance with Title 14, California Administrative Code, Sections 1254 - 1256, and Public Resources Code Sections 4292 - 4296.	Within 30 days after completion of construction, Geysers Power Company shall submit a statement from a responsible civil engineer to the California Department of Forestry (CDF), the USGS, and the Energy Commission indicating that the transmission line has been constructed in accordance with applicable requirements. Geysers Power Company shall also inspect the transmission line annually to ensure that the line maintains required clearances, especially during the fire season. In the event that noncompliance is determined by the CDF, the CDF shall require Geysers Power Company to take measures necessary to correct the noncompliance. If Geysers Power Companies corrective measures are unsatisfactory in the opinion of the CDF, the CDF shall inform the Energy Commission and shall recommend a course of action.	Ongoing	The annual visual transmission line inspection was completed on 10/29/24 and the annual vegetation inspection was completed on 4/29/24.
Transmission Line Safety and Nuisance	13-3	Operations/Ongoing	SMUD shall ensure that, regardless of location or ownership, all metallic ungrounded fences longer than 150 feet within the right-of-way shall be grounded following the procedures outlined in the AFC.	Within 30 days after completion of transmission line construction, SMUD shall file a statement verifying compliance.	Ongoing	GPC is in compliance with GPC's Transmission Line maintenance program
Transmission Line Safety and Nuisance	13-4	Operations/Ongoing	In the event of complaints regarding induced currents from vehicles, portable objects, large metallic roofs, fences, gutters, or other objects, SMUD shall investigate and take all reasonable measures at its own expense to correct the problem for valid complaints provided that the nuisance is being caused by SMUD's transmission facility and that (a) the object is located outside the right-of-way, or (b) the object is within the right-of-way and existed prior to right-of-way acquisition. For objects constructed, installed, or otherwise placed within the right-of-way after right-of-way acquisition, SMUD shall notify the owner of the object that it should be grounded. In this case, grounding is the responsibility of the property owner. SMUD shall advise the property owner of this responsibility in writing prior to signing the right-of-way agreement.	In an annual compliance report to the CEC, SMUD shall identify the source and volume of potable water used.	Ongoing	No complaints received concerning induced currents from the GPC plants during the reporting period.
Transmission Line Safety and Nuisance	13-6	Operations/Ongoing	On-site worker safety inspections may be conducted by the California Division of Occupational Safety and Health (CAL/DOSH) during construction and operation of the transmission line or when an employee complaint has been received. Geysers Power Company shall notify the CEC and the USGS in writing in the event of a violation and shall indicate if such violation may delay the transmission line construction schedule.	Geysers Power Company shall maintain records of CAL/DOSH inspections and shall make them available to authorized CEC staff upon request.	Ongoing	No Cal/OSHA inspections were performed during the reporting period.

Technical Area	No.	Facility Status	Condition of Certification	Compliance Verification	Status	2024 Annual Compliance Report
Transmission Line Safety and Nuisance	13-7	Operations/Ongoing	Geysers Power Company shall make every reasonable effort to locate and correct, on a case-by-case basis, all causes of radio and television interference attributed to the transmission line facilities including, if necessary, modifying receivers and furnishing and installing antennas. In addition, Geysers Power Company shall take reasonable care to prevent the conductors from being scratched or abraded.	Geysers Power Company shall maintain records of complaints and corrective action and shall make these records available to authorized Energy Commission CEC staff upon request.	Ongoing	No complaints received concerning induced currents from the GPC plants during the reporting period.
Water Quality/Hydrology/ Water Resources	6-2	Operations/Ongoing	To ensure the integrity of the spill containment and storm water drainage systems, Geysers Power Company shall maintain those systems and repair them as needed.	Annually (July 1) Geysers Power Company shall file with the CEC and NCRWQCB a summary of repair or alterations made to the spill containment or storm water drainage systems.	Ongoing	An annual containment inspection is conducted as part of a preventative maintenance program. No repairs or alterations were needed to the spill containment or storm water drainage systems during the reporting period.
Water Quality/Hydrology/ Water Resources	6-5	Operations/Ongoing	To protect the quality of waters within the immediate vicinity of the SMUDGEO #1 site, SMUD has proposed numerous mitigation measures as listed in the Joint Water Resource Findings identified below: •SMUD agrees to design and construct the paved pad surface to drain a 100 year storm. •SMUD proposes to utilize condensed steam for cooling water consistent with current practices of like geothermal power plants. •Condensed steam will be utilized for cooling water make-up. The excess cooling water will evaporate as it passes through the cooling tower or will be reinjected into the steam resource reservoir. •Initial start-up cooling water supplied by the steam developer will be steam condensate. •SMUD agrees to "truck-in" the domestic-potable annual water as needed. This water will be acquired from an outside source. •SMUD agrees to minimize work in the area where a spring has been identified.	Prior to commencing commercial operation SMUD shall file statements signed by a registered civil engineer, as appropriate, and the project manager, identifying compliance-noncompliance and/or deviations to the above listed mitigation measures. 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.	Ongoing	GPC is in compliance. See attachment WQ 6-5 for the Recycled Water Report.
Water Quality/Hydrology/ Water Resources	6-10	Operations/Ongoing	SMUD has proposed to annually need approximately 1 acre-foot of "potable" water from various domestic, irrigation, and operational needs. The exact source(s) and volume of this water were undetermined at the time of certification: therefore, SMUD shall file that information (projected for the life of the project) with the CEC.	In an annual compliance report to the CEC, SMUD shall identify the source and volume of potable water used.	Ongoing	Approximately 24.2 acre-feet of groundwater from the Moody ground water well was used between Unit 3 (Sonoma), Unit 13 (Big Geysers), Unit 16 (Quicksilver), Unit 19 (Calistoga) for Stretford makeup water, and at all the aforementioned plants, including the decommissioned West Ford Flat and Bear Canyon power plants, for domestic usage, and used for various drilling purposes at the associated well pads during the reporting period. There are no individual water meters to determine how much water is used at each plant or wellfield.

CONDITION OF CERTIFICATION
PUBLIC HEALTH 2-1

Attachment PH 2-1: Table of Quarterly Radon-222 Concentration Analysis in Non-Condensable Gases for 2024

Geysers Sonoma Plant (Unit 3) 80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024

	4Q24	3Q24	2Q24	1Q24	Sonoma 3
Date	11/11/24	07/01/24	05/09/24	3/14/24	
Unit	SONOMA	SONOMA	SONOMA	SONOMA	3
[Rn-222] Main Steam Sample (pCi/Kg)	**19146**	**21103**	**22215**	**22312**	
Unit gross load (MW)	**59.09**	**55.3**	**58.1**	**57.9**	
Supply steam flow rate (klb/hr)	**926**	**897**	**908**	**891**	
Supply Steam Flow Rate (Mg/hr)	420	407	412	404	
Steam Rate (lb/kwhr)	**15.60**	**16.20**	**15.60**	**15.40**	
Steam Rate Derived Supply Steam Flow Rate (Mg/hr)	418	406	411	404	
100% Service Cool. Tower Air flow Rate, S.T.P. (GL/hr)	26.82	26.82	26.82	26.82	
Number of Fans in Service	**12**	**12**	**12**	**10**	
Number of Fans	12	12	12	12	
Cool. Tower fract. (cells oper. /cells design)	1.00	1.00	1.00	0.83	
Cooling Tower air flow rate, S.T.P. (GL/hr)	26.82	26.82	26.82	22.35	
Unit daily Cooling Tower air flow (L/day)	6.4368E+11	6.4368E+11	6.4368E+11	5.364E+11	
Unit Rn222 Release Rate (Ci/day)	0.19	0.21	0.22	0.22	
Unit Rn222, Emission Concentration (pCi/L)	**0.30**	**0.32**	**0.34**	**0.40**	
Notes on Color Codes:					
Data from Sample Collection Sheet					
Data from Analytical Laboratory Results					
Data Result					
Data Entry Or Import From Other Source Required					
Maxiumum Value Substiututed in lieu of corrupt data					
Anomolous Source Data Corrupt And Not Used					
Data is Constant or Calculated					
Conversion Const. Mg/klb =					
0.4535924					

CONDITION OF CERTIFICATION
WQ 6-5

Attachment WQ 6-5: 2024 Geysers Power Plant Units Recycled Water Use Report

Geysers Sonoma Plant (Unit 3) 80-AFC-01C
Annual Compliance Report to the California Energy Commission
January 2024 - December 2024

GEYSERS POWER COMPANY, LLC
10350 Socrates Mine Road
Middletown, CA 95461
707.431.6000

GWQ-25-009

January 27, 2025

Email to:
ddwsantarosa@waterboards.ca.gov
District Engineer
State WRCB – Division of Drinking Water
50 D Street, Suite 200
Santa Rosa, CA 95404

Subject: 2024 Recycled Water Use Report System No. 4991030

District Engineer:

The report requirement as noted in correspondence from the Department of Health Services (now known as Division of Drinking Water) on December 5, 2003 requires that:

Section 3.2 of the Engineering Report describes additional potential uses of the recycled water. Annually, Calpine must submit a letter report describing those uses and use areas which are incorporated under this section.

The referenced Engineering Report (Report) is associated with the use of Santa Rosa Geysers Recharge Project recycled water specifically at the Geysers power plant units. Section 3.1 of the Report states that recycled water will be used as make-up water in cooling towers. This report includes use in Cooling Towers at power plants (Report Section 3.1) and other potential uses including for flushing toilets, priming drain taps, industrial process water, firefighting, industrial boiler feedwater, construction uses, and landscape irrigation (Report Section 3.2).

Attachment 1 provides data associated with cooling tower usage. During 2024 the following injection wells received recycled SRGRP water:

- Unit 1 Aidlin injection wells include Aidlin 11, Aidlin 12, and Aidlin 13.
- Unit 3 Sonoma injection wells include CA1862-4, CA1862-13, CA1862-16 and CA1862-27. CA1862-1 and CA1862-6 are shut in but could be placed back into service.
- Unit 17 Lakeview injection wells include DX45, DX46, DX88, and NEGU13. DX47, DX52, DX72, GDH2 are shut in but could be put back in service.
- Unit 20 Grant injection wells include BEF8728, GDC33, GDCF36A28, BGL4, and GDCF6529

Minor amounts of recycled water 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.

If you have any questions, please contact me at (707) 431-6062.

Sincerely,

Saima Baig

Digitally signed by Saima Baig
DN: cn=Saima Baig, o, ou=Geysers Power Company, LLC, email=saima.baig@calpine.com, c=US
Date: 2025.01.27 09:17:14 -08'00'

Saima Baig
EHS Region Manager - Geysers

TABLE 1 SRGRP WATER TO COOLING TOWERS (CT)						
Date	U3 CT SRGRP Gallons	U17 CT SRGRP Gallons*	U20 CT SRGRP Gallons	Aidlin Tower 1	Aidlin Tower 2	2024 SRGRP to CT total Gallons
January	24,211,726	1,383,840	12,986,984	3,074,877	3,074,877	44,732,303
February	22,536,484	392,229	5,317,932	1,021,606	1,021,606	30,289,858
March	25,127,456	325,762	10,205,199	2,238,617	2,238,617	40,135,650
April	23,841,054	874,519	13,705,976	288,057	288,057	38,997,662
May	25,173,573	595,850	17,133,467	3,661,968	3,661,968	50,226,826
June	23,101,942	779,979	19,433,081	2,911,499	2,911,499	49,138,000
July	23,255,144	6,592,362	15,975,267	3,740,217	3,740,217	53,303,207
August	15,377,859	3,692,849	8,102,432	4,491,474	4,491,474	36,156,087
September	24,978,065	6,501,102	22,165,859	7,121,869	7,121,869	67,888,764
October	19,389,250	2,622,808	13,112,823	6,474,757	6,474,757	48,074,394
November	10,741,166	868,663	6,637,493	7,880,178	7,880,178	34,007,677
December	18,837,185	426,731	15,322,831	5,886,837	5,886,837	46,360,421
2024 Totals	256,570,903	25,056,694	160,099,342	48,791,956	48,791,956	539,310,851