STATE OF CALIFORNIA - THE RESOURCES AGENCY

CAI-IFORNIA ENERGY COMMISSION 1516 NINTH STREET SACRAMENTO, CA 95814-5512

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STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:

PALOMAR ENERGY CENTER

Docket No. 01-AFC-24C

STAFF RESPONSE AND RECOMMENDATIONS TO RODRIGUEZ COMPLAINTS RE: COOLING TOWER OPERATIONS

SUMMARY

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On December 6, 2007, Mark Rodriguez, a resident of the City of Escondido, filed a document entitled "VIS-8 Non-Compliance Complaint – Palomar Energy Center (Docket No. 01-AFC-24C)" regarding the operational status and efficiency of the cooling tower plume abatement system at the Palomar Energy Center (PEC). On December 21, 2007, Mr. Rodriguez 'then filed a second document concerning the operation of the cooling towers at PEC, this document entitled "Public Health and Safety Complaint – Palomar Energy Center (Docket No. 01-AFC-24C)."

Staff has initiated its investigation into the allegations raised in the documents filed by Mr. Rodriguez concerning VIS-8 and "public health," and, for reasons explained below, recommends that the committee allow staff to continue the investigation regarding the cooling tower operations for an additional 30 days, and order that the response and recommendations be filed by staff no later than February 6, 2008.

I.

BACKGROUND

Palomar Energy, LLC, a subsidiary of Sempra Energy Resources, filed an Application for Certification (AFC) on November 28, 2001, with the California Energy Commission seeking approval to construct and operate the PEC project. The project was subsequently licensed by the Energy Commission on August 6,2003. The project was approved for a natural-gas-fired combined cycle power plant with two 220 M'VA combustion turbine generators equipped with dry low combustors and evaporative inlet air coolers, two heat recovery steam generators equipped with duct burners, a 250 MVA steam turbine-generator and associated auxiliary systems and equipment. The electrical power net output from the plant was approved for 521 MW during summer conditions and a maximum 545 MW during winter conditions. The commercial operation of the plant commenced on April 1, 2006. The ownership of the plant was subsequently transferred to SDG&E (CEC 2003a).

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On October 8, 2007, Mark Rodriguez, a resident of the City of Escondido, filed a Public Records Act request with the Commission. Staff responded to his request in a timely manner, and provided Mr. Rodriguez with all public records he requested regarding PEC. On December 6 and 21, 2007, Mr. Rodriguez filed the complaints that are now the subject of this response.

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INVESTIGATION AND ANALYSIS

For purposes of its investigation and analysis, staff has consolidated the "cornplaints" submitted on December 6 and 21 by Mr. Rodriguez. Both submissions relate to the same subject matter: the operation of the cooling towers at PEC. Consolidation of these complaints will enable staff to more effectively address in a single response all of the issues raised regarding the operation of the cooling towers. Additionally, it will be more efficient for the committee assigned to hear this matter pursuant to Section 1204 to consider a single investigation and response, and in turn to issue a single written decision, saving valuable time and resources.

The document filed by Mr. Rodriguez on December 6, 2007, concerns allegations of non-compliance with Condition of Certification VIS-8 at the PEC. In response, staff initiated an investigation of the operation of the cooling tower plume abatement system.

- December 7, 2007 Staff contacted the project owner, San Diego Gas and Electric (SDG&E) requesting design and operating data.
- December 12, 2007 SDG&E provided a timely and informative response to staff's December 7, 2007 request.,
- December 17, 2007 Staff visited the project site and spoke to the plant operators.
- December 18,2007 Based on an observation by staff during the December 17, 2007 site visit, SDG&E notified staff that they had modified the plant control logic software to avoid low speed fan operation during conditions conducive to plume formation.
- December 21, 2007 Staff requested additional data from SDG&E based on the earlier information provided and staff's observations during the site visit.
- January 3, 2008 SDG&E filed responses to staff's request for information.

Staff is currently reviewing the cooling tower and plume abatement design and procurement specifications. Additionally, staff is evaluating the size and density of PEC cooling tower plumes photographed in the last year against concurrent ambient meteorological conditions, and is considering the data provided by the owner. Staff notes that a continuing problem in addressing the size, frequency and duration of cooling tower plumes has been the lack of dated and time-stamped photographic evidence to evaluate the ability of the plume abatement system to minimize (not eliminate) plumes.

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VIS-8 requires that the "project owner shall **reduce** the project's cooling tower visible vapor plumes by using a wet/dry plume abated cooling tower with a design point of 51.5° F and 90.5 percent relative humidity." [Emphasis added] It is important to note the requirement in VIS-8 is not to eliminate the cooling tower's visible vapor plumes, but to "reduce" and "minimize" those plumes to the extent possible.

Preliminary findings are that the plume abatement system is automatically turned on and off based on measured meteorological conditions, regardless of the time of day or rain or fog. Additionally, it appears that the system was designed to use a curve that is more restrictive than the VIS-8 design point of 51.5° F and 90.5 percent relative humidity system. However, staff is verifying both the actual curve installed in the digital control system and the accuracy of the meteorological measurement equipment.

Additional information was provided by SDG&E on January 3, 2008 in response to staff's request for information. Staff will to continue to work towards a resolution of the issues that were raised in Mr. Rodriguez' December 6, 2007 complaint, and will be able to complete its report and final recommendations by the end of January 2008.

Additionally, staff has broadened the scope of its investigation into the operations of the cooling towers, including cooling tower water treatment, in response to the allegations raised in the complainant's December 21 submission entitled "Public Health and Safety Complaint." Staff anticipates that its investigation into this subject matter, as well as a separate analysis of the sufficiency of both complaints, will be completed by the end of January 2008, and will commit to filing its final report no later than February 6, 2008.

III.

REQUEST FOR 30-DAY EXTENSION

Upon receipt of the initial complaint regarding the operation of the cooling towers at PEC filed by Mr. Rodriguez on December 6, staff initiated its investigation in to the allegations raised therein. After receipt of the second complaint regarding the operation of the cooling towers, staff then broadened the scope of their investigation. Based on the complexity and thoroughness of the investigation, the need for additional information from PEC and the cooling tower manufacturer, SPX Cooling Technologies, Inc., and because of the timing of the holiday season, staff requires additional time to complete the investigation in full. Section 1237(b) states in relevant part:

Upon completion of the investigation of the alleged non-compliance, the commission staff shall file a report with the Docket Unit and with the committee...setting forth staff's conclusions. The report shall be filed no later than 30 days after the receipt by the designated compliance project manager of the complaint...

As discussed above, continues to work towards resolutions of the issues raised in both complaints. Thus far, staff has concluded that additional time is required to complete

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this investigation into the allegations raised in the complaints. Title 20, California Code of Regulations, Section 1237(e) sets forth the actions that the committee must take upon issuance of the staff report:

Within 30 days after issuance of the staff report, the committee shall:

(1) dismiss the complaint upon a determination of insufficiency of the complaint or lack of merit;

(2) issue a written decision presenting its findings, conclusions, or order(s) after considering the complaint, staff report, and any submitted comments; or

(3) conduct hearings to further investigate the matter and then issue a written decision.

Pursuant to Section 1237(e)(2), staff requests that the committee find that good cause exists to continue this matter, and issue an order that the investigation regarding the cooling tower operations be extended 30 days.

Section 1237(d) allows for the submission of comments to the staff report by any person within 14 days of the issuance of that report. Section 1237(e) does not require, however, that the committee withhold the filing of any written order for the full 30 day period. Staff therefore requests that the committee issue the order granting the extension of the investigation after the 14 day comment period has expired.

IV.

RECOMMENDATIONS

As to the complaints filed on December 6 and December 21 entitled "VIS-8 Non-Compliance Complaint – Palomar Energy Center" and "Public Health and Safety Complaint – Palomar Energy Center" respectively, regarding the operation of the cooling towers, staff recommends that the committee find that good cause exists to extend the investigation regarding the operation of the cooling tower for an additional 30 days in accordance with Section 1237(e)(2), and order that the response and recommendations to the investigation be filed by staff no later than February 6, 2008.

Date: January 4, 2008

Respectfully submitted,

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KEVIN W. BELL Senior Staff Counsel

STATE OF CALIFORNIA --- THE RESOURCES AGENCY

CALIFORNIA ENERGY COMMISSION 1516 NINTH STREET SACRAMENTO, CA 95814-5512



STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

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In the Matter of:

PALOMAR ENERGY CENTER

Docket No. 01-AFC-24C

ORDER No. _____ ORDER APPROVING Extension of Investigation of Complaints re: Cooling Tower Operations Palomar Energy Center

On December 6, 2007, Mark Rodriguez, a resident of the City of Escondido, filed a document entitled "VIS-8 Non-Compliance Complaint – Palomar Energy Center regarding the operation of the cooling towers at the Palomar Energy Center (PEC). On December 21, 2007, Mr. Rodriguez then filed a second document concerning the operation of the cooling towers at PEC, this document entitled "Public Health and Safety Complaint – Palomar Energy Center (Docket No. 01-AFC-24C)."

Commission Staff has initiated its investigation in to the allegations raised in the complaints filed in the instant matter. Based on the complexity and thoroughness of the investigation, the need for additional information from PEC and the cooling tower manufacturer, SPX Cooling Technologies, Inc., and because of the timing of the holiday season, staff requires additional time to complete the investigation in full.

Staff has filed an initial report regarding the investigation into the allegations raised in the complaints regarding the operation of the cooling tower at PEC. Staff has requested that this Committee issue an order that the investigation regarding the cooling tower operations be extended 30 days in accordance with Title 20, California Code of Regulations, Section 1237(e)(2).

CONCLUSION AND ORDER

Having considered the complaints and the initial staff report filed in the instant matter, the committee finds good cause to extend the investigation 30 days as requested. The committee hereby grants the request to extend the Commission Staff investigation into the complaints regarding the Palomar Energy Center 30 days. The committee further orders that the response be filed by staff no later than February 6, 2008.

IT IS SO ORDERED.

Date:	
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John L. Geesman, J.D. Commissioner

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

IN THE MATTER OF:

APPLICATION FOR CERTIFICATION FOR THE PALOMAR ENERGY PROJECT

DOCKET NO. 01-AFC-24C

PROOF OF SERVICE

I, <u>Janet Preis</u>, declare that on <u>January 4, 2008</u>. I deposited copies of the attached Staff Responses to Complaints VIS-8 in the United States mail at *Sacramento, CA* with first class postage thereon fully prepaid and addressed to the following:

DOCKET UNIT

Send the original signed document plus the required 12 copies to the address below.

CALIFORNIA ENERGY COMMISSION DOCKET UNIT, MS-4 Attn: Docket No. 01-AFC-24C 1516 Ninth Street Sacramento, CA 95814-5512

Also send copies of all documents to:

Mark Rodriguez 945 Chardonney Way Escondido, CA 92029 marknrodriguez@cox.net

Taylor O. Miller Senior Environmental Counsel Sempra Energy 925 L Street, Suite 650 Sacramento, CA 95814 <u>TMiller@Sempra.com</u>

I declare under penalty of perjury that the foregoing is true and correct

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INTERNAL DISTRIBUTION LIST

FOR YOUR INFORMATION ONLY! Parties **DO NOT** mail to the following individuals. The Energy Commission Docket Unit will internally distribute documents filed in this case to the following:

JOHN L. GEESMAN, Commissioner Presiding Member MS-31

JEFFREY BYRON, Commissioner Associate Member MS-32

PUBLIC ADVISER

Public Adviser's Office 1516 Ninth Street, MS-12 Sacramento, CA 95814 **pao@energy.state.ca.us**

Susan Gefter Hearing Officer MS-9

Paula David Project Manager MS-2000

Kevin W. Bell Senior Staff Counsel MS-14