

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512



STATE OF CALIFORNIA
State Energy Resources
Conservation and Development Commission

In the Matter of:)	Docket No. 99-AFC-1C
)	Order No. 03-0723-(9)
ELK HILLS POWER PROJECT)	
)	COMMISSION ORDER APPROVING
Petition to Allow for Increasing Startup-)	PROJECT MODIFICATION
Shutdown Emissions, Increasing Power of)	
Fire Water Pump, and Modifying Cooling)	
Tower Operation)	

On April 30, 2003 the California Energy Commission (Energy Commission) received a petition from Elk Hills Power, LLC to modify air quality Conditions of Certification to allow for an increase in criteria air emissions during startup-shutdown phases, increase the size of the emergency fire water pump, and modify the operation of the cooling towers. At a regularly scheduled Business Meeting on July 23, 2003, the Energy Commission considered staff's analysis and approved revisions to the air quality Conditions of Certification in accordance with Title 20, section 1769(a)(3) of the California Code of Regulations to allow for the aforementioned project modifications.

COMMISSION FINDINGS

Based on staff's analysis, the Energy Commission finds that:

- A. There will be no new or additional unmitigated significant environmental impacts associated with the proposed change. Potential exceedance of criteria emission limits during startup and shutdown activities will be mitigated through the surrender of emission reduction credits.
- B. The facility will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525.
- C. The changes will be beneficial to the project owner by allowing for operational efficiencies.
- D. There has been a substantial change since the Energy Commission certification based on the project owner's re-evaluation of operational information that was not available during the siting process.

ORDER

The California Energy Commission hereby approves an increase in startup-shutdown emissions, increasing the size of the emergency fire water pump, and modification of the cooling tower operation.

REVISIONS TO EXISTING CONDITIONS OF CERTIFICATION

(Deleted text is shown in ~~strike through~~, and new text is underlined).

AQ-13 During startup or shutdown of any gas turbine engine(s), combined emissions from both gas turbine engines (s-3523-1-0 and ~~—2-0~~) heat recovery steam generator exhausts shall not exceed any of the following limits in any one hour:

- NOx (as NO₂) 400 lbs
- CO 3600 lbs

Deleted: 76

Deleted: 38

Verification: The project owner shall provide records of compliance as part of the quarterly reports of Condition **AQ-35**.

AQ-14 ~~By Commencing~~ two hours after initial turbine firing, CTG exhaust emissions shall not exceed any of the following: NOx (as NO₂) 12.2 ppmv @ 15% O₂ and CO 25 ppmv @ 15% O₂. [District Rule 4703]

Verification: The project owner shall provide records of compliance as part of the quarterly reports of Condition **AQ-35**.

AQ-15 Emission rates from each CTG, except during startup or shutdown, shall not exceed any of the following emission limits:

- PM10 16.2 lbs/hr
- SO₂ 3.6 lbs/hr
- NO₂ 15.8 lbs/hr and 2.5 ppmvd @ 15% O₂ averaged over 1-hr
- VOC 4.0 lbs/hr and 2.0 ppmvd @ 15% O₂ averaged over 3-hr
- CO 12.5 lbs/hr and 4 ppmvd @ 15% O₂ averaged over 3-hr
- Ammonia 10 ppmvd @ 15% O₂ averaged over 24-hr

Deleted: 18

[District Rule 2201, 4001 and 4703]

Verification: The project owner shall provide records of compliance as part of the quarterly reports of Condition **AQ-35**.

AQ-16 Emission rates from each CTG shall not exceed any of the following:

- PM10 388.8 lbs/day
- SO₂ 86.4 lbs/day
- NO₂ 752.0 lbs/day
- VOC 184.0 lbs/day
- CO 3948.0 lbs/day

Deleted: , on days when a startup or shutdown occurs,

Deleted: 432

Deleted: 418.5

Deleted: 96.0

Deleted: 326.7

[District Rule 2201]

Verification: The project owner shall provide records of compliance as part of the quarterly reports of Condition **AQ-35**.

AQ-17 Emission rates from both CTGs (S-3523-1 and -2) shall not exceed any of the following:

- PM10 777.6 lb/day
- SO2 172.8 lb/day
- NO2 1103.0 lb/day
- VOC 269.0 lb/day
- CO 4297.0 lb/day

Deleted: , on days when a startup or shutdown occurs for either or both turbines,

Deleted: 864.0

Deleted: 817.8

Deleted: 192.0

Deleted: 640.4

[District Rule 2201]

Verification: The project owner shall provide records of compliance as part of the quarterly reports of Condition **AQ-35**.

AQ-18 Annual emissions from both CTGs calculated on a twelve (12) consecutive month rolling basis shall not exceed any of the following: PM10 -283,824 lb/year, SOx (as SO2) - 57,468 lb/year, NOx (as NO2) - 335,022 lb/year, VOC - 64,478 lb/year, and CO - 831,008 lb/year. [District Rule 2201]

Deleted: 315,360

Deleted: 285,042

Deleted: 223,040

Verification: The project owner shall provide records of compliance as part of the quarterly reports of Condition **AQ-35**.

AQ-21 Prior to commencement of operation of S-3523-1-0, -2-0, & 3-0, emission offsets shall be tendered for all calendar quarters in the following amounts, at the offset ratio specified in Rule 2201 (6/15/95 version) Table 1, PM10 - Q1: 70,820 lb, Q2: 71,608 lb, Q3: 72,394 lb, and Q4: 72,394 lb; and surrendered for all calendar quarters in the following amounts, at the offset ratio specified in Rule 2201 (6/15/95 version) Table 1, SOx (as SO2) - Q1: 14,170 lb, Q2: 14,328 lb, Q3: 14,485 lb, and Q4: 14,485 lb; NOx (as NO2) - Q1: 65,353 lb, Q2: 66,079 lb, Q3: 66,805 lb, and Q4: 66,805 lb; and VOC - Q1: 10,967 lb, Q2: 11,089 lb, Q3: 11,211 lb, and Q4: 11,211 lb. [District Rule 2201]

Deleted: 78,596

Deleted: 79,470

Deleted: 80,343

Deleted: 80,343

Additional NOx emission offsets have been tendered for the following quantities of emission, at the applicable offset ratio specified in Table 4-2 of District Rule 201 (as amended 12/19/02): NOx (as NO2) - Q1: 12,324 lbs, Q2: 12,461 lbs, Q3: 12,598 lbs, Q4: 12,598 lbs. [District Rule 2201]

The requirements of this condition have been met by the surrendering of the following emission reduction credits: certificates S-1591-1 (VOC), S-1541-5 (SO2) and S-1588-2 (NO2) and the tendering of certificate S-1583-2 (NO2 for PM10).

Verification: The owner/operator shall submit copies of ERCs tendered or surrendered to the SJVUAPCD in the totals shown to the CPM prior to commencement of operation of the CTGs or cooling tower.

AQ-49 Drift eliminator drift rate shall not exceed 0.0005%. [District Rule 2201]

Deleted: 0.0006

Verification: The project owner shall submit documentation from the selected cooling tower vendor that verifies the drift eliminator efficiency to the CPM thirty (30) days prior to commencement of construction of the cooling towers.

AQ-50 PM10 emission rate shall not exceed 9.4 lb/day. [District Rule 2201]

Deleted: 9.3

Verification: Please refer to Condition **AQ-51**.

Language preceding Condition of Certification AQ-53:

**SAMPLE EQUIPMENT DESCRIPTION: 240-HP CUMMINS MODEL 6CTA8.3-F2
DIESEL-FIRED IC ENGINE DRIVING EMERGENCY FIRE
WATER PUMP S-3523-4-0:**

Deleted: 125 HP
PERKINS/DETROIT DIESEL
MODEL PDFP-06YR

IT IS SO ORDERED.

STATE OF CALIFORNIA
ENERGY RESOURCES
CONSERVATION AND
DEVELOPMENT COMMISSION

DATE July 23, 2003

WILLIAM J. KEESE, Chairman