

STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:)	Docket No. 99-AFC-1C
ELK HILLS POWER PROJECT)	Order No. 08-0102-04
)	
ELK HILLS POWER)	ORDER TO AMEND THE ENERGY
)	COMMISSION DECISION TO CHANGE
)	NINE AIR QUALITY CONDITIONS OF
)	CERTIFICATION
)	

On November 15, 2007, Elk Hills Power filed a petition with the California Energy Commission requesting to amend the Energy Commission Certification to change nine Air Quality conditions of certification at the Elk Hills Power Project (EHPP). EHPP is a nominal 500 MW natural gasfired, combined-cycle power plant located at the intersection of Elk Hills and Skyline Roads, approximately 25 miles west of Bakersfield, in Kern County. The power plant was certified in December 2000 and it commenced commercial operation in July 2003.

STAFF RECOMMENDATION

Energy Commission staff reviewed the petition and has determined that it complies with the requirements of Title 20, Section 1769(a) of the California Code of Regulations. Staff recommends approval of the Elk Hills Power petition to amend the Energy Commission certificate to change nine Air Quality conditions of certification for the Elk Hills Power Project.

COMMISSION FINDINGS

Based on staff's analysis, the Energy Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Energy Commission finds that:

- A. The petition meets all the filing criteria of Title 20, section 1769(a) of the California Code of Regulations concerning post-certification project modifications;
- B. The modification will not change the findings in the Energy Commission's Final Decision pursuant to Title 20, section 1755;
- C. Adherence to the proposed revisions to Conditions of Certification AQ-10, AQ-14, AQ-27, AQ-30, AQ-33, AQ-58, AQ-61, AQ-66, AQ-67 will ensure the facility will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code section 25525;
- D. The facility design changes will be beneficial to the public and project owner by further reducing air pollution limits.

E. There has been a substantial change in circumstances since the Energy Commission certification and the change is based on information that was not available to the parties prior to Energy Commission Certification justifying the changes to the Air Quality conditions of certification. The proposed modifications reflect a number of minor changes recently approved by the San Joaquin Valley Air Pollution Control District (District) pursuant to their Rule 4703 and the issuance of the Title V permit by the U.S. Environmental Protection Agency.

CONCLUSION AND ORDER

The California Energy Commission hereby adopts staff's recommendations and approves the following changes to the Elk Hills Power Project Certification. Deleted text from the Certification is shown in strikethrough and added text is underlined.

AQ-10 CTG and duct burner shall be fired on natural gas, consisting primarily of methane and ethane, with a sulfur content no greater than 0.75 grains of sulfur compounds (as S) per 100 dry-scf of natural gas. [District Rule 2201]

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

AQ-14 By 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]

<u>During an extended startup, the combined emissions from both the CTG and HRSG exhausts shall not exceed either 800 lbs NOx or 3,600 lbs CO per event.</u>

<u>During shutdown of CTG, the combined emissions from both the CTG and HRSG exhausts shall not exceed either 102.5 lbs NOx or 222.0 lbs CO per event.</u>

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

AQ-27 Compliance with the startup NOx, CO, and VOC mass emission limits shall be demonstrated for one of the CTGs (S-3523-1, or -2) upon initial operation and at least every seven five years thereafter by District witnessed in situ sampling of exhaust gases by a qualified independent source test firm. [District Rule 1081]

<u>Verification</u>: The project owner shall provide records of compliance as part of Condition AQ-29.

AQ-30 Source test plans for initial and seven year source tests shall include: a method for measuring the VOC/CO surrogate relationship that will be used to demonstrate compliance with VOC lb/hr, lb/day; and lb/twelve month rolling emission limits.

[District Rule 2201]

<u>Verification</u>: The project owner shall provide a source test plan to the CPM and District for the CPM and District approval fifteen (15) days prior to testing. The results and field data collected by the source tests shall be submitted to the CPM and the District within sixty (60) days of testing.

AQ-33 The project owner shall maintain hourly records of NOx, CO, and ammonia emission concentrations (ppmv @ 15% O2), and hourly, daily, and twelve month rolling average records of NOx and CO emissions. Compliance with the hourly, daily, and twelvemonth rolling average VOC emission limits shall be demonstrated by the CO CEM data and the VOC/CO relationship determined by annual CO and VOC source tests. [District Rule 2201]

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

AQ-58 NOx emissions shall not exceed 7.2 4.4 g/hp-hr. [District Rule 2201]

<u>Verification</u>: The project owner shall make the site available for inspection by representatives of the District, CARB and the Commission.

AQ-61 The engine shall be operated only for maintenance, testing, and required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 200 77 hours per year.

[District Rules 2201 and 4701]

<u>Verification:</u> The project owner shall compile records of hours of operation of any of the IC engines and include those records as part of the quarterly reports submitted to the CPM under Condition AQ-35.

AQ-66 The project owner/operator shall not employ the duct burner during startup or shutdown events.

<u>Verification:</u> The project owner/operator shall include a statement within the quarterly report, required under Condition of Certification AQ-35, that the duct burner has not been employed during startup or shutdown events.

AQ-67 The project owner/operator shall demonstrate compliance with all applicable limitations for any gas turbines on the project site that are equipped with an intermittently operating auxiliary burner both with and without the burner in operation.

<u>Verification:</u> The project owner/operator shall ensure that the source test requirements of Condition of Certification AQ-29 include the operation of any auxiliary burners as specified.

IT IS SO ORDERED.

Date: January 2, 2008

STATE OF CALIFORNIA

ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

JACKALYNE PFANNENSTIEL, Chairman