

## **ATTACHMENT M**

### **GWF Hanford PDOC Comments and District Responses**

## **GWF HANFORD COMMENTS / DISTRICT RESPONSES**

*GWF Energy's comments regarding the preliminary determination of compliance for GWF Energy LLC - Hanford (District facility C-4140) are provided below followed by the District's responses. A copy of GWF Hanford's May 1, 2009 comment package is available at the District office.*

### **1. GWF HANFORD COMMENT**

Page 2, last sentence of Section I: Statement the project is subject to federal Prevention of Significant Deterioration (PSD) requirements is incorrect. Since the project will not result in emissions increases for attainment pollutants in excess of the PSD Significant levels. Recommend sentence be deleted.

### **DISTRICT RESPONSE**

Under Authority to Construct C-603-1-8 (project C-1092783), Hanford L.P. has applied to lower the annual CO emissions from its 320 MMBtu/hr fluidized bed combustor from 198,560 lb/year to 156,000 lb/year in accordance with their latest GEM data and source test results. This reduction in CO emissions will result in the facility emission totals being less than the major source thresholds for CO emissions. The resulting reduction in annual CO emissions will bring the entire stationary source CO emission total under the major source threshold of 200,000 lb/year. Since the stationary source will no longer be a major source for CO emissions, it no longer has the potential of being subject to PSD permitting requirements for CO emissions.

In order for the stationary source emission totals to be reflected in the PDOC evaluation for this project above, Hanford L.P. will be required to implement ATC C-603-1-8, prior to or concurrently with the changes authorized within this document. Therefore, the following condition has been added to the PDOC evaluation:

- Authority to Construct (ATC) C-603-1-8 shall be implemented concurrently, or prior to the modification and startup of the equipment authorized by this Determination of Compliance. [District Rule 2201]

In addition, the PDOC evaluation has been revised to reflect these emission changes and to indicate that the source is no longer subject to PSD requirements of EPA Region IX. However, the District feels that these changes are significant enough to warrant a re-noticing period of the PDOC evaluation. Therefore, the PDOC will be sent out a second public review and comment period.

## **2. GWF HANFORD COMMENT**

Page 3, second paragraph of Section IV: Replace the term “heat recovery steam generator” with the term “once through steam generator”. This terminology should be revised and utilized throughout the entire DOC evaluation.

### **DISTRICT RESPONSE**

After discussion between GWF Energy and the District, the term “once through” references how the steam generator can operate in both simple cycle (not producing steam) and combined cycle (producing steam) turbine modes. The term heat recovery indicates that the steam generator produces steam by recovering heat from the turbine exhaust and does not combust natural gas to produce heat. Therefore, the term “heat recovery steam generator” has been modified and replaced with the term “once through heat recovery steam generator”. This terminology has been modified throughout the entire DOC evaluation.

## **3. GWF HANFORD COMMENT**

Page A-6, PDOC condition 41, please clarify the intent of the startup and shutdown source testing requirements when operating in simple cycle mode and combined cycle mode.

### **DISTRICT RESPONSE**

In order to coincide with the steady state source testing requirements for each of these gas turbines, source testing of the startup and shutdown emission rates shall be conducted within 60 days of the end of the commissioning period while operating in both simple cycle and combined cycle modes. After the initial tests have been conducted, startup and shutdown source testing shall occur once every seven years in whichever mode of operation the turbines are required to operate in at that time. The startup and shutdown source testing requirements within the PDOC evaluation have been revised for clarity.

## **4. GWF HANFORD COMMENT**

Page A-7, PDOC condition 45, please specify the fuel sulfur content limit that GWF is required to demonstrate compliance with.

### **DISTRICT RESPONSE**

The first sentence of PDOC condition 45 (revised PDOC condition 50) has been revised to include the specific fuel sulfur content limit GWF is required to demonstrate compliance with.

**5. GWF HANFORD COMMENT**

Page A-7, PDOC condition 46, please revise the source tests methods as follows: NO<sub>x</sub> – include EPA Method 19 in accordance with the Acid Rain Program requirements of 40 CFR 72; PM<sub>10</sub> – include EPA Method 202 to cover both the front half and back half portion of the PM<sub>10</sub> emissions in the exhaust stream; and

**DISTRICT RESPONSE**

The additional allowable source test methods have been added PDOC condition 46 (revised PDOC condition 51).

## **ATTACHMENT N**

### **Environmental Protection Agency (EPA) PDOC Comments and District Responses**

## **EPA COMMENTS / DISTRICT RESPONSES**

*EPA comments regarding the preliminary determination of compliance for GWF Hanford, LLC (District facility C-4140) are provided below followed by the District's responses. A copy of EPA's May 4, 2009 comment email is available at the District office.*

### **1. EPA COMMENT – LAER PDOC Evaluation and Gas Turbine Emission Calculations**

While the PDOC contains conditions for startup and shutdown (SU/SD) operating scenarios (e.g., mass limits, duration of startups and shutdowns, definitions of operating scenarios, etc.), it must also contain limits on the number of such events when operating under simple- or combined-cycle operation, since the evaluation is based on an assumed number of these events (pages 19-20 of the PDOC). Likewise, the calculations were based on a total of 8,541 hours of operation per year rather than the maximum of 8,760 hours in a year. For these reasons, the proposed permit conditions must include limits on the capacity utilization and/or hours of operation to properly reflect the scenarios used in the emission calculations.

#### **DISTRICT RESPONSE**

The hypothetical operating scenarios provided by the applicant and contained within the PDOC evaluation were used to establish the maximum annual emission limits for each turbine and the auxiliary boiler. It is these maximum emissions that must be enforced and such limits are included as permit conditions in the PDOC. Additionally, the PDOC requires the applicant to keep emission records on a rolling 12-month basis for each pollutant. For NO<sub>x</sub> and CO emissions, the NO<sub>x</sub> and CO CEMs will be used to track rolling 12-month emissions. Rolling 12-month SO<sub>x</sub> emissions will be calculated using the monthly sulfur content monitoring data and monthly fuel usage. Rolling 12-month VOC and PM<sub>10</sub> emissions will be calculated using the rolling 12-month fuel usage and source test data.

No changes were made to the PDOC as a result of this comment.

### **2. EPA COMMENT – 40 CFR 60 Subpart IIII**

Page 69 of the PDOC evaluation concludes that Subpart IIII of 40 CFR 60 applies to the compressed ignited internal compression engine (CI-ICE) and that all applicable standards of this subpart "are less restrictive than current District requirements..." While this may be true, to satisfy Title V requirements, the District must provide a demonstration for multiple applicable streamlining requirements that is consistent with the protocol established in Subsection II.A. of "White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program" ("White Paper No. 2"). Please add an appropriate demonstration to the evaluation for this project and provide a copy to EPA prior to issuing a Certificate of Conformity ("COC") for this project.

**DISTRICT RESPONSE**

40 CFR Subpart IIII is applicable and a compliance discussion has been added to the PDOC for the proposed emergency compression ignition internal combustion engine. Additionally, the applicable requirements have been added to the draft PDOC conditions for the proposed emergency compression ignition internal combustion engine.

**3. EPA COMMENT – 40 CFR 63 Subpart ZZZZ**

The PDOC evaluation must determine on the record whether the CI-ICE is a source that would be subject to Subpart ZZZZ of 40 CFR 63 and indicate any requirements that apply to this source. Please determine whether it is 1) an area source per section 63.6585; 2) a new or an existing stationary RICE per section 63.6590(a); 3) an existing stationary RICE that meets the criteria contained in section 63.6590(b)(3); and/or 4) a stationary RICE subject to Regulations under 40 CFR Part 60 and meets the criteria contained in section 63.6590(c). Please update the evaluation and add any permit conditions as necessary.

**DISTRICT RESPONSE**

A detailed 40 CFR 63 Subpart ZZZZ discussion has been added to the DOC evaluation for this project. Since GWF Hanford is required to comply with 40 CFR 60, Subpart IIII, no additional requirements were applicable to this source from this subpart and no additional draft PDOC conditions are necessary.

**4. EPA COMMENT – Emission rates during startup and shutdown events vs. steady-state operation**

Page 12 of the PDOC states that the VOC, PM<sub>10</sub> and SO<sub>x</sub> emission rates during startup and shutdown are *equivalent* to the steady state emission rates. Based on the data in the tables on page 12, this statement appears to be inaccurate. Steady state emission rates are as follows: VOC – 1.19 lb/hr; PM<sub>10</sub> – 3.03 lb/hr; and SO<sub>x</sub> – 0.33 lb/hr; while startup and shutdown rates respectively are as follows: VOC – 1.70, 1.70 lb/hr; PM<sub>10</sub> – 1.93, 2.03 lb/hr; and SO<sub>x</sub> – 0.35, 0.35 lb/hr. Please revise the text on page 12 stating that these emission rates are equivalent.

**DISTRICT RESPONSE**

Please note that these startup and shutdown emission rates are only applicable for these turbines, pre-project. The values are not used in any of the potential to emit calculations in the PDOC. Upon further review of the application review performed for the original permitting project for these turbines when they were originally installed, project C-1010451, the assumption that VOC, PM<sub>10</sub> and SO<sub>x</sub> emission rates during startup and shutdown are equivalent to the steady state emission rates appears to be accurate. Therefore, the startup and shutdown emission rates in the table on the page 12 have been revised to the following: VOC – 1.19 lb/hr; PM<sub>10</sub> – 3.03 lb/hr; and SO<sub>x</sub> – 0.33 lb/hr.

**5. EPA COMMENT – SCR operation and startup and shutdown events**

It is unclear if the PDOC assumes operation of the SCR during startup and shutdown events. If it is the District's intention, as part of BART that the SCR should be in operation as soon as technically feasible, please add conditions to both require its use and monitoring provisions to ensure the SCR unit is in operation during startup and shutdown events. Examples of such conditions could include: 1) require the installation and maintenance of a working temperature gauge at the inlet or the catalyst bed of the SCR system and 2) require the monitoring and recording of the temperature over which the control system ought to be operating.

**DISTRICT RESPONSE**

The requirements for operation of the SCR system during startup and shutdown will be determined as part of the BACT analysis for startups and shutdowns in accordance with EPA comment #11 below (refer also to EPA comment letter for GWF Tracy project N-1083212, dated May 21, 2009). Conditions requiring at what minimum temperature ammonia should start being injected into the SCR system and that the temperature should be monitored and recorded will be added to the PDOC, as well as any other conditions determined necessary to ensure BACT is achieved during startup and shutdown periods.

**6. EPA COMMENT – Monitoring, Recordkeeping, and Recording for Visible Emissions**

Visible emissions from the electrical generator lube oil vents and from the exhaust of the diesel-fired internal combustion engine are subject to SIP-approved District Rule 4101. While subsection 6.1 of the rule identifies US EPA Method 9 for visual determination of the opacity, provisions for monitoring, recordkeeping, and recording should be considered and are required under Title V (per section 9.0 of District Rule 2520). Examples of considerations include: 1) requirement to conduct periodic monitoring/inspection and to record the opacity readings (along with their times and dates); 2) requirement to conduct the monitoring while the equipment is operating and during daylight hours; 3) requirement to take corrective action that eliminates the visible emissions during X hours and report the visible emissions as a potential deviation in accordance with the permit's reporting requirements; 4) requirement to verify and certify within X hours that the equipment causing the visible emissions has been fixed; and 5) requirement that the operator maintain and make available upon request records of emission point(s), of descriptions of corrective actions taken, of date and time emissions were abated, and of records of emission readings. Please include these requirements as appropriate into the final permit or FDOC. Issuance of the COC is contingent upon the District adding the necessary conditions to the Title V portion of the permit.

**DISTRICT RESPONSE**

Natural Gas Fired Turbine:

The District has not previously included any type of visible emissions testing requirements on its permits for natural gas fired turbines. In addition, the District's Title V monitoring, reporting and recordkeeping (MRR) policy states that additional opacity MRR conditions are only required for diesel fired turbines which is consistent with CAPCOA's "Summary Of Periodic Monitoring Recommendations For Generally Applicable Requirements in SIP" document, dated June 24, 1999, as it does not recommend any additional opacity MRR conditions for gas-fired turbines.

Diesel Fired Emergency Internal Combustion Engine:

The District has not previously included any type of visible emissions testing requirements on its permits for diesel fired internal combustion engines that are primarily used for emergency purposes. In addition, the District's Title V monitoring, reporting and recordkeeping (MRR) policy states that no additional opacity MRR conditions are required for diesel fired standby and emergency IC engines which is consistent with CAPCOA's Periodic Monitoring Recommendations, as it does not recommend any additional monitoring for diesel fired emergency IC engines which are fired on CARB certified diesel fuel, since it has a very low sulfur content and has a low aromatic content (reference CAPCOA's Summary Of Periodic Monitoring Recommendations For Generally Applicable Requirements in SIP, June 24, 1999).

In addition, each District compliance staff member is certified to perform visible emissions testing in accordance with EPA Method 9. During the source's annual inspection, the District compliance staff member will observe the equipment to ensure that there are no visible emission violations.

Therefore, the District does not feel it is necessary to add conditions to the PDOC requiring GWF Hanford to perform periodic visible emission tests in accordance with EPA Method 9.

No changes were made to the PDOC as a result of this comment.

**7. EPA COMMENT – Subsection 60.4345(e) of 40 CFR 60 (NSPS Subpart KKKK) CEM Quality Assurance Plan**

Please propose conditions in the actual permit or final Determination of Compliance (FDOC) that require the owner or operator to develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs (a), (c), and (d) of subsection 60.4345.

**DISTRICT RESPONSE**

Since GWF Hanford is not proposing to comply with the output based NO<sub>x</sub> emission standards of 40 CFR 60, Subpart KKKK, there are no specific requirements for them to install a fuel flow meter, watt meter, steam flow meter, or a pressure or temperature measurement device. Therefore, the District does not feel the requirements of sections 60.4345(c) and (d) are applicable to these units and they would not need to provide QA plans for these types of monitoring devices.

The turbines are each equipped with a CEMS for NO<sub>x</sub> emissions. Therefore, the requirements of section 60.4345(a) are applicable to these units. The following condition has been added to address the quality assurance monitoring plan requirement:

- The owner/operator shall develop and keep on site a quality assurance plan the NO<sub>x</sub> CEMS. [40 CFR 60.4345(e)]

**8. EPA COMMENT – Subsection 60.4350(a) through (f) of 40 CFR 60 (NSPS Subpart KKKK) data calculation protocols**

Please propose conditions in the actual permit or final Determination of Compliance (FDOC) that capture the requirements contained in paragraphs (a), (b), and (d) through (f) of subsection 60.4350. As currently proposed, the requirements contained in paragraphs 5.0 through 5.3.3, of Appendix P in 40 CFR 51 do not apply here as the project does not involve any fossil-fuel fired steam generators, nitric acid plants, nor sulfuric acid plants.

**DISTRICT RESPONSE**

The District concurs that the requirements contained in paragraphs 5.2 and 5.3.3 Appendix P in 40 CFR 51 are only applicable to nitric acid and sulfuric acid plants. This condition has been removed from the PDOC evaluation.

- a. Section 60.4350(a) states that all CEM data must be reduced to hourly averages as specified in Section 60.13. Condition 56 from the original PDOC evaluation stated that the results of the CEMS shall be averaged over a one hour period for NO<sub>x</sub> emissions using consecutive 15-minute sampling periods, in accordance with the applicable requirements of CFR 60.13. The District feels that this condition already specifies that the applicant comply with Section 60.4350(a) and no further conditions are required. Please note that a section 60.4350(a) reference has been added to this condition.
- b. Section 60.4350(b) specifies that for determining excess NO<sub>x</sub> emissions, for ppm measurements where the measured O<sub>2</sub> concentration in the exhaust stack is greater than 19.0%, a diluent cap of value of 19.0% may be used in the emission calculations. The following condition has been added to ensure continued compliance with this section.

- For the purpose of determining excess NO<sub>x</sub> emission, for each unit operating hour in which a valid hourly average is obtained, the data acquisition system and handling system must calculate and record the hourly NO<sub>x</sub> emission rate in units of ppm, using the appropriate equation from Method 19 of 40 CFR 60, Appendix A. For any hour in which the hourly O<sub>2</sub> concentration exceeds 19.0 percent O<sub>2</sub>, a diluent cap value of 19.0 percent O<sub>2</sub> may be used in the emission calculations. [40 CFR 60.4350(b) and 60.4350(f)]
- d. Section 60.4350(d) states that if you have installed and certified a NO<sub>x</sub> diluent CEMS to meet the requirements of part 75 of this chapter, states can approve that only quality assured data from the CEMS shall be used to identify excess emissions under this subpart. GWF Hanford has only proposed to install and certify the CEMS in accordance with the requirements of 40 CFR 60, Subpart KKKK. Therefore, the requirements of this section are not applicable and no further discussion is required.
- e. Section 60.4350(e) states that all required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages. As noted above, it is the District's interpretation that the continuous measurement devices listed in this section are only required for facilities electing to comply with the output based NO<sub>x</sub> emission standards (lb/MWh) of this subpart (reference section 60.4335(2), (3) and (4)). GWF Hanford is choosing to comply with the NO<sub>x</sub> ppm concentration standards of this subpart. Therefore, each of these continuous emission monitors is not required and the requirements of this section are not applicable.
- f. Section 60.4350(f) states that for the purpose of determining excess NO<sub>x</sub> emissions, the operator shall calculate the hourly average NO<sub>x</sub> emission rates, in units of the emission standards under section 60.4320, using either ppm for units complying with the concentration limits or the equations listed in sections 60.4350(f)(1) and (2) for units complying with the output based emission standards. GWF Hanford is proposing to comply with the concentration limits specified within this subpart, therefore, they must comply by calculating hourly average NO<sub>x</sub> emission rates in units of ppm. In accordance with the District response to EPA's comment on section 60.4350(b) above, the requirement to calculate and record the hourly average NO<sub>x</sub> emission rate in units of ppm has been added to the PDOC.

**9. EPA COMMENT – Requirement to Operate Continuous Emission Monitoring Equipment During all Startup, Shutdown, and Malfunction Events**

Please propose a permit condition that requires the operator to keep the Continuous Emission Monitoring running during all startup, shutdown, and malfunction events provided that the CEM data is certifiable to determine compliance with startup and shutdown emission limits. Even though it may be implicit that CEM equipment is required to operate during all startup, shutdown, and malfunction events, it should be clarified to the operator through an explicit permit condition.

**DISTRICT RESPONSE**

Condition 51 from the PDOC evaluation (revised PDOC condition 57) has been revised in accordance with your comment and now reads as follows:

- The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NO<sub>x</sub>, CO and O<sub>2</sub> concentrations. Continuous emissions monitor(s) shall monitor emissions during all types of operation, including during startup and shutdown periods, provided the CEMS passes the relative accuracy requirement for startups and shutdowns specified herein. If relative accuracy of CEMS cannot be demonstrated during startup and/or shutdown conditions, CEMS results during startup and shutdown events shall be replaced with startup and/or shutdown emission rates obtained from source testing to determine compliance with emission limits contained in this document. [District Rules 1080 and 4703 and 40 CFR 60.4335(b)(1)]

*The District is currently processing two additional projects for GWF Energy to perform similar modifications to what is being proposed at their GWF Hanford location (C-1083176 and N-1083212). EPA provided a few additional comments for those projects that were not included in their comment email for the GWF Hanford project. In order to provide for consistency in the conditions for the three projects, the additional comments will also be addressed within this project.*

**10. EPA COMMENT – Additional Subpart KKKK Requirements**

Please propose permit conditions that requires the operator to comply with the following sections:

- a. Subsection 60.4345(a). Please propose a condition that requires the RATA of the CEMS to be performed on a lb/MMBtu basis.
- b. Subsection 60.4385(a) and (c). Please consider proposing conditions that indicate the sets of circumstances that would constitute excess SO<sub>x</sub> emissions and monitor downtime.
- c. Subsection 60.4400(a). Please consider proposing conditions that reflect the applicable source test methods and elements contained in paragraphs (a)(2), (a)(3), and (b).

**DISTRICT RESPONSE**

- a. It is the Districts understanding that the RATA test is only required to be performed on a lb/MMBtu basis if the RATA test is conducted pursuant to Part 75. The following condition, from the PDOC, has been modified to include this requirement:

- The owner/operator shall perform a relative accuracy test audit (RATA) for NO<sub>x</sub>, CO and O<sub>2</sub> as specified by 40 CFR Part 60, Appendix F, 5.11, or 40 CFR Part 75 Appendix B, at least once every four calendar quarters. 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. If the RATA test is conducted as specified in 40 CFR Part 75 Appendix B, the RATA shall be conducted on a lb/MMBtu basis. [District Rule 1080 and 40 CFR 60.4345(a)]
- b. The following condition has been added to address Subsection 60.4385(a) and (c) requirements:
- Excess SO<sub>x</sub> emissions is each unit operating hour including in the period beginning on the date and hour of any sample for which the fuel sulfur content exceeds the applicable limits listed in this permit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. Monitoring downtime for SO<sub>x</sub> begins when a sample is not taken by its due date. A period of monitor downtime for SO<sub>x</sub> also begins on the date and hour of a required sample, if invalid results are obtained. A period of SO<sub>x</sub> monitoring downtime ends on the date and hour of the next valid sample. [40 CFR 60.4385(a) and (c)]
- c. The source test method condition from the PDOC for each turbine has been revised, as follows, to address this comment. In addition, the condition has been revised in accordance with GWF Hanford's comment on the specific source test methods listed in the condition (refer to GWF comment #5 in Attachment N above):
- The following test methods shall be used: NO<sub>x</sub> - EPA Method 7E, 20, or ARB Method 100 (ppmv basis), or EPA Method 19 (lb/MMBtu basis); CO - EPA Method 10, 10B or ARB Method 100; VOC - EPA Method 18 or 25; PM<sub>10</sub> - EPA Method 5 and 202 (front half and back half) or 201 and 202a; ammonia - BAAQMD ST-1B; and O<sub>2</sub> - EPA Method 3, 3A, 20, or ARB Method 100. NO<sub>x</sub> testing shall also be conducted in accordance with the requirements of 40 CFR 60.4400(a)(2), (3), and (b). EPA approved alternative test methods, as approved by the District, may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703 and 40 CFR 60.4400(1)(i) and 40 CFR 60.4400(a)(2), (3), and (b)]

#### **11. EPA COMMENT – BACT Evaluation for Startup and Shutdown Operating Scenarios**

We note that the District has included permit conditions for startup and shutdown (SU/SD) operating scenarios (e.g., mass limits, duration of startups and shutdowns, definitions of operating scenarios, etc.) for two combustion turbine generators in the PDOC. However we do not see a proper BACT analysis for operation during these periods. We are aware of several projects in California that are considering technologies and work practices that minimize duration and emissions during such operating scenarios from stationary combustion turbines in their BACT evaluations. Please provide an appropriate BACT analysis for operation during startup and shutdown periods.

Although the District imposes the condition on the project to maintain the units in good operating condition and operate in a manner to minimize emissions, we request additional information be included in the District's evaluation that supports the proposed permit conditions (such as emission limits, durations, and definitions) for SU/SD operations.

EPA requires that BACT apply not only during normal, steady-state operations but also during all transient operating periods such as SU/SD periods. Therefore, as part of the BACT evaluation, we expect applicants to consider operating approaches, operating controls, work practices, and equipment performance and design that would minimize SU/SD emissions. Please refer to the following two decisions from EPA's Environmental Appeals Board (EAB) that provide context in this matter. They are Rockgen Energy Center (PSD Appeal No. 99-1) (<http://www.epa.gov/eab/disk1/rockgen.pdf>) and Tallmadge Generating Station (PSD Appeal No. 02-12) (<http://www.epa.gov/eab/orders/tallmadge.pdf>).

### **DISTRICT RESPONSE**

The District agrees with EPA's comment and has incorporated a BACT analysis for startup and shutdown periods when operating in combined cycle mode. The analysis includes the evaluation of work practices that minimize the duration and emissions during startup and an evaluation of control technologies to reduce startup and shutdown emissions, including GE's Rapid Start technology and Siemens Fast Start technology.

## **ATTACHMENT O**

### **California Energy Commission (CEC) PDOC Comments and District Responses**

## **CEC COMMENTS / DISTRICT RESPONSES**

*CEC comments regarding the preliminary determination of compliance for Starwood Power-Midway, LLC (District facility C-4140) are provided below followed by the District's responses. A copy of CEC's April 20, 2009 comment letter is available at the District office.*

### **1. CEC COMMENT – Annual VOC Emissions Calculations**

The District has used, as proposed by the applicant, an average VOC emission concentration (0.8 ppm) that is lower than the short-term maximum BACT VOC emission concentration limit (2.0 ppm) to determine annual emissions. Currently, the District conditions do not identify how compliance with the annual VOC emission limit, based on the lower concentration value, will be demonstrated. Staff believes that a notation should be added to the annual emission limits specified within Condition 37 or the source test conditions specified within Conditions 42-44 that notes that the annual source test date will be used to show compliance with the annual VOC emission limit.

### **DISTRICT RESPONSE**

Condition 37 from the PDOC evaluation (revised PDOC condition 41) has been revised in accordance with this comment and now reads as follows:

- Annual emissions from this CTG, calculated on a twelve month rolling basis, shall not exceed any of the following limits: NO<sub>x</sub> (as NO<sub>2</sub>) – 35,998 lb/year; CO – 20,705 lb/year; VOC – 4,683 lb/year; PM<sub>10</sub> – 18,659 lb/year; or SO<sub>x</sub> (as SO<sub>2</sub>) – 2,649 lb/year. Compliance with the annual NO<sub>x</sub> and CO emission limits shall be demonstrated using CEM data and the annual VOC, PM<sub>10</sub> and SO<sub>x</sub> emission limits shall be demonstrated using the most recent source test results. [District Rule 2201]