DOCKETED	
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Description:	N/A
Filer:	Dale Rundquist
Organization:	California Energy Commission / Jason Dobbs
Submitter Role:	Commission Staff
<b>Submission Date:</b>	8/19/2014 9:08:23 AM
Docketed Date:	8/19/2014

From: Dobbs, Jason [mailto:JDobbs@semprautilities.com]

Sent: Wednesday, April 09, 2014 2:53 PM

**To:** Rundquist, Dale@Energy

Cc: LaPeter, Carl S.; Waller, Fred A.; Bowman, Jason R

**Subject:** RE: Palomar Amendment.

Dale,

The following report(s) measure start-up emissions for 2011, 2012, and 2013. The reports will provide CEC staff the information needed to verify NOx emissions for the start-up events. If you have questions or concern, please feel free to call me at the numbers listed below.

As I mentioned in my previous email, Environmental will work on the questions related to "combustor tuning events". We anticipate a response will be provided to CEC by the end of next week. Thank you

## April 7th email with combustor tuning questions:

On Apr 7, 2014, at 11:03 AM, "Rundquist, Dale@Energy" < <u>Dale.Rundquist@energy.ca.qov</u>> wrote:

Hi Jason,

Staff would like to ask two more questions.

Can you provide the frequency of the combustor tuning events for the past three years?

Can you provide the NOx emissions during the combustor tuning events (the same that was requested for startups)?

Thank you, Dale R.

Jason T. Dobbs Compliance Administrator San Diego Gas & Electric 2300 Harveson Place Escondido, CA 92029-1965 (760) 432-2506 Office (619) 247-2789 Cell

**From:** Rundquist, Dale@Energy [mailto:Dale.Rundquist@energy.ca.gov]

Sent: Wednesday, March 26, 2014 3:35 PM

**To:** Dobbs, Jason

**Cc:** Qian, Wenjun@Energy; Bemis, Gerry@Energy; Layton, Matthew@Energy

**Subject:** RE: Palomar Amendment.

Hi Jason,

Yes, these are the startup/shutdown events reports that staff receives in the quarterly reports. But staff never received actual measured NOx emissions during startups/shutdowns. The quarterly reports only have statements saying the project complies with 400 lbs/hr limit.

Can you send the measured (CEMS and source test) NOx emissions data specifically during startups for the past three years?

Staff would like to verify that startup NOx emissions are below 200 lbs/hr from each turbine and 400 lbs/hr from both turbines as specified in the district PTO condition 16.

Thank you, Dale R.

**From:** Dobbs, Jason [mailto:JDobbs@semprautilities.com]

Sent: Wednesday, March 26, 2014 2:16 PM

**To:** Rundquist, Dale@Energy **Subject:** RE: Palomar Amendment.

Dale,

After reviewing this with Fred, we determined the following startup/shutdown reports address the "frequency" portion of the original question. Please note – the attached reports are included in the Quarterly Operational Report(s) Fred sends CEC to meet the AQ-SC7 requirement. Thank you

Jason T. Dobbs
Compliance Administrator
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**From:** Rundquist, Dale@Energy [mailto:Dale.Rundquist@energy.ca.gov]

Sent: Wednesday, March 26, 2014 1:12 PM

To: Dobbs, Jason

Cc: Qian, Wenjun@Energy; Bemis, Gerry@Energy; Layton, Matthew@Energy

**Subject:** RE: Palomar Amendment.

Hi Jason,

Staff wants to know if Fred can address <u>frequency</u> in addition to the fact that the NOx emissions don't exceed 400 lbs/hr and 200 lbs/hr.

Thank you, Dale R.

From: Dobbs, Jason [mailto:JDobbs@semprautilities.com]

Sent: Wednesday, March 26, 2014 12:43 PM

**To:** Rundquist, Dale@Energy **Subject:** FW: Palomar Amendment.

Dale,

Please find the following comments from our Environmental Department (Red Text). If you have questions or concerns, please feel free to email or call me. Thank you

Jason T. Dobbs Compliance Administrator San Diego Gas & Electric 2300 Harveson Place Escondido, CA 92029-1965 (760) 432-2506 Office (619) 247-2789 Cell

**From:** Waller, Fred A.

Sent: Wednesday, March 26, 2014 11:36 AM

To: Dobbs, Jason

Subject: RE: Palomar Amendment.

Jason,

My responses to the questions are in red font below.

Fred Waller
SDG&E Environmental Services
fwaller@semprautilities.com
Office 760 432 2507
Mobile 619 219 9530

From: Dobbs, Jason

Sent: Tuesday, March 25, 2014 2:30 PM

To: Waller, Fred A.

**Subject:** FW: Palomar Amendment.

Fred,

Please review the following questions and send me a response I can forward to Dale Rundquist (CEC). Thank you.

Jason T. Dobbs Compliance Administrator San Diego Gas & Electric 2300 Harveson Place Escondido, CA 92029-1965 (760) 432-2506 Office (619) 247-2789 Cell

**From:** Rundquist, Dale@Energy [mailto:Dale.Rundquist@energy.ca.gov]

**Sent:** Monday, March 24, 2014 11:22 AM

To: Dobbs, Jason

Cc: Qian, Wenjun@Energy; Bemis, Gerry@Energy; Layton, Matthew@Energy

Subject: Palomar Amendment.

Hi Jason,

Staff needs some information about the emissions during cold startups and warm startups for each turbine:

 What's the possibility/frequency of one turbine emitting 400 lbs/hr or two turbines emitting 200 lbs/hr each (as modeled in the 2006 analysis submitted to the district)?

[fwaller] Palomar Energy Center (PEC) continuously complies with the SDAPCD Operating Permit condition 16 which states that NOx emissions from both units shall not exceed 400 lbs/hr (NOx) measured over each clock hour period including but not limited to periods of startup, shutdown, low load and tuning. Unit 1 is not allowed to be in a startup while unit 2 is being started up and vice versa. Recent operating data confirms that PEC complies with condition 16, and each combustion turbine's NOx lbs/hr emissions have been under 200 lbs/hr during startups. The PEC maintains CEMS data that has detailed operational data and the data is available for inspection.

 From the quarterly reports for the last 3 years, staff noticed the number of cold startups and warm startups has decreased since 2011. Does this mean that the power plant has been operated more and more? *fwaller*] Yes, the PEC has been operating more and more, that is there has been an increase in "fired service hours" in the past three calendar years and CEMS data shows compliance with the applicable mass-based and concentration-based limits. I did not look back past 2011.

Thank you, Dale R.

## **Dale Rundquist**



Compliance Project Manager

## **CALIFORNIA ENERGY COMMISSION**

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URL: <u>http://www.energy.ca.gov</u>