### DOCKETED

Docket Number:	15-AFC-01
Project Title:	Puente Power Project
TN #:	211989
Document Title:	Letter to VCAPCD re Comments on Preliminary Determination of Compliance
Description:	N/A
Filer:	Paul Kihm
Organization:	Latham & Watkins LLP
Submitter Role:	Applicant Representative
Submission Date:	6/27/2016 2:43:06 PM
Docketed Date:	6/27/2016



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June 23, 2016

Kerby E. Zozula Manager, Engineering Division Ventura County Air Pollution Control District 669 County Square Drive, 2<sup>nd</sup> Floor Ventura, CA 93003

Subject: Comments on the Preliminary Determination of Compliance for the Proposed Puente Power Project (15-AFC-01/VCAPCD Application No. 00013-370)

Dear Mr. Zozula:

On behalf of NRG Oxnard Energy Center, LLC (Applicant), we offer the enclosed comments on the Preliminary Determination of Compliance (PDOC) for the Puente Power Project (P3 or Project), issued on May 19, 2016. We greatly appreciate the effort that the Ventura County Air Pollution Control District and San Joaquin Valley Air Pollution Control District staffs have expended in evaluating the permit application and preparing the PDOC for this Project. The enclosed comments are offered in the order in which their subjects appear in the PDOC.

If you have any questions or comments, please do not hesitate to contact me at (760) 710-2156.

Sincerely,

Dioge L Teanthe

George L. Piantka, PE Sr. Director, Regulatory Environmental Services NRG Energy, Inc.

Enclosure

cc: Jon Hilliard, CEC Project Manager Leland Villalvazo, SJVAPCD

### COMMENTS ON MAY 19, 2016 VCAPCD PDOC FOR P3

#### Equipment Description (PDOC, Appendix K, page K-1)

As discussed in the March 19, 2015 Application for an Authority to Construct (ATC)/Determination of Compliance (DOC),<sup>1</sup> the project rating of 262 MW refers to the <u>net nominal rating</u> for the proposed GE 7HA.01 gas turbine generator. To avoid confusion we are requesting that the 262 MW rating shown in the PDOC include the term "net nominal." The requested change is shown below (shown by strikethrough/underline).

### Puente Power Project 262 MW <u>(net nominal)</u> GE 7HA.01 Combustion Turbine Generator (CTG)

Canceling the VCAPCD permit for MGS Unit 2 (PDOC, Appendix K, page K-1, Condition 2)

This permit condition includes a requirement to cancel the VCAPCD operating permit for MGS Unit 2 prior to the commissioning of the proposed new gas turbine unit. For clarification purposes, we are requesting that the VCAPCD change the wording slightly to require that the cancellation would occur prior to the <u>start</u> of the commissioning period for the new gas turbine. The requested change is shown below (shown by strikethrough/underline).

...Permittee shall cancel the permit for Mandalay Generating Station (MGS) Unit 2 prior to the <u>start of</u> commissioning of the new Puente Power Project CTG.

# NOx, O2, and CO CEMS data reduction requirements (PDOC, Appendix K, page K-3, Condition 9)

This permit condition includes requirements for the NOx, O2, and CO CEMS data to be reduced according to the applicable federal regulatory requirements. For clarification purposes, we are requesting changes to make the permit condition consistent with the applicable requirements of 40 CFR Part 75 for the NOx/O2 CEMS and 40 CFR Part 60 for the CO CEMS. The requested changes are shown below (shown by strikethrough/underline).

Results of the <u>NOx, CO, and O2</u> continuous emissions monitoring shall be reduced according to the <u>applicable</u> procedure<u>s</u> established in 40 CFR Part 60, Subpart KKKK (for NOx CEMS), 40 CFR Part 75 Appendix F (for

<sup>&</sup>lt;sup>1</sup> See cover letter to March 19, 2015 ATC/DOC Application to the VCAPCD.

<u>NOx and O2 CEMS</u>), and 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3 (for CO CEMS), or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA.

# NOx, O2, and CO CEMS quarterly audit requirements (PDOC, Appendix K, page K-3, Condition 10)

This permit condition includes quarterly audit requirements for the NOx, O2, and CO CEMS. For clarification purposes, we are requesting changes to make the permit condition consistent with the applicable requirements of 40 CFR Part 75 for the NOx/O2 CEMS and 40 CFR Part 60 for the CO CEMS. The requested changes are shown below (shown by strikethrough/underline).

Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. In accordance with the applicable sections of 40 CFR Part 60, Appendix F, the CO CEMS shall be audited at least once each calendar quarter by conducting cylinder gas audits (CGA) or relative accuracy audits (RAA). CGA or RAA may be conducted during three of four calendar quarters, but no more than three calendar quarters in succession. The NOx and O2 CEMS shall be audited in accordance with the applicable requirements of 40 CFR Part 75. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District upon request.

# NOx, O2, and CO CEMS relative accuracy test audit requirements (PDOC, Appendix K, page K-3, Condition 11)

This permit condition includes the periodic relative accuracy test audit requirements for the NOx, O2, and CO CEMS. For clarification purposes, we are requesting changes to make the permit condition consistent with the applicable requirements of 40 CFR Part 75 for the NOx/O2 CEMS and 40 CFR Part 60 for the CO CEMS. The requested changes are shown below (shown by strikethrough/underline).

<u>For the CO CEMS, t</u>The permittee shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F at least once every four calendar quarters. <u>For the NOx and O2 CEMS</u>, <u>t</u>The permittee shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 75, Appendix B at least once every two calendar quarters unless the permittee achieves 7.5% or below relative accuracy<u>.</u>, <u>then If the</u> permittee meets the incentive of 7.5% or <del>less</del> <u>better</u> relative accuracy, then <u>the</u> <u>permittee shall</u> perform <u>a</u> RATA once every four calendar quarters. <u>For the</u> <u>CO CEMS</u>, <u>t</u>The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F.

## <u>40 CFR Part 60, Subpart KKKK NOx Emission Limit (PDOC, Appendix K, page K-4, Condition 15)</u>

This permit condition includes the normal operation 4-hour rolling average NOx emission limit of 15 ppmv @ 15% O2 from 40 CFR Part 60, Subpart KKKK. In addition to the normal operation NOx emission limit, 40 CFR Part 60, Subpart KKKK includes a higher NOx limit that applies during periods of gas turbine low load operation. For clarification purposes, we are requesting that the gas turbine load low NOx emission limit be included in this permit condition. We are also requesting that as an alternative to NOx emission limits in terms of ppmv, the permittee be allowed to comply with NOx emission limits in terms of pounds per megawatt-hour (lb/MWh) as provided in 40 CFR Part 60.4380.b.1. The requested changes are presented below (shown by strikethrough/underline).

For the purposes of 40 CFR Part 60, Subpart KKKK, excess emissions shall be defined as any unit operating period in which the 4-hour rolling average NOx concentration exceeds the applicable emissions concentration limit of 15 ppmvd NOx at 15% O2 or, alternatively, as elected by the permittee, the 4-hour rolling average NOx emission rate exceeds the applicable lb/MWh emissions rate limit, as defined in Part 60.4320, Table 1. The 4-hour rolling average NOx concentration limit for any operating hour is determined by the arithmetic average of 15 ppmvd at 15% O2 for each hour in which the unit operated above 75% of peak load for the entire hour, and 96 ppmvd at 15% O2 for each hour in which it did not. The 4-hour rolling average NOx lbs/MWh emission limit for any operating hour is determined by the arithmetic average of 0.43 Ib/MWh for each hour in which the unit operated above 75% of peak load for the entire hour, and 4.7 lb/MWh for each hour in which it did not. The 4-hour rolling average is the arithmetic average of the average NOx concentration in ppm measured by the CEMS for a given hour (corrected to 15 percent O2) or lb/MWh if elected by the permittee and the three unit operating hour average NOx concentrations or Ib/MWh emission rates during the three unit operating hours immediately preceding that unit operating hour. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2.

#### Natural Gas Sulfur Content (PDOC, Appendix K, page K-5, Condition 21)

This permit condition includes the method for monitoring the natural gas sulfur content. The permit condition includes the allowable natural gas sulfur content test methods. We are request a change to the permit condition to allow the use

of an alternative test method if approved by the VCAPCD. The requested changes are shown below (shown by strikethrough/underline).

The <u>natural gas</u> sulfur content shall be: (i) documented in a valid purchase contract, supplier certification, tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, <del>or</del> Gas Processors Association Standard 2377, <u>or verified using an alternative method approved by the District</u>. If the <u>natural gas</u> sulfur content is less than 0.75 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be once every six (6) months. If any six (6) month monitoring shows an exceedance, weekly monitoring shall resume.

# Natural Gas High/Low Heating Values (PDOC, Appendix K, page K-5, Condition 25)

This permit condition includes the method for monitoring the natural gas high and low heating values. The permit condition includes the allowable natural gas heating value test methods. We are requesting a change to the permit condition to allow the use of an alternative test method if approved by the VCAPCD. The requested changes are shown below (shown by strikethrough/underline).

The HHV (higher heating value) and LHV (lower heating value) of the natural gas combusted shall be determined upon request using ASTM D3588, ASTM 1826, or ASTM 1945, or an alternative method approved by the District.

## Gas Turbine Startup Emission Limits and Monitoring (PDOC, Appendix K, page K-5, Condition 27)

This permit condition includes the hourly average emission limits and associated monitoring requirements that apply during gas turbine startup periods. Because the new gas turbine will be equipped with NOx and CO CEMS, we are requesting changes to clarify that during gas turbine startups, the hourly average NOx and CO emissions will be monitored by the CEMS. In addition, for consistency purposes we are requesting a change referencing the CEMS missing data substitution requirements under Permit Condition 55. The requested changes are shown below (shown by strikethrough/underline).

During <u>startup</u> of the CTG, emissions (in pounds = lbs) from the CTG in any one hour shall not exceed any of the following limits:

ROC = 20.30 lbs, NOx (as NO2) = 98.87 lbs, PM10 = 8.75 lbs,SOx (as SO2) = 5.50 lbs, and CO = 178.55 lbs

If the CTG is in startup mode during any portion of a clock hour, the facility will be subject to the aforementioned limits during that clock hour. Compliance with the ROC<del>, NOx,</del> and PM10<del>, and CO</del> emission limits shall be verified by CTG manufacturer's emission data. Compliance with the SOx emission limit shall be verified by complying with the natural gas sulfur content limit of this permit. In addition, compliance with the NOx and CO emission limits shall be verified by continuous emissions monitors (CEMS) as required by this permit. If the CEMS is not operating properly, as required below, the <u>CEMS missing data procedures required by Permit</u> <u>Condition 55 shall be implemented</u> permittee shall provide documentation, including a certified source test, correlating the control system operating parameters to the associated measured NOx and CO emissions.

## Gas Turbine Shutdown Emission Limits and Monitoring (PDOC, Appendix K, page K-6, Condition 28)

This permit condition includes the hourly average emission limits and associated monitoring requirements that apply during gas turbine shutdown periods. Because the new gas turbine will be equipped with a NOx and CO CEMS, we are requesting changes to clarify that during gas turbine shutdowns the hourly average NOx and CO emissions will be monitored by the CEMS. In addition, for consistency purposes we are requesting a change referencing the CEMS missing data substitution requirements under Permit Condition 55. The requested changes are shown below (shown by strikethrough/underline).

During <u>shutdown</u> of the CTG, emissions (in pounds = lbs) from the CTG in any one hour shall not exceed any of the following limits:

ROC = 30.28 lbs, NOx (as NO2) = 22.98 lbs, PM10 = 9.58 lbs, SOx (as SO2) = 5.50 lbs, andCO = 163.48 lbs

If the CTG is in shutdown mode during any portion of a clock hour, the facility will be subject to the aforementioned limits during that clock hour. Compliance with the ROC, NOx, and PM10, and CO emission limits shall be verified by CTG manufacturer's emission data. Compliance with the SOx emission limit shall be verified by complying with the natural gas sulfur content limit of this permit. In addition, compliance with the NOx and CO emission limits shall be verified by continuous emissions monitors (CEMS) as required by this permit. If the CEMS is not operating properly, as required below, the <u>CEMS missing data procedures required by Permit Condition 55 shall be implemented permittee shall provide documentation</u>,

including a certified source test, correlating the control system operating parameters to the associated measured NOx and CO emissions.

<u>Gas Turbine Normal Operation Emission Limits and Monitoring (PDOC,</u> <u>Appendix K, page K-6, Condition 29)</u>

This permit condition includes the hourly average emission limits and associated monitoring requirements that apply during gas turbine normal operating periods. Because the new gas turbine will be equipped with a NOx and CO CEMS, we are requesting changes to clarify that the hourly average NOx and CO emissions will be monitored by the CEMS. We are also requesting that the term "one-hour rolling average" be changed to "one-hour average" to avoid confusion with multi-hour rolling average calculations. In addition, for consistency purposes we are requesting a change referencing the CEMS missing data substitution requirements under Permit Condition 55. The requested changes are shown below (shown by strikethrough/underline).

During <u>normal</u> operation of the CTG, emission concentrations and emission rates from the CTG, except during startup, shutdown, and/or unplanned load change, shall not exceed any of the following limits:

ROC = 6.60 pounds per hour and 2.0 ppmvd @ 15% O2, NOx (as NO2) = 23.73 pounds per hour and 2.5 ppmvd @ 15% O2, PM10 = 10.10 pounds per hour, SOx (as SO2) = 5.50 pounds per hour, CO = 23.10 pounds per hour and 4 ppmvd @ 15% O2, Ammonia (NH3) = 17.53 pounds per hour and 5 ppmvd @ 15%O2.

ROC and NOx (as NO2) ppmvd and pounds per hour limits are expressed as a one hour rolling average limit. All other ppmvd and pounds per hour limits are three-hour rolling averages. If the CTG is in either startup or shutdown mode during any portion of a clock hour, the CTG shall not be subject to these limits during that clock hour. Startup limits and shutdown limits are listed in the above conditions.

Compliance with the ROC, NOx, PM10, CO, and NH3 emission limits shall be verified by initial and annual source testing as required below. Compliance with the SOx emission limit shall be verified by complying with the natural gas sulfur content limit of this permit. Compliance with the NH3 limits shall also be verified by monitoring the ammonia injection rate as required below. In addition, compliance with the NOx and CO emission limits shall be verified by continuous emissions monitors (CEMS) as required by this permit. If the CEMS is not operating properly, as required below, the <u>CEMS missing data procedures required by Permit Condition</u> <u>55 shall be implemented permittee shall provide documentation, including</u> a certified source test, correlating the control system operating parameters to the associated measured NOx and CO emissions.

## Gas Turbine Annual Emission Limits and Monitoring (PDOC, Appendix K, page K-7, Condition 31)

This permit condition includes the annual emission limits for the new gas turbine that apply on a rolling 12-month basis. These emission limits match the worstcase calendar year emission levels expected by the Applicant for the new gas turbine. However, because the permit condition requires monitoring based on a 12-month rolling basis rather than on a calendar-year basis, we are requesting that the gas turbine commissioning emissions be removed from this condition. Condition 30 already limits total ROC, NOx, and CO that may be emitted during the commissioning period. Furthermore, excluding gas turbine commissioning emissions from this calculation is consistent with EPA regulations regarding replacement units. For replacement units such as the proposed P3 gas turbine, EPA regulations allow up to 180 days from the initial startup of new equipment before the emissions from the new unit are included for purposes of applicability of Prevention of Significant Deterioration (PSD) regulations [40 CFR Part 52.21(b)(3)(ii) and (viii)] and nonattainment New Source Review (NSR) regulations [40 CFR Appendix S to Part 51 II.a.6.ii. and vi.]. This 180-day period allows for a reasonable shakedown period for the new equipment, and the ambient air quality impact analysis prepared for the P3 demonstrated that no exceedances of the ambient air quality standards would result from commissioning the new P3 gas turbine while existing units are in operation. The gas turbine commissioning period is part of the shakedown period for the new P3 gas turbine.

In addition, we are requesting a change to clarify that compliance with the NOx and CO annual emission limits will be determined using the CEMS. Furthermore, to more accurately account for the lower ROC, SOx, and PM10 hourly emissions that will occur during gas turbine low-load normal operating periods, we are requesting a change to track compliance with the annual emission limits for these pollutants based on fuel-based emission factors and annual fuel use. Finally, we are requesting the removal of references to a limit on the number of gas turbine annual operating hours because such a limit is overly restrictive given the lower hourly emissions during gas turbine low load operation, and such a limit is no longer needed following the above changes. The requested changes are shown below (shown by strikethrough/underline).

Annual emissions from the CTG calculated on a twelve consecutive calendar month rolling basis shall not exceed any of the following limits:

ROC = 10.84 tons per year, NOx (as NO2) = 32.95 tons per year, PM10 = 10.68 tons per year, SOx (as SO2) = 5.91 tons per year, and CO = 54.42 tons per year.

These tons per year limits include normal operation, startups, shutdowns, <u>and</u> unplanned load changes<del>, and the commissioning period</del>.

Compliance with the NOx and CO emission limits shall be verified with the CEMS. In addition, compliance with the NOx and CO emission limits shall be verified with initial and annual source testing combined with compliance with the CTG's annual operating limit in hours per year.

Compliance with the ROC and PM10 emission limits for normal gas turbine operation shall be verified with initial and annual source testing to determine normal operation emission factors in terms of lbs/MMBtu or lbs/MMscf combined with total rolling 12-month total fuel use during compliance with the CTG's normal operation annual operating limit in hours per year. Compliance with the ROC and PM10 emission limits during gas turbine startup and shutdown shall be verified based on the hourly emission limits in Permit Conditions 27 and 28 combined with the number of gas turbine startup and shutdown hours during the preceding rolling 12-month period.

Compliance with the SOx emission limit shall be verified by <del>complying with</del> <u>monitoring</u> the natural gas sulfur content <del>limit</del> <u>as required by Permit</u> <u>Condition 21 of this permit</u> combined with <u>total monitored fuel use in the</u> <u>CTG during the preceding rolling 12-month period</u> <del>compliance with the</del> <del>CTG's annual operating limit in hours per year</del>.

## Gas Turbine Compliance Test Methods (PDOC, Appendix K, page K-9, Condition 38)

This permit condition includes the allowable compliance test methods for the gas turbine. To clarify that the testing includes both the front-half and back-half portions of the EPA PM10 test method, we are requesting that the back-half EPA test method 202 be added to the allowable methods. The requested change is shown below (shown by strikethrough/underline).

The following source test methods shall be used for the initial and annual compliance verification:

ROC: EPA Methods 18 or 25, NOx: EPA Methods 7E or 20, PM10: EPA Method 5 (front half and back half) or EPA Method<u>s</u> 201A <u>and</u> <u>202</u>, CO: EPA Methods 10 or 10B, O2: EPA Methods 3, 3A, or 20, Ammonia (NH3): BAAQMD ST-1B.

EPA approved alternative test methods as approved by the District may also be used to address the source testing requirements of this permit.

## Gas Turbine NOx and CO CEMS RATA Requirements (PDOC, Appendix K, page K-9, Condition 39)

This permit condition includes the periodic relative accuracy test audit (RATA) requirements for the gas turbine NOx and CO CEMS. For clarification purposes, we are requesting changes to make the permit condition consistent with the applicable requirements of 40 CFR Part 75 for the NOx CEMS and 40 CFR Part 60 for the CO CEMS. The requested changes are shown below (shown by strikethrough/underline).

An initial and annual source test and a periodic NOx and CO Relative Accuracy Test Audit (RATA) shall be conducted on the CTG and its CEM<u>S</u> to demonstrate compliance with the NOx and CO emission <del>standards</del> <u>limits</u> of this permit and applicable relative accuracy requirements for the CEMS systems using District approved methods. The annual source test and the NOx <u>CEMS</u> <del>and CO</del> RATAs shall be conducted in accordance with the applicable RATA frequency requirements of 40 CFR75, Appendix B, Sections 2.3.1 and 2.3.3. <u>The annual source test and CO CEMS</u> <u>RATAs shall be conducted in accordance with the applicable RATA</u> <u>frequency requirements of 40 CFR 60, Appendices B and F.</u> The initial and annual RATA may be conducted during the initial and annual emission source tests required above and shall be conducted in accordance with a protocol complying with all the applicable requirements of an approved source test protocol.

Limits on the Gas Turbine Operating Hours and Number of Startups/Shutdowns (PDOC, Appendix K, page K-11, Condition 48)

This permit condition limits the number of operating hours and number of startup and shutdowns per year for the new gas turbine. While the total numbers of operating hours and startups/shutdowns per year shown in this permit condition match the worst-case assumptions in the December 10, 2015 ATC/DOC permit application package submitted to the VCAPCD for the P3 (see Table B-11), this permit condition does not account for the lower hourly emissions that will occur during low-load operation of the new gas turbine. Because the purpose of these limits on the number of operating hours and number of startups/shutdowns is to limit the annual potential to emit for the new gas turbine, a more direct and accurate approach to verifying compliance with the annual emission limits in this permit is to use the compliance monitoring methods included in Permit Condition 31. However, if the VCAPCD believes it is necessary to have a secondary condition limiting annual gas turbine emissions, we request that the limit be in terms of heat input rather than operating hours. Based on the gas turbine hourly fuel use level of 2.53 MMscf/hr shown on Table VII-5 of the PDOC, the natural gas high heating value (HHV) of 1,018 Btu/scf shown in Section VII of the PDOC, and 2,150 hours per year of gas turbine operation, the resulting gas turbine annual heat input limit is 5,537,411 MMBtu per year (HHV). The requested change is shown below (shown by strikethrough/underline).

The number of annual operating hours (including startup and shutdown) for the CTG shall not exceed 2,150 hours per year. The number of startup periods occurring shall not exceed 200 per year. The number of shutdown periods occurring shall not exceed 200 per year.

The CTG shall be equipped with an operating, non-resettable, elapsed hour meter. The permittee shall maintain a log that differentiates normal operation from startup operation and shutdown operation. These hours of operation records shall be compiled into a monthly total. The monthly operating hour records shall be summed for the previous 12 months and reported to the District on an annual basis.

The annual heat input for the CTG shall not exceed 5,537,411 MMBtu per year in terms of high heating value (HHV) calculated on a 12 consecutive calendar month rolling basis. As required by Condition 56, the CTG shall be equipped with continuous monitors to measure, calculate, and record the total heat input to the combustion turbine based on the natural gas HHV during each unit operating minute, in terms of MMBtu per hour. This heat input data shall be compiled into a monthly total. At the beginning of each calendar month, the monthly heat input totals shall be summed for the previous 12 months. The resulting rolling 12 month heat input totals shall be reported to the District on an annual basis.

SCR and Oxidation Catalyst Control System Specifications (PDOC, Appendix K, page K-11, Condition 49)

This permit condition includes the requirement to submit the design specifications for the selective catalytic reduction (SCR) and oxidation catalyst emission control system to the VCAPCD. To ensure that the final design specifications for the SCR/oxidation catalyst control system are complete and available, we are requesting a change to clarify that these specifications must be submitted to the VCAPCD no later than 90 days prior to installation of the SCR/oxidation catalyst emission control system, rather than prior to the start of construction of the P3 project as a whole. The requested changes are shown below (shown by strikethrough/underline).

Not later than 90 calendar days prior to the start of construction installation of the selective catalytic reduction (SCR)/oxidation catalyst emission control systems, the permittee shall submit to the District the final selection, design parameters and details of the selective catalytic reduction (SCR) and oxidation catalyst emission control systems for the CTG including, but not limited to, the minimum ammonia injection temperature for the SCR; the catalyst dimensions and volume, catalyst material, catalyst manufacturer, space velocity and area velocity at full load; and control efficiencies of the SCR and the oxidation catalyst CO at temperatures between 100 °F and 1000 °F at space velocities corresponding to 100% and 25% load.

#### SCR Monitoring System (PDOC, Appendix K, page K-11, Condition 50)

This permit condition includes the monitoring requirements for the SCR emission control system. We are requesting changes to clarify that these monitors must be installed and fully operational prior to the initial operation of the SCR emission control system. The requested changes are shown below (shown by strikethrough/underline).

Continuous monitors shall be installed on SCR system prior to their its initial operation to monitor or calculate, and record the ammonia solution injection rate in pounds per hour and the SCR catalyst temperature in degrees Fahrenheit for each unit operating minute. The monitors shall be installed, calibrated and maintained in accordance with a District approved protocol, which may be part of the CEMS protocol. This protocol, which shall include the calculation methodology, shall be submitted to the District for written approval at least 90 days prior to initial startup-installation of the gas turbines with the SCR system. Following the initial operation of the SCR system, Tthe monitors shall be in full operation at all times when the turbine is in operation.

#### SCR Emission Control System (PDOC, Appendix K, page K-11, Condition 51)

This permit condition includes requirements for manual and automatic control of the SCR emission control system. For clarification purposes, we are requesting the following changes to this condition (shown by strikethrough/underline):

Except during periods when the ammonia injection system is being tuned or one or more ammonia injection systems is in manual control for compliance with applicable permit conditions, the automatic ammonia injection system serving the SCR system shall be in operation in accordance with manufacturer's specifications at all times when ammonia is being injected into the SCR system. Manufacturer specifications shall be maintained on site and made available to District personnel upon request.

## NOx, O2, and CO CEMS Requirements (PDOC, Appendix K, page K-12, Condition 53)

This permit condition includes the various requirements for the NOx, O2, and CO CEMS. For clarification purposes, we are requesting the following minor changes to this condition (shown by strikethrough/underline):

A continuous emission monitoring system (CEMS) shall be installed and operated on the CTG and properly maintained and calibrated to measure, calculate, and record the following, in accordance with the District approved CEMS protocol:

a. Hourly average concentration of oxides of nitrogen (NOx) uncorrected and corrected to 15% oxygen, in parts per million (ppmvd), necessary to demonstrate compliance with the NOx limits of this permit;

b. Hourly average concentration of carbon monoxide (CO) uncorrected and corrected to 15% oxygen, in parts per million (ppmvd), necessary to demonstrate compliance with the CO limits of this permit;

c. Percent oxygen (O2) in the exhaust gas averaged over each operating hour;

d. Hourly mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;

e. Cumulative mass emissions of oxides of nitrogen (NOx) calculated as NO2 in each startup and shutdown period, in pounds;

f. Daily mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;

g. Calendar monthly mass emissions of oxides of nitrogen (NOx) calculated as NO2, in pounds;

h. Rolling 1-hour average and rRolling 4-hour average concentration of oxides of nitrogen (NOx) corrected to 15% oxygen, in parts per million (ppmvd);

*i.* Rolling 4 <u>4</u>-hour average oxides of nitrogen (NOx) calculated as NO2 <del>omission rate</del>, in pounds per megawatt-hour (MWh);

*j.* Calendar month, calendar year, and rolling 12-calendar-month period mass emissions of oxides of nitrogen (NOx) <u>calculated as NO2</u>, in tons; *k.* Hourly mass emissions of carbon monoxide (CO), in pounds:

*I.* Cumulative mass emissions of carbon monoxide (CO) in each startup and shutdown period, in pounds;

*m.* Daily mass emissions of carbon monoxide (CO), in pounds;

*n.* Calendar monthly mass emissions of carbon monoxide (CO), in pounds;

o. Calendar month, calendar year, and rolling 12-calendar-month period mass emissions of carbon monoxide (CO), in tons;

p. Average concentration of oxides of nitrogen (NOx) and carbon monoxide (CO) uncorrected and corrected to 15% oxygen, in parts per million (ppmvd), averaged over each unit operating hour; q. Average emission rate in pounds per hour of oxides of nitrogen (NOx) calculated as NO2 and pounds per hour of carbon monoxide (CO) during each unit operating hour.

# NOx and CO CEMS Data Substitution Requirements (PDOC, Appendix K, page K-12, Condition 55)

This permit condition includes the various data substitution requirements for the NOx and CO CEMS. For clarification purposes, we are requesting the following changes to this condition (shown by strikethrough/underline):

When the <u>NOx</u> CEMS is not recording data and the CTG is operating, hourly NOx emissions for purposes of rolling 12-calendar-month period emission calculations shall be determined in accordance with 40 CFR 75 Subpart C. Additionally, <u>when the CO CEMS is not recording data and the</u> <u>CTG is operating</u>, hourly CO emissions for <u>purposes of</u> rolling 12calendar-month period emission calculations shall be determined using CO emission factors to be determined from source test emission factors<del>,</del> <del>recorded CEMS data</del>, and <u>hourly</u> fuel consumption data<del>, in terms of</del> <del>pounds per hour of CO for the gas turbine</del>. Emission calculations used to determine hourly emission rates shall be reviewed and approved by the District, in writing, before the hourly emission rates are incorporated into the CEMS emissions data.

#### <u>General Compliance Statement for Emergency Diesel Generator Engine (PDOC,</u> <u>Appendix K, page K-15)</u>

This section of the permit includes the regulatory requirements for the emergency Diesel generator engine. For clarification purposes, we are requesting the following minor change to this statement in the permit (shown by strikethrough/underline):

#### Puente Power Project 779 BHP Tier 4-Final Emergency Diesel Engine

The Emergency Diesel Engine is simultaneously subject to the <u>applicable</u> emission limits, monitoring requirements, and recordkeeping and reporting requirements of the following rules and regulations:...