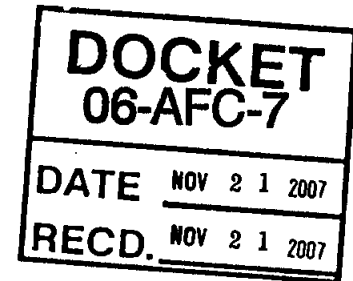


## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814-5512

November 21, 2007

Mr. Richard L. Martin, Jr.  
Air Pollution Control Officer  
North Coast Unified Air Quality Management District  
2300 Myrtle Avenue  
Eureka, CA 95501



Dear Mr. Martin:

**HUMBOLDT BAY REPOWERING PROJECT (06-AFC-7)  
PRELIMINARY DETERMINATION OF COMPLIANCE, PERMIT NO. 440-1**

Energy Commission staff appreciates the opportunity to provide written public comments on the Preliminary Determination of Compliance (PDOC) issued by the District on October 24, 2007 for the Humboldt Bay Repowering Project (HBRP) proposed by Pacific Gas and Electric Company (PG&E). We look forward to continuing to work closely with the North Coast Unified Air Quality Management District (District) on the HBRP.

In reviewing the PDOC and the accompanying Engineering Evaluation (EE), we have a concern that there is insufficient data to support some of the conclusions in the document. As a consequence, at this time we cannot determine whether the HBRP will comply with applicable laws, ordinances, regulations, and standards. One issue in particular, the firing of the diesel fuel, requires additional analysis to determine the potential for significant impacts to the air quality and public health. After the District has had an opportunity to review our comments, we suggest meeting with you at your convenience, to discuss relevant issues and to answer any questions.

**General Comments**

**Definition of Natural Gas Curtailment.** Section III of the PDOC includes a definition of "Natural Gas Curtailment" that staff believes is ambiguous. We believe that establishing such a definition is unnecessary, especially since curtailments may be confused with emergencies. Staff views curtailments as part of normal, foreseeable operations, which are distinct from emergencies. Staff recommends removing the term from the PDOC and permit conditions. This should be possible with a comprehensive limitation of operation in diesel mode (for example, by prohibiting fuel switching for economic reasons in Condition 87 and Condition 94).

If the term "Natural Gas Curtailment" is not removed, the District's EE should address the following questions: What regulatory agencies would specify a curtailment? The agency(s) should be specifically identified. Also, what "procedures approved by a regulatory agency" would be used to trigger a Natural Gas Curtailment? Specific

agencies and circumstances that would trigger diesel operation under this definition would need to be identified in the definition. This is important because it would more clearly define to all parties the circumstances and the specific regulatory steps and responsibilities that would be implemented under the definition of "natural gas curtailment."

**Definition of Emergency Use.** The definition of "Diesel Particulate Matter ATCM Emergency Use" (PDOC Section III) appears to conflict with the definition of Emergency Use in the Airborne Toxic Control Measure for Stationary Compression Ignition Engines [Section 93115.4(a)(30), title 17, California Code of Regulations (CCR)]. In addition, when conducting a health risk assessment, the use of diesel fuel during curtailments cannot be considered an "emergency" and therefore must be included in the health risk assessment as per Cal-EPA guidelines (Office of Environmental Health Hazard Assessment: *Air Toxics Hot Spots Program Risk Assessment Guidelines*, August 2003, page 1-2).

The District definition excludes the dual-fuel engines (S-1 to S-10) which are stationary compression ignition engines subject to the Airborne Toxic Control Measure (ATCM), at least in diesel mode, as noted in the California Air Resources Board (ARB) letter in the attachments to the EE ( EE p. 45). Additionally, because HBRP is subject to natural gas curtailment by PG&E's California Public Utilities Commission (CPUC) Gas Tariff Rule 14 (AFC Section 2.7.3), the normal natural gas supply to the proposed dual-fuel engines can be curtailed through the enforcement of this obligation that PG&E has with the CPUC. Partial or total loss of the natural gas supply due to third-party agreements does not qualify as an event for "emergency use" under the definition in the CCR. Because the CCR already provides a definition for "Emergency Use" that applies to all stationary compression ignition engines at the facility, the District should not establish its own definition which could be interpreted contrary to the CCR. Staff recommends removing the term "Diesel Particulate Matter ATCM Emergency Use" from the PDOC and permit conditions.

If a definition of "Diesel Particulate Matter ATCM Emergency Use" is retained by the District, it should apply to all compression ignition engines, including S-1 through S-10, and it should be made consistent with the definition of "Emergency Use" in the current CCR.

**Best Available Control Technology.** The BACT determination is based on an assertion from PG&E that Diesel Particulate Filters would not be cost effective (EE p.39), but this determination should be based on an independent engineering evaluation of cost effectiveness by the District. The Engineering Evaluation should illustrate how the cost-effectiveness analysis conforms with the definitions in Rule 110, Section 4.5.2 and Section 4.8 and federal guidelines for sources subject to Prevention of Significant Deterioration (PSD) review.

**ATCM Applicability.** The District states that "according to the applicant" the dual-fuel Wärtsilä engines are exempt from the ATCM during natural gas mode (EE p.45), and that the ATCM applies to the Wärtsilä engines only during diesel mode operation. The District should ensure that the final determination is either made by the District independently or by the ARB.

The dual-fuel engines in the PDOC (S-1 to S-10) are stationary compression ignition engines that appear to be subject to the ATCM, at least in diesel mode, as noted in the ARB letter attached to the PDOC. In its letter, ARB did not clarify whether diesel mode operation would be subject to the ATCM for emergency engines (17 CCR 93115.6) or the ATCM for prime diesel-fueled engines (17 CCR 93115.7). Energy Commission staff does not view a natural gas curtailment as an opportunity for "emergency use," but if the dual-fuel engines in diesel mode are treated as "emergency standby" engines, then standards in Section 93115.6(a)(3) would be triggered. The emission standard for an emergency standby engine that is allowed to operate up to 100 hours per year for maintenance and testing is 0.01 g/bhp-hr diesel particulate matter (DPM). The PDOC (Conditions 51 and 52) would allow each of the ten proposed dual-fuel engines to operate in diesel mode for an average of 100 hours/year for maintenance and testing (and curtailments), but the PDOC would also allow an emission rate of 0.15 g/bhp-hr DPM, which exceeds the standard in the ATCM Section 93115.6(a)(3)(A)(2). The 0.01 g/bhp-hr DPM standard for prime diesel-fueled engines in ATCM Section 93115.7(a)(1) would also be exceeded.

#### **Offset Requirements.**

The discussion in the EE (p.23 to 24) lacks sufficient detail to determine the level of onsite reductions due to the Humboldt Bay Power Plant (HBPP) shutdown. The District should provide an assessment of the "actual emissions" (defined in Rule 110, Section 4.2) from the HBPP as a first step in determining the quantity of offsets. It is not clear from the Engineering Evaluation whether any of the reductions would meet the eligibility standards for banking (in District Rule 106). At a minimum, the enforceable reductions requested by the applicant should be tabulated. For example, the Engineering Evaluation does not show any reductions of sulfur oxides (SOx) even though they are required for offsetting SOx are a precursor to PM10. The purpose of the small table (ERCs tons/yr) on p.24 of the EE should be disclosed. The applicability of and whether the PDOC demonstrates compliance with the public notification requirements for emission reduction credits (District Rule 106, Section 14.6) should also be described.

Offset requirements are defined in the PDOC (EE p.23) on the basis that certain quantities of emissions reductions would occur with the shutdown of the existing HBPP. These quantities should not include emissions that occurred during an "emergency." The definition of Historic Actual Emissions, per Rule 110, Section 6.2.2 excludes emissions that are unrepresentative of normal operations. A reasonable interpretation of "emergency use" would be that emissions generated during emergencies are not representative of normal operations. In evaluating the emission offset calculations, it

appears that some of the baseline emissions from the existing Humboldt Bay Power Plant occurred while that facility was operating in an "emergency" condition. We recommend that the District follow one clear definition of "emergency" and then analyze the appropriate quantity of emission reductions consistent with Section 6.2.2. Staff believes the District should re-evaluate whether credits should be included in the offset calculations for the following:

- The circumstance when the Humboldt Bay Power Plant Unit 2 (HB2) fired fuel oil between the months of August 1 to September 28, 2006 (shown on AFC Table 8.1A-9).
- The situations where the Mobile Emergency Power Plant Units 2 and 3 (MEPP2 and MEPP3) operated for virtually every month over the two year period of October 2004 through September 2006 (shown on AFC Table 8.1A-9). Were these operations considered "normal" or do they constitute an "emergency," and what were those circumstances of operation?

**New Source Performance Standards (NSPS).** Compliance with the NSPS 40 CFR Part 60 Subpart IIII threshold of 0.15 g/KW-hr (or 0.11 g/bhp-hr) for particulate matter (EE p.44) should be demonstrated by using U.S. EPA Method 5 for testing. Using the District definition of "Diesel Particulate Matter" from the PDOC, the engines should not be allowed to emit more than 0.11 g/bhp-hr Diesel Particulate Matter. The limit of 0.15 g/bhp-hr shown in Condition 50 should be revised to 0.11 g/bhp-hr for the engines to comply with NSPS Subpart IIII. The limit specified in Condition 58 should also be revised to 0.11 g/bhp-hr.

**Ambient Air Quality Impacts.** The District's ambient air quality impacts analysis appears to be based on outdated dispersion modeling. The District (EE p.18) says that the applicant did not model particulate matter less than 2.5 microns (PM2.5) separately from particulate matter less than 10 microns (PM10). This does not recognize that a separate PM2.5 analysis was provided by PG&E in AFC Section 8.1.2.8.3, September 2007. The issue regarding terrain between the stack base and stack top (EE p.40) was resolved with modeling conducted in early 2007. It is also not clear from the analysis whether the District accurately portrayed the potential PM10/PM2.5 impacts based upon the potential for the engines to operate at 1,000 engine-hours per year in diesel mode (as allowed by Condition 94). PG&E did not provide the Energy Commission with an analysis of impacts at 100 hours/year/engine in diesel mode in its September 2007 filing, which was based on 50 hours/year/engine with stack heights of 100 feet. If the District is citing an analysis that considers 1,000 engine-hours per year with a stack height of 100 feet from PG&E, rather than conducting its own analysis, then PG&E's analysis should be cited. Similarly, the District appears to analyze only 50 hour/year/engine in diesel mode (EE Table 16, p.41), which would not capture the full impacts allowed by Condition 94.

PG&E's analysis of PSD Class I and Class II increment consumption for the HBRP in its current configuration was dated November 2, 2007. It is unclear how the District was

able to determine compliance with the PSD increments requirements (EE p.42) if PG&E did not provide an analysis until after the PDOC was issued. If the District is citing an analysis from PG&E, rather than conducting its own, then that analysis should be cited.

**Health Risk Assessment.** The Engineering Evaluation (p. 22) indicates that a health risk assessment has been performed, but there is no evidence of it or its conclusions in the analysis.

**National Park Service and Department of Agriculture (Forest Service) Visibility Analysis.** As part of the District's PSD analysis, the National Park Service and the Department of Agriculture Forest Service were asked by the District to evaluate the visibility impacts of the project on nearby Class I areas such as the Redwood National Park, and the Marble and Yolla Bolly Wilderness Areas. In a letter dated August 29, 2007 from the National Park Service and included in the PDOC, the Park Service states, "Because the North Coast Unified Air Quality Management District will limit oil firing to only 50 hours per year, we do not request that Sierra Research conduct a VISCREEN analysis for emissions from oil firing." Similarly, in a letter dated October 16, 2007 from the Forest Service and included in the PDOC, the Forest Service also understands that the project would be limited to 50 hours of diesel and therefore the Forest Service would not require additional visibility modeling. However, the PDOC allows for up to 1,000 engine-hours per year. Since the Park Service and the Forest Service were unaware of this project change, these agencies should be informed of such a change, and given the opportunity to re-evaluate whether additional visibility analysis should be performed.

### **Comments on Specific PDOC Conditions**

Condition 30 – This condition requires that the equipment shall not be modified "so as to alter the dispersion modeling results." In order to be clear regarding what modeling results are being referred to, the condition should reference in the Engineering Evaluation the specific modeling results that are of concern. If changes were necessary to the heat input capacities or changes to the full-load design specifications that "alter the dispersion modeling results," it is not clear how the applicant would demonstrate compliance with the condition. Would the applicant need to provide a revised modeling analysis? If so, the condition should include a provision to provide that analysis. However, a permit condition that actually references modeling results is unconventional.

Table 2.0 Authorized Control Devices – This table is not referenced by any previous or subsequent permit conditions. Condition 103 only refers to this table many pages later. This table has no requirements for the Authorized Control Devices other than these devices are "to be determined" (TBD). Since it is not clear when the specifications for this equipment will be determined, the purpose of this table is also unclear. As it is, it does not seem to provide any enforceable purpose.

Condition 44 – This condition requires that off-site emission reduction credits (ERCs) be surrendered prior to construction. However, the vast majority of the “offsets” are from the shutdown of the HBPP. There is no condition that requires the permanent shutdown and the surrender of the Permits to Operate of the HBPP. This requirement should be included in this set of permit conditions. (See comment for Condition 64).

Condition 44 - Table 3.0 should be revised to reflect the offsets required (including the HBPP) based on reductions of Historic Actual Emissions consistent with District Rule 110, Section 6.2.2.

Consistent with many other power plant conditions in the state concerning the surrender of ERCs, the specific ERC certificate numbers should be included in the condition and Engineering Evaluation. If the applicant needs to change the ERC package, it would be a relatively straightforward process of informing the District of the change in the ERC package.

Condition 46 – This limits sulfur dioxide (SO<sub>2</sub>) from each back-up engine (S-11 and S-12) to 1,000 parts per million (ppm) or 40 tons per year. This condition appears to enforce the sulfur oxide emissions limit of District Rule 104, Subsection 5. That reference should be included in the permit condition as is done in the previous Condition 45.

Condition 48 – This condition limits the natural gas start-up hourly NO<sub>x</sub> emissions to 392 lb/hour for all 10 engines. However, the hourly startup NO<sub>x</sub> emissions are shown as 830 lb/hour in Table 4 of the Engineering Evaluation. The vendor guarantee of 22 lb/hour/engine was also presented as the maximum NO<sub>x</sub> startup emissions. Three different hourly startup figures are thus potentially presented, 220, 392 and 830 lb/hour for all 10 engines. The figures used in the permit condition should be supported in the Engineering Evaluation, and there should be an analysis of why the 392 lb/hour limit was chosen.

Condition 49 – This condition seeks to limit the diesel mode start-up hourly NO<sub>x</sub> emissions to 676 lb/hour for all 10 engines. However, the hourly startup NO<sub>x</sub> emissions are shown as 830 lb/hour in Table 4 of the Engineering Evaluation. The vendor guarantee of 154 lb/hr/engine was also presented in Table 4 as the maximum NO<sub>x</sub> startup emissions per engine in diesel mode. Three different hourly startup figures are thus potentially presented, 676, 830 and potentially 1540 (154 lb x 10 engines) lb/hour for all 10 engines. The figures used in the permit condition should be supported in the Engineering Evaluation, and there should be an analysis of why the 676 lb/hr figure was chosen. The District should consider eliminating this condition because comments provided by PG&E to the Energy Commission on October 31, 2007 in response to Data Request 92 imply that with consideration of background NO<sub>2</sub>, operating at 676 lb/hr could cause a violation of the new 1-hour California Ambient Air Quality Standard for NO<sub>2</sub>.

There does not appear to be any permit conditions for limiting CO emissions during startup for firing either natural gas or diesel. We would recommend that CO limits (derived from Table 4 of the Engineering Evaluation) be added for startup.

There does not appear to be any conditions limiting startups to a maximum of 5 engines per 60 minute period, as recommended on p.17 of the Engineering Evaluation.

Condition 50 - Compliance with the NSPS 40 CFR Part 60 Subpart IIII threshold of 0.15 g/KW-hr (or 0.11 g/bhp-hr) for particulate matter on p. 44 of the Engineering Evaluation must be demonstrated by using U.S. EPA Method 5 for testing. Using the District definition of "Diesel Particulate Matter" from the PDOC, the engines should not be permitted to emit more than 0.11 g/bhp-hr DPM. The limit of 0.15 g/bhp-hr shown in Condition 50 should be revised to 0.11 g/bhp-hr for the engines to comply with NSPS Subpart IIII. This comment also applies to Condition 58.

Conditions 51 and 52 – These conditions limit the fuel heat input. The Engineering Evaluation should provide the calculations to substantiate these figures. Condition 51 should clarify whether the annual diesel mode limit in Table 4.0 applies to each engine, because elsewhere the conditions would allow the flexibility for one engine to operate for more than 100 hours annually in diesel mode as long as all ten engines remain within the 1,000 engine-hours per year allowed by Condition 94.

Condition 54 – This condition limits the amount of diesel fuel gallons that can be burned. The annual figure (1,088,362 gal/yr) is twice the figure presented in Table 2 (544,181 gal/yr) of the Engineering Evaluation. The fuel use figure in Condition 54 would be equivalent to 149,000 MMBtu/yr when converted to a heat input basis. This exceeds the heat input limit for diesel mode (140,890 MMBtu/year) in Condition 52. Condition 52 and Condition 54 should be revised to show one consistent heat input and fuel use limitation.

Condition 55 – This condition would limit NO<sub>x</sub> emissions on a three-hour rolling basis, but revising this to a 1-hour limit should be considered because compliance with the one-hour NO<sub>2</sub> ambient air quality standard depends on minimizing hourly NO<sub>x</sub> emissions.

Condition 56 – None of the daily emission limits of Table 5.1 match the Daily Emission Rates of Table 5 in the Engineering Evaluation. Table 5 (EE p. 10) does not provide a daily summary of natural gas mode emissions, the most likely emissions event that will occur with this project. Table 5 of the Engineering Evaluation should be revised to reflect this fact, and to thus provide the basis for the emission limits presented in Table 5.1 of Condition 56.

Condition 58 – This condition refers to operating engines S-1 through S-10 during an event consistent with the definition of "Diesel Particulate Matter ATCM Emergency Use."

However, as defined by the District (PDOC p.10) the "Diesel Particulate Matter ATCM Emergency Use" term would apply only to engines S-11 and S-12. The emission limits of the ATCM should apply to engines S-1 through S-10, at all times or at least in diesel mode (as implied on EE p. 45), depending on final interpretation by ARB. Additionally, the emission rate proposed by the applicant is not clearly reported by the District because the Engineering Evaluation (p.8) shows a rate of 0.15 g/bhp-hr while p. 12 shows 0.11 g/bhp-hr. Condition 58 should be revised to show that the applicable limit applies to S-1 through S-10 when they operate in diesel mode, regardless of the event that triggers diesel mode.

Condition 59 - This condition limits Diesel Particulate Matter while in diesel mode. However, there is the caveat in the condition that states that these limits would not apply during Natural Gas Curtailment. Since diesel fuel will have to be fired if the project operates during a curtailment, the Diesel Particulate Matter limit must apply, regardless of the event that triggers diesel mode. The reference to excluding Natural Gas Curtailment should be removed.

Is it unclear why startup and shutdown periods would be excluded from these hourly, daily, and annual limits. Since that Diesel Particulate Matter (DPM) emissions are a function of the amount of fuel burned, it does not appear to be appropriate to exclude periods of startup and shutdown in these limits. In addition, PM will be monitored by source test emission factors and fuel flow, thus determining compliance with the limits excluding startups would entail specifically finding those times where startups and shutdowns occur and removing that fuel flow data. Staff believes that this additional compliance complexity is not necessary or appropriate.

Condition 60 – Some of the daily emission limits presented in Table 5.4 of this condition are not consistent with the daily emission figures presented in Table 5 of the Engineering Evaluation. Specifically, the ammonia (NH<sub>3</sub>) limit in Table 5.4 is 507 lb vs. 443 lb in Table 5 (EE p.10). Also, the PM<sub>10</sub> emission limit in Table 5.4 is 1,542 lb vs. 2,592 lb in Table 5. If the lower PM<sub>10</sub> figure is chosen, technical justification should be provided since it appears not to reflect the maximum potential hourly (10.8 lb/hr) emission rate presented in Table 4 of the Engineering Evaluation.

Condition 61 – This condition provides the annual emission limits. However, Table 9 of the Engineering Evaluation summarized the annual emissions from the 10 engines, and none of the figures in Condition 61 agree with the figures in Table 9 (EE p.17). Table 9 also references that "applicant proposes 830 lb/hr NO<sub>x</sub> limit for all Wärtsilä engines combined, regardless of fuel type." However, as pointed out earlier in comments to Conditions 48 and 49, the startup limit is currently proposed at 676 lb/hr, and a limit of 392 lb/hr seems to be necessary. If the emissions summary in Table 9 of the Engineering Evaluation shows the maximum emissions, but lower or higher emission limits are needed, the Engineering Evaluation should provide explanations of why the conditions must have lower or higher limits. If a justifiable NO<sub>x</sub> emission startup limit



can be arrived at, the figures in Table 9 and in Table 5.5 of Condition 61 would need to be adjusted.

Condition 61 – Table 5.5 allows 174.2 tons per year of NO<sub>x</sub> from sources S-1 through S-10, but Table 16 of the Engineering Evaluation (p. 23 of EE) would only provide offsets for about 150 tons per year. Sufficient offsets must be provided by the project and in Condition 44 (Table 3.0) to fully offset the annual NO<sub>x</sub> emissions.

Condition 63 – There are emission differences (CO and NO<sub>x</sub>) for the annual limits presented in Table 5.7 vs. the emission figures of the Engineering Evaluation Table 9.

Condition 64 – As stated in comments concerning the offset calculations (Condition 44), staff believes that a condition should be added that all permits to operate the existing HBPP should be surrendered, once the engines S-1 through 10 complete their commissioning phase. The term “until such time as the sources are decommissioned” is vague and should be deleted. Since the “offsets” provided by shutdown of the HBPP enable the new emissions from the HBRP, it is necessary that permit conditions clearly require surrendering the Permits to Operate for HBPP. See comments to Condition 66.

Condition 66 – The term “as soon as possible following commercial operation” is used in this condition. As discussed above concerning Condition 64, we believe the language must provide a specific time limitation. We suggest: “The existing generating units at the Humboldt Bay Power Plant, permit units NS-020 (Boiler #1), NS-21 (Boiler #2) and NS-57 (Turbines), shall be shutdown and their Permits to Operate (PTOs) surrendered once engines S-1 through S-10 have successfully completed their Commissioning Phase as defined elsewhere in this permit.”

The term “unless such operation is required by the California Independent System Operator” (for continued operation of HBPP) must be deleted if, as proposed, the existing HBPP is to be shutdown to provide offsets for the new HBRP.

Condition 69 – The term “At the earliest feasible opportunity” is not an enforceable time limit. Staff recommends that equipment tuning be tied to the Commissioning Plan submitted for approval in Condition 79. We suggest: “In accordance with the District approved Commissioning Plan required under Condition 79, the reciprocating engines shall be tuned to minimize emissions in the time frame specified in the approved Commissioning Plan.”

Condition 70 - The term “At the earliest feasible opportunity” is not an enforceable time limit. Staff recommends that installation, adjustment, and initial operations of the SCR and oxidation catalyst be tied to the Commissioning Plan submitted for approval in Condition 79. We suggest: “In accordance with the NCUAQMD approved Commissioning Plan required under Condition 79, the Selective Catalytic Reduction (SCR) system and the oxidation catalyst shall be installed, adjusted, and operated to

minimize emissions from each reciprocating engine in the time frame specified in the approved Commissioning Plan.”

Condition 71 – The reference to continuous monitors specified in Conditions 32, 34, 40, and 41 appear to be in error, as these conditions do not mention continuous monitors. This condition seems to refer to Conditions 31, 33, 39, and 42 instead.

Condition 73 – There is a limit in this condition that during Commissioning, each engine would operate no more than 100 hours without the SCR and oxidation catalyst installed. The Engineering Evaluation should discuss how this figure was derived.

Condition 74 – There is a limit in this condition that during Commissioning, no more than five uncontrolled engines would be operated simultaneously and that their combined daily operation would not exceed 90 engine-hours. The Engineering Evaluation should discuss how these figures were derived, and the potential impacts on the ambient air quality standards (specifically NO<sub>2</sub> and CO) that these operational scenarios would cause.

Condition 75 – This condition limits the hourly and daily emission levels during Commissioning. Staff did not find any information in the Engineering Evaluation that supports how the limits for CO, NO<sub>x</sub>, PM<sub>10</sub>, ROC (Methane) and SO<sub>x</sub> (SO<sub>2</sub>) were derived.

Staff recommends that the District include a separate heading discussion in the Engineering Evaluation on the Commissioning phase of the project that addresses the issues raised on Conditions 73 through 75.

Condition 76 – This condition limits the NO<sub>x</sub> and CO emissions during the Commissioning Period after the SCR and oxidation catalyst are in operation. The reference to Condition 58 should be deleted as this condition limits particulate emissions. Staff also suggests adding Condition 60 to the referred conditions as this condition does have daily NO<sub>x</sub> and CO limits.

Condition 77 – It is unclear whether there is an hourly restriction for testing diesel during Commissioning. It could be inferred that the hourly limits in Conditions 73 and 74 limit combined the hours of diesel mode and natural gas mode, but those conditions are unclear on this point. Conditions 73 and 74 should either state that the limits include both modes, or Condition 77 should specify a limit on the number of hours in diesel mode during Commissioning.

Condition 78 – This condition refers to limits in Condition 59, but the correct reference is probably another condition (possibly Condition 61).

Condition 84 – This condition requires that a very detailed Startup, Shutdown, and Malfunction Plan be submitted to the District less than 30 days prior to the

Mr. Martin, NCUAQMD  
November 21, 2007  
Page 11

Commissioning Period. We believe that to adequately review and approve this plan, that the plan should be submitted *not later* than 30 days prior to Commissioning.

Condition 87 – The term Natural Gas Curtailments should be removed and replaced with a prohibition on fuel switching to diesel mode for economic reasons.

Condition 93 – The Engineering Evaluation should identify how the figures of 80 engine-hours per Calendar Day and loads less than 12 MW were derived.

Condition 97 – It is not specified how the requirement for an oxidation catalyst abatement efficiency of 70% will be demonstrated.

Condition 103 – This condition references a Table 2.0 Authorized Control Devices. However, this table has no requirements for the Authorized Control Devices other than that these devices are “to be determined” (TBD). See earlier comment on page 5 about Table 2.0.

Condition 123 – This condition requires that once every three years or following each 200 hours of operation of each engine in diesel mode, that the unit would be completely source tested using diesel fuel. We suggest that this condition include language to clarify that the number of hours needed for this testing would need to comply with the limitation on Maintenance and Testing in Condition 94(b).

We appreciate the District working with Energy Commission staff on this Application for Certification. If you have any questions regarding our comments, please contact Keith Golden at (916) 653-1643. We look forward to discussing our comments with you.

Sincerely,

A handwritten signature in black ink that reads "Rich York for Paul Richins". The signature is written in a cursive, flowing style.

PAUL RICHINS  
Environmental Protection Office Manager

cc: Docket (06-AFC-7)  
Proof of Service List  
California Air Resources Board  
US Environmental Protection Agency, Region IX  
United States Department of the Interior, National Park Service  
United States Department of Agriculture, Forest Service, Pacific Southwest Region