

*State of California The Resources Agency of California*

**M e m o r a n d u m**

To: John L. Geesman, Commissioner, Presiding Member  
William J. Keese, Chairman, Associate Member

Date : May 2, 2003

Telephone: (916) 651-8835

From : **California Energy Commission** - Bob Eller, Project Manager  
1516 Ninth Street  
Sacramento CA 95814-5512

Subject: **PALOMAR ENERGY PROJECT (01-AFC-24) – ADDENDUM #3 TO STAFF ASSESSMENT**

During the Evidentiary Hearing held in Escondido, CA on April 29, 2003, staff and the applicant notified the Committee of proposed changes to the Conditions of Certification for **Air Quality** necessary to account for emission reduction credits (ERCs) that may not be available to the applicant. This change, a reduction of 0.8 tons/year of NOx equivalent credits for diesel engine replacement, is contained in the attached condition **AQ-SC5**. This revision required conforming changes to conditions **AQ-17** and **AQ-49**. Finally, the Committee requested the addition of a condition requiring that the cooling tower be equipped with .0005 percent efficient drift eliminators. This requirement is contained in the attached condition **AQ-SC9**.

The attached conditions replace the corresponding conditions of certification contained in staff's January 25, 2003, Final Staff Assessment (Exhibit 50) and staff's March 7, 2003, Addendum to Staff Assessment (Exhibit 51).

Staff has coordinated this revision with the applicant and the San Diego Air Pollution Control District who have agreed to the revised conditions. An email message from Dan Speer of the APCD, dated April 30, 2003 indicating the District's agreement, is attached.

The Committee requested comment regarding whether Exhibit 34 should remain in the record. Although no longer directly relevant because the applicant has decided to reduce its emissions limit rather than offer additional ERCs, as it proposed in Exhibit 34, that exhibit illustrates one of the alternative approaches that was considered and sets the context for the agreement that staff and the applicant reached. Staff recommends that it remain in the evidentiary record. A similar approach was taken with Exhibit 39, offered by the applicant to set the background for staff's agreement to certain changes to conditions reflected in Exhibit 51.

Attachments

# PALOMAR ENERGY PROJECT (01-AFC-24)

## REVISION TO CONDITIONS OF CERTIFICATION

### AIR QUALITY

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**AQ-SC5** The project owner shall surrender the emission offset credits listed in the table below or a modified list, as allowed by this condition, at the time that surrender is required by Air Quality Condition **AQ-49**. If additional ERCs are submitted consistent with Air Quality Conditions **AQ-17** and **AQ-49**, the project owner shall submit an updated table including the additional ERCs to the CPM. The project owner shall request CPM approval for any substitutions, modifications, or additions of credits listed.

The CPM, in consultation with the District, may approve any such change to the ERC list provided that the project remains in compliance with all applicable laws, ordinances, regulations, and standards, the requested change(s) clearly will not cause the project to result in a significant environmental impact, and each requested change is consistent with applicable federal and state laws and regulations. If provided to increase maximum allowable emissions from 104.3 tons per year of NOx emissions to 124.4 tons per year pursuant to Condition AQ-49, Class A ERCs issued by the District and meeting the standards of District Rule 26.1 are presumed to satisfy these criteria. If other than Class A ERCs are proposed, then the U.S. EPA shall also be consulted.

District ERC Number	NOx-Equivalent (tpy)
ERC 000111-01	17.5
ERC 000111-02	0.15 (from 0.3 tpy VOC)
ERC 010228-01	7.6 (from 15.2 tpy VOC)
ERC 921291-01	20.8
ERC 921291-02	0.5 (from 1.0 tpy of VOC)
ERC 976993-01	10.5 (from 21.0 tpy of VOC)
ERC 020130-02	3.6
No ERC number, diesel engine replacement	26.0
No ERC number, boiler replacement	38.5

**Verification:** The project owner shall submit to the CPM a list of ERCs to be surrendered to the District at least 60 days prior to initial startup. When additional ERCs are submitted pursuant to Air Quality Condition **AQ-49**, the project owner shall submit the list of additional ERCs at least 60 days prior to the use of these additional ERCs. If the CPM, in consultation with the District and, in the event other than a Class A ERC is

proposed, with the U.S.EPA, approves a substitution or modification, the CPM shall file a statement of the approval with the commission docket and mail a copy of the statement to every person on the post-certification mailing list. The CPM shall maintain an updated list of approved ERCs for the project.

**AQ-SC9** The cooling tower annual PM<sub>10</sub> emissions shall be limited to 5.7 ton/year. The project owner shall estimate annual PM<sub>10</sub> emissions from the cooling tower using the water quality testing data and recirculating water flow data collected on a quarterly basis (**AQ-SC8** and **AQ-35**). The water quality testing data shall show the total dissolved solids, the pH, and the ammonia concentration of the cooling water.

The cooling tower shall be equipped with drift eliminators with an efficiency of 0.0005 percent.

**Verification:** The project owner shall submit to the CPM annual cooling tower PM<sub>10</sub> emission estimates in the Quarterly Operational Reports (**AQ-SC7**).

**AQ-17** The total aggregate emissions of oxides of nitrogen (NO<sub>x</sub>), calculated as nitrogen dioxide, from all emission units at this stationary source shall not exceed 104.3 tons for each rolling 12-calendar month period. Upon surrender of sufficient emission offsets in compliance with District Rules 20.1 and 20.3, the total aggregate NO<sub>x</sub> limit shall increase up to 124.4 tons for each rolling 12-calendar month period. These additional emission offsets must have been publicly noticed through the emission reduction credit banking process or District notification specific for this project, and in a California Energy Commission notification specific for this project.

Aggregate emissions shall begin accruing at the initial startup of either turbine. Compliance with the aggregate NO<sub>x</sub> limit shall be verified using the CEMS on each gas turbine as well as U.S. EPA- or CARB-certified NO<sub>x</sub> emission factors, testing results, or other representative emissions information for all other combustion equipment.

**Verification:** The project owner shall submit to the CPM and the District turbine emissions CEMS data and calculations demonstrating compliance with this condition as part of the Quarterly Operational Report (**AQ-SC7**).

**AQ-49** Prior to the initial startup of this equipment, the project owner shall surrender to the District Class A Emission Reduction Credits (ERCs) in an amount equivalent to 125.2 tons per year of NO<sub>x</sub> to offset the maximum allowable of 104.3 tons

per year of NOx emissions for this facility. When additional offsets are available up to 149.3 tons per year, maximum allowable emissions will increase to the maximum potential of 124.4 tons per year of NOx emissions.

The CPM may approve any such change to the ERC list contained in Air Quality Condition **AQ-SC5** based on the criteria provided in **AQ-SC5**.

**Verification:** The project owner shall surrender the required ERCs to the District and provide copies of all related correspondence within 15 days of submittal to the CPM for review and approval.

**From:** "Speer, Dan " <Dan.Speer@sdcounty.ca.gov>  
**To:** "beller@energy.state.ca.us" <beller@energy.state.ca.us>  
**Date:** 4/30/03 2:41PM  
**Subject:** FW: Palomar Energy Project - Changes to Air Quality Conditions of Certification

Bob,

The San Diego APCD has review the subject proposed changes to certain air quality conditions of the certification as highlighted in the attachment. The changes are acceptable to the APCD.

Thank You,

Dan Speer  
Senior Air Pollution Control Engineer

-----Original Message-----

From: Abreu, Alberto [mailto:AAbreu@sempra-res.com]  
Sent: Wednesday, April 30, 2003 2:17 PM  
To: Speer, Dan  
Cc: Rowley, Joseph; Miller, Taylor; Kelly, Raymond; Lake, Mike  
Subject: Palomar Energy Project - Changes to Air Quality Conditions of Certification

Dan:

As we discussed, attached are proposed changes to conditions of certification AQ-SC5; AQ-SC9; AQ-17 and AQ-49. Changes to AQ-SC5; AQ-17 and AQ-49 reflect a reduction in the plant's NOx emission rate to 104.3 tpy. The change to Condition AQ-SC9 reflects the addition of the cooling tower drift efficiency to the conditions of certification.

The CEC has requested that the APCD indicate if these changes are acceptable. If you could please forward this e-mail to Bob Eller (beller@energy.state.ca.us), with copy to Susan Geffer (sgeffer@energy.state.ca.us), indicating whether the proposed changes are acceptable, we would appreciate it.

Thank you.

<<PROPOSED REVISIONS TO AIR CONDITIONS 042903.doc>>

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