

**CALIFORNIA ENERGY COMMISSION**1516 NINTH STREET  
SACRAMENTO, CA 95814-5512

**STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION**

<b>DOCKET</b>	
<b>01-AFC-17C</b>	
DATE	DEC 15 2010
RECD.	DEC 15 2010

**In the Matter of:**

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) **Docket No. 01-AFC-17C****INLAND EMPIRE ENERGY CENTER**

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) **Order No. 10-1215-17****INLAND EMPIRE ENERGY  
CENTER, LLC**

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) **ORDER APPROVING a Petition to Modify  
Air Quality Conditions of Certification**

On November 10, 2009, Inland Empire Energy Center, LLC, the owner/operator of Inland Empire Energy Center (IEEC), submitted a petition requesting to modify the Air Quality Conditions of Certification. The modification will allow the California Energy Commission (Energy Commission) air quality conditions of certification to be consistent with the current South Coast Air Quality Management District (SCAQMD) RECLAIM/Title V permit for the IEEC project.

The modifications were approved by the SCAQMD and a revised Permit to Operate was issued on August 25, 2009.

**STAFF RECOMMENDATION**

Energy Commission staff reviewed the petition and finds that it complies with the requirements of Title 20, Section 1769(a) of the California Code of Regulations and recommends approval of Inland Empire Energy Center, LLC's petition to modify the IEEC Project and amend related Conditions of Certification.

**ENERGY COMMISSION FINDINGS**

Based on staff's analysis, the Energy Commission concludes that the proposed changes will not result in any significant impact to public health and safety, or the environment. The Energy Commission finds that:

- The petition meets all the filing criteria of Title 20, section 1769(a) of the California Code of Regulations concerning post-certification project modifications;
- The modification will not change the findings in the Energy Commission's Final Decision pursuant to Title 20, section 1755;
- The project will remain in compliance with all applicable laws, ordinances, regulations, and standards (LORS), subject to the provisions of Public Resources Code section 25525;

- The proposed changes to conditions of certification, including changes to permitted emission levels, have been approved by the SCAQMD and do not affect the project's compliance with ambient air quality standards; and
- There has been a substantial change in circumstances justifying the change in that the SCAQMD has made changes in the RECLAIM/Title V permit since the last Energy Commission amendment was approved on April 11, 2007.

## CONCLUSION AND ORDER

The California Energy Commission hereby adopts Staff's recommendations and approves the following changes to the Commission Decision for the IEEC Project. New language is shown as **bold and underlined**, and deleted language is shown in ~~strikethrough~~.

## CONDITIONS OF CERTIFICATION

### Staff Air Quality Conditions of Certification – Operation

**AQ-SC14** The project owner shall limit emissions during startup periods. During startup periods, the project owner shall limit the combined CO emission rate for the two gas turbines to ~~490~~ **1600** lb/hr (~~95~~ **800** lb/hr for each turbine) and limit the combined NOx emission rate for the two gas turbines to 816 lb/hr (408 lb/hr for each turbine).

**Verification:** See the verification for Condition **AQ-18**.

### Gas Turbines and SCR

**AQ-18** The operator shall operate and maintain this equipment according to the following requirements:

The commissioning period shall not exceed ~~500~~ **738** hours of operation for both turbines ~~during the first 180 calendar days from the date of initial start-up.~~

Startup/shutdown time shall not exceed 4 hours per day per gas turbine, except for a cold startup and combustor-tuning activities, which shall not exceed 6 hours per day per gas turbine. A cold startup shall be defined as a startup of the gas turbine after 72 hours of non-operation. Combustor-tuning activities shall be defined as all testing, adjusting, tuning, and calibration activities recommended by the turbine manufacturer to ensure safe, reliable, and in-specification operation of the turbine. Startup/shutdown and combustor-tuning activity emissions shall not exceed 408 lbs/hr NOx and ~~95~~ **800** lbs/hr CO averaged for the duration of the startup. The startup/shutdown and combustor-tuning activity emissions shall not exceed 803 lbs/event NOx and ~~300~~ **2000** lbs/event CO.

Monthly startup/shutdown time shall not exceed 31 hours. Shutdown time does not include non-operation time.

The operator shall provide the AQMD with written notification of the initial startup date. Written records of commissioning, startups, shutdowns, and combustor-tuning activities shall be maintained and made available upon request from AQMD. (SCAQMD E193-2)

**Verification:** The project owner shall submit to the CPM the final commissioning status report as in Condition AQ-17. The project owner shall provide startup/shutdown and combustor-tuning activity occurrence, duration, and emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (AQ-SC8). The project owner shall make the site available for inspection of the commissioning, startup/shutdown, and combustor tuning activity records by representatives of the District, CARB and the Commission.

### Auxiliary Boiler and SCR

**AQ-39** The 8.49 lbs/mmscf NO<sub>x</sub> emission limit(s) shall only apply after the installation and operation of the SCR catalyst during the interim reporting period to report RECLAIM emissions. (SCAQMD A99-2) **The 100.67 lbs/mmscf NO<sub>x</sub> emission limit(s) shall only apply prior to the installation of the SCR catalyst during the interim reporting period to report RECLAIM emissions. (SCAQMD A99-4)**

**Verification:** The project owner shall submit to the CPM and APCO auxiliary boiler emissions data demonstrating compliance with this condition through the use of the required RECLAIM emission factor, as appropriate, as part of the Quarterly Operation Report (**AQ-SC8**).

**AQ-42** The 7 ppmv NO<sub>x</sub> emission limit(s) is averaged over one hour at 3 percent oxygen, dry basis. **This limit shall not apply during the initial auxiliary boiler commissioning period not to exceed 200 hours or until the SCR catalyst is installed and operational, whichever occurs first. This limit shall not apply during startup and shutdown periods. Startup shall not exceed 75 minutes per occurrence and shutdown shall not exceed 30 minutes per occurrence. There shall be no more than one startup and one shutdown per day.** (SCAQMD A195-4)

**Verification:** The project owner shall submit to the CPM and APCO auxiliary boiler CEMS emissions data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

**AQ-45** The 5 ppmv NH<sub>3</sub> emission limit(s) is averaged over 1 hour at 3 percent oxygen, dry basis. **The limit shall not apply during the auxiliary boiler D3 startup**

**process when the SCR catalyst temperature is below 480 degree F. The limit shall not apply during the auxiliary boiler D3 boiler shutdowns.** (SCAQMD A195-8)

**Verification:** See verification for Conditions **AQ-32**, **AQ-33**, and **AQ-46**.

### Two Emergency Generator Engines and One Fire Pump Engine

**AQ-48 Emergency Generator Engines:** The operator shall limit the operating time of each engine to no more than ~~50~~ **200** hours per year. **The 200 hours annual limit includes no more than 50 hours in any one year for maintenance and testing purposes.** (SCAQMD C1-1) **Emergency Fire Pump Engine: The operator shall limit the operating time to no more than 50 hours in any one year.** (SCAQMD C1-3)

**Verification:** The project owner shall submit to the CPM and APCO the emergency generator and fire pump IC engines operations data demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

**AQ-51** The emergency generator engines shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase. To comply with this condition, the operator shall prior to the first compliance year hold a minimum NOx RTCs of 1,946 lbs for each engine. This condition shall apply during the first twelve months of operation. To comply with this condition, the operator shall, prior to the beginning of all years subsequent to the first compliance year, hold a minimum NOx RTCs of ~~1,946~~ **7,784** lbs for each engine. In accordance with Rule 2005(f), unused RTCs may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the first compliance year. (SCAQMD I296-4)

**Verification:** The project owner shall submit to the CPM copies of all RECLAIM reports filed with the District demonstrating compliance with this condition as part of the Quarterly Operation Report (**AQ-SC8**).

**Attachment Air Quality 1 – AQ-SC16, Equipment Description**

***EQUIPMENT DESCRIPTION***

Section H of the facility permit: Permit to Construct and temporary Permit to Operate

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
<b>PROCESS 1: COMBUSTION AND POWER GENERATION</b>					
<b>SYSTEM 2: AUXILIARY EQUIPMENT</b>					
BOILER, AUXILIARY BOILER, NATURAL GAS, <del>NEBRASKA, MODEL NS F 76</del> <b>RENTECH, MODEL 2005-84</b> , WITH LOW NOX BURNER, 152.12 MMBtu/HR, WITH: A/N: 456170 <b>483511</b> Permit to Construct Issued: <del>6/02/06</del> <b>10/16/08</b> BURNER, NATURAL GAS, <del>TODD VARIFLAME</del> <b>JOHN ZINK</b> , MODEL VII690VGXXXX, WITH LOW NOX BURNER, 152.12 MMBTU/HR	D3	C6	NOx MAJOR SOURCE**	<b>NOx:</b> 7.0 PPMV NATURAL GAS (4) [RULE 2005 BACT, RULE1703-PSD Analysis]; <b>NOx:</b> 8.49 LBS/MMSCF NATURAL GAS (1) [RULE 2012]; <b>100.67 LBS/MMSCF NATURAL GAS (1A) [RULE 2012]</b> <b>CO:</b> 50 PPMV NATURAL GAS (4) [RULE 1303 BACT]; <b>CO:</b> 400 PPMV NATURAL GAS (5A) [RULE 1146]; <b>CO:</b> 2,000 PPMV NATURAL GAS (5) [RULE 407]; <b>VOC:</b> 10 PPMV NATURAL GAS (4) [RULE 1303 BACT] <b>PM10:</b> 7.26 LB/MMSCF NATURAL GAS (4) [RULE 1303-BACT]; <b>PM10:</b> 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409]; <b>H2S:</b> 0.25 GRAINS PER 100 SCF NATURAL GAS (4) [RULE 1303-BACT]	A63.2, A99.2, <b>A99.4</b> , A195.4, A195.5, A195.6, B61.1, C1.2, D29.4, D82.3, D82.4, E193.1, E193.3, E193.6, I296.3, K40.2

<b>Process 2: INORGANIC CHEMICAL STORAGE</b>					
<b>System 1: AMMONIA STORAGE TANKS</b>					
ROOF, #1, 28% AQUEOUS AMMONIA, <del>16,000</del> <b>16,900</b> GALS, DIAMETER: 10 FT; LENGTH: 26 FT A/N: 439497 <b>480152</b> Permit to Construct Issued: <del>08/05/05</del> <b>10/16/08</b>	D7				E144.1, C157.1, E193-1, E193.3,
STORAGE TANK, FIXED ROOF, #2, 28% AQUEOUS AMMONIA, <del>16,000</del> <b>16,900</b> GALS, DIAMETER: 10 FT; LENGTH: 26 FT A/N: 439498 <b>480153</b> Permit to Construct Issued: <del>08/05/05</del> <b>10/16/08</b>	D8				E144.1, C157.1, E193-1, E193.3,

**IT IS SO ORDERED.**

Date: \_\_\_\_\_

STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION

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KAREN DOUGLAS  
Chairman