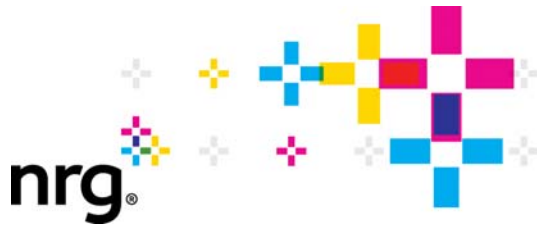


## DOCKETED

<b>Docket Number:</b>	07-AFC-06C
<b>Project Title:</b>	Carlsbad Energy Center - Compliance
<b>TN #:</b>	203530
<b>Document Title:</b>	Project Owner's Comments on Preliminary Determination of Compliance
<b>Description:</b>	N/A
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<b>Organization:</b>	NRG Energy, West Region
<b>Submitter Role:</b>	Applicant
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January 15, 2015

Dr. Steve Moore  
Engineering Group  
San Diego Air Pollution Control District  
10124 Old Grove Road  
San Diego, CA 92131

**RE: Comments on the Preliminary Determination of Compliance for the Proposed Amended Carlsbad Energy Center Project**

Dear Dr. Moore:

On behalf of Carlsbad Energy Center LLC (Applicant), we offer the following comments on the Preliminary Determination of Compliance (PDOC) for the Amended Carlsbad Energy Center Project, issued on December 12, 2014. We greatly appreciate the effort that the District staff has expended in evaluating the permit application and preparing the PDOC. The comments are offered in the order in which their subjects occur in the PDOC.

Limit on Number of Commissioning Hours (PDOC, Appendix D, page D-2, Condition 17)

This condition limits the number of commissioning hours per gas turbine to 213 hours. While this is consistent with the information provided by the gas turbine vendor, in order to allow for a possible situation where one of the units may need more than 213 hours to complete commissioning, we are requesting that this condition be changed to a combined limit on the commissioning hours for all six gas turbines. A combined limit of 1,278 commissioning hours for all six gas turbines is consistent with the worst case facility-wide annual emission estimates analyzed in the ATC Application.<sup>1</sup> In addition, a combined limit of 1,278 commissioning hours for all six gas turbines is also consistent with the annual facility-wide emission limits contained in Permit Condition Number 42. The requested change is shown below (shown by strikethrough/underline):

17. **The total combined number of commissioning hours for all six combustion turbines is limited to 1,278 hours.** For each combustion turbine, the commissioning period is the period of time commencing with the initial startup of that turbine and ending ~~after 213 hours of turbine operation, or~~ on the date the permittee notifies the District the commissioning period has ended. For purposes of this condition, the number of hours of turbine operation is defined as the total unit operating minutes during the commissioning period divided by 60. [Rule 20.3(d)(1)]

<sup>1</sup> See May 8, 2014 ATC Application, Appendix 5.1B, Table 5.1B-14.

CO Annual Emission Limit (PDOC, Appendix D, page D-6, Condition 42)

This permit condition includes various annual emission limits for the project including a CO limit of 77.8 tons/year for the entire facility. While this CO emission limit is consistent with the information provided in the ATC Application during normal operating years (calculated as rolling 12-month averages), this emission limit does not account for the higher CO emission levels shown during the first operating year that includes the commissioning period. As shown in the ATC Application,<sup>2</sup> the annual CO emissions during the first operating year are expected to be approximately 102 tons/year. Therefore, we are requesting a two-tiered annual CO emission limit to account for the higher CO emissions during the first operating year. The requested change is shown below (shown by strikethrough/underline):

42. Total emissions from the equipment authorized to be constructed under this permit, except emissions or emission units excluded from the calculation of aggregate potential to emit as specified in Rule 20.1 (d) (1), shall not exceed the following limits for each rolling 12-calendar-month period, beginning with the 12-calendar-month period beginning with the month in which the earliest initial startup among the equipment authorized to be constructed under this permit occurs:

<i>Pollutant</i>	<i>Emission Limit, tons per year</i>
a. <i>NO<sub>x</sub></i>	<i>84.8</i>
b. <i>CO (<del>excluding commissioning period</del>)</i>	<i>77.8</i>
<i><u>CO (including commissioning period)</u></i>	<i><u>102.1</u></i>
c. <i>VOC</i>	<i>24.1</i>
d. <i>PM<sub>10</sub></i>	<i>28.4</i>
e. <i>SO<sub>x</sub> (calculated as SO<sub>2</sub>)</i>	

Annual Limit on Gas Turbine Startups (PDOC, Appendix D, page D-8, Condition 47)

This permit condition limits the annual number of startups per gas turbine to 400 per year. While this matches the maximum number of startups shown in the ATC Application for a normal operating year,<sup>3</sup> it does not account for the startups that will occur during the commissioning period. The ATC Application includes a separate set of operating assumptions/emission estimates for the commissioning period (commissioning includes a number of gas turbine startups).<sup>4</sup> Therefore, we are requesting a change to clarify that the limit on 400 startups per year begins following the end of the commissioning period for each gas turbine. This requested change is shown below (shown by strikethrough/underline):

<sup>2</sup> See May 8, 2014 ATC Application, Appendix 5.1B, Table 5.1B-14.

<sup>3</sup> See May 8, 2014 ATC Application, Appendix 5.1B, Table 5.1B-15.

<sup>4</sup> See May 8, 2014 ATC Application, Appendix 5.1B, Tables 5.1B-5 and 5.1B-6.

47. For each combustion turbine, following the end of the commissioning period the number of startup periods occurring in each calendar year shall not exceed 400. [Rules 1200, 20.3(d)(2) and 21]

Gas Turbine Continuous Emission Monitoring (CEM) Protocol (PDOC, Appendix D, page D-13, Condition 69)

The following permit condition includes requirements for a CEMs protocol. The requested change shown below (shown by strikethrough/underline) reflects a correction to an apparent typographical error:

69. The CEMS shall be in operation in accordance with the District approved CEMs protocol at all times when the turbine is in operation. ~~a~~ A copy of the District approved CEMS monitoring protocol shall be maintained on site and made available to District personnel upon request. [Rules 69.3, 69.3.1, and 20.3(d)(1) and 40 CFR Part 60 Subpart KKKK, and 40 CFR Part 75]

Gas Turbine Commissioning Report Requirements (PDOC, Appendix D, page D-15, Condition 80)

The following permit condition includes gas turbine commissioning reporting requirements. The requested change shown below (shown by strikethrough/underline) reflects a correction to clarify the deadline for submitting these reports:

80. Within ~~t~~Thirty calendar days after the end of the commissioning period for each combustion turbine, the project owner shall submit a written report to the District. This report shall include, at a minimum, the date the commissioning period ended, the startup and shutdown periods, the emissions of NO<sub>x</sub> and CO during startup and shutdown periods, and the emissions of NO<sub>x</sub> and CO during steady state operation. This report shall also detail any turbine or emission...

If you have any questions regarding these comments, please do not hesitate to contact me at (760) 710-2156 (office) or (760) 707-6833 (cell).

Sincerely,



George L. Piantka, PE  
Director, Regulatory Environmental Services  
NRG, West Region

cc: Robert Mason, CH2M Hill  
John McKinsey, Locke Lord