



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

January 15, 2014

Mr. Uve Sillat
Environmental Engineer
Southern California Edison
1218 S. 5th Ave
Monrovia, CA 91016

SUBJECT: Title V Facility Permit Revision (Facility ID: 51475)

Dear Mr. Sillat:

Please find attached the revised Section H of your Title V Facility Permit. The revised section reflects the approval of the permit revision requested in your Application No. 534356. The proposed de minimis significant permit revision was submitted to EPA for a 45-day review on November 8, 2013. EPA's review period ended on December 23, 2013, and no comments were received. This permit revision includes the change of conditions to allow a sliding scale annual start ups vs annual fuel use for the turbine. The corresponding application numbers are summarized in the table below:

Equipment	Application No.	Device No.	Process	Permit Type
Gas Turbine	535915	D1	1/1	PC

Please review the attached section carefully. Insert the enclosed section into your Title V Facility Permit and discard the earlier versions. Questions concerning changes to your permit should be directed to Mr. Chris Perri at (909) 396-2696.

Sincerely,

Andrew Lee, P.E.
Senior Engineering Manager
Engineering and Compliance

AYL:CT:JTY:cgp

Attachment

cc: Gerardo Rios, EPA Region IX
Cher Snyder, SCAQMD Compliance



FACILITY PERMIT TO OPERATE

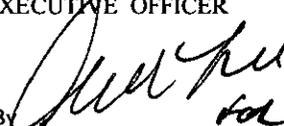
**SO CAL EDISON CO
10670 DALE AVE
STANTON, CA 90680**

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By 

Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance



**FACILITY PERMIT TO OPERATE
SO CAL EDISON CO**

TABLE OF CONTENTS

Section	Description	Revision #	Date Issued
A	Facility Information	1	06/08/2012
B	RECLAIM Annual Emission Allocation	1	06/08/2012
C	Facility Plot Plan	TO BE DEVELOPED	
D	Facility Description and Equipment Specific Conditions	2	04/04/2013
E	Administrative Conditions	1	06/08/2012
F	RECLAIM Monitoring and Source Testing Requirements	1	06/08/2012
G	Recordkeeping and Reporting Requirements for RECLAIM Sources	1	06/08/2012
H	Permit To Construct and Temporary Permit to Operate	5	01/15/2014
I	Compliance Plans & Schedules	1	06/08/2012
J	Air Toxics	1	06/08/2012
K	Title V Administration	1	06/08/2012
Appendix			
A	NOx and SOx Emitting Equipment Exempt From Written Permit Pursuant to Rule 219	1	06/08/2012
B	Rule Emission Limits	1	06/08/2012



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: POWER GENERATION					
System 1: GAS TURBINE					
GAS TURBINE, PEAKING UNIT, UNIT NO. 1, NATURAL GAS, GENERAL ELECTRIC, MODEL LM6000PC SPRINT, SIMPLE CYCLE, HEAT INPUT REFERENCED AT 88 DEGREES FAHRENHEIT, WITH WATER INJECTION, 522 MMBTU/HR WITH A/N: 535915 Permit to Construct Issued: 01/15/14	D1			CO: 6 PPMV NATURAL GAS (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]; NOX: 25 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; PM: 0.01 GRAINS/SCF (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF (5) [RULE 409, 8-7-1981]; PM: 11 LBS/HR (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.06 LBS/MMBTU (8) [40CFR 60 Subpart KKKK, 7-6-2006]; VOC: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A63.3, A63.4, A63.6, A99.1, A99.2, A195.5, A195.6, A195.7, A195.8, A327.1, C1.3, C1.6, D12.6, D29.5, D29.6, D82.1, E57.1, E193.4, K40.1, K67.5
GENERATOR, 49 MW					

* (1) (1A) (1B) Denotes RECLAIM emission factor
(3) Denotes RECLAIM concentration limit
(5) (5A) (5B) Denotes command and control emission limit
(7) Denotes NSR applicability limit
(9) See App B for Emission Limits
(2) (2A) (2B) Denotes RECLAIM emission rate
(4) Denotes BACT emission limit
(6) Denotes air toxic control rule limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: POWER GENERATION					
STACK, HEIGHT: 80 FT ; DIAMETER: 13 FT A/N: 535915 Permit to Construct Issued: 01/15/14	S5				

* (1) (1A) (1B) Denotes RECLAIM emission factor
 (2) (2A) (2B) Denotes RECLAIM emission rate
 (3) Denotes RECLAIM concentration limit
 (4) Denotes BACT emission limit
 (5) (5A) (5B) Denotes command and control emission limit
 (6) Denotes air toxic control rule limit
 (7) Denotes NSR applicability limit
 (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (9) See App B for Emission Limits
 (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



**FACILITY PERMIT TO OPERATE
SO CAL EDISON CO**

SECTION H: DEVICE ID INDEX

**The following sub-section provides an index
to the devices that make up the facility
description sorted by device ID.**



**FACILITY PERMIT TO OPERATE
SO CAL EDISON CO**

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	Section H Page No.	Process	System
D1	1	1	1
S5	2	1	1



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

FACILITY CONDITIONS

F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

F14.1 The operator shall not use diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

[RULE 431.2, 9-15-2000]

F24.1 Accidental release prevention requirements of Section 112(r)(7):

a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).

b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

[40CFR 68 - Accidental Release Prevention, 5-24-1996]

DEVICE CONDITIONS



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

A. Emission Limits

A63.3 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
NOX	Less than 7867 LBS IN ANY ONE YEAR
PM10	Less than 7030 LBS IN ANY ONE YEAR
CO	Less than 10281 LBS IN ANY ONE YEAR
SOX	Less than 414 LBS IN ANY ONE YEAR
VOC	Less than 1936 LBS IN ANY ONE YEAR



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The operator shall calculate the emission limit(s) by using fuel use data and the following emission factors for the turbine: VOC: 2.95 lbs/mmcf, PM10: 10.63 lbs/mmcf, and SOx: 0.63 lbs/mmcf.

The operator shall calculate the emission limit(s) by using hourly operation data and the following emission factors for the engine: NOx: 2.55 lbs/hr, CO: 3.24 lbs/hr, VOC: 0.92 lbs/hr, PM10: 0.25 lbs/hr, SOx: 0.0038 lbs/hr.

Compliance with the NOx and CO emission limits shall be verified through CEMS data. If CO CEMS data is not available, CO emissions shall be calculated using fuel usage and a factor of 14.12 lbs/mmcf during normal operations, 8.74 lbs/hr during any start up hour, or any hour in which there is both a start up and a shutdown, and 7.86 lbs/hr during any shutdown hour. The operator shall use the appropriate missing data procedures if NOx data is not available.

If a CEMS calibration occurs within 60 minutes of a start up, NOx emissions for the calibration period shall be calculated using the actual duration of the calibration in minutes times a factor of 0.0802 lb/min, and shall only occur when the NOx emissions average for the five minutes immediately before calibration are at or below BACT levels

For the purposes of this condition, the yearly emission limit shall be defined as a period of twelve (12) consecutive months determined on a rolling basis with a new 12 month period beginning on the first day of each calendar month. The limits apply to the total emissions from the turbine plus the engine..

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

A63.4 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
NOX	Less than 1584 LBS IN ANY ONE MONTH
PM10	Less than 1499 LBS IN ANY ONE MONTH



**FACILITY PERMIT TO OPERATE
SO CAL EDISON CO**

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

CO	Less than 2068 LBS IN ANY ONE MONTH
SOX	Less than 89 LBS IN ANY ONE MONTH
VOC	Less than 398 LBS IN ANY ONE MONTH

The operator shall calculate the annual emission limit(s) by using fuel use data and the following emission factors: VOC: 2.95 lbs/mmcf, PM10: 10.63 lbs/mmcf, and SOx: 0.63 lbs/mmcf.

Compliance with the NOx and CO emission limits shall be verified through CEMS data. If CO CEMS data is not available, CO emissions shall be calculated using fuel usage and a factor of 14.12 lbs/mmcf during normal operations, 8.74 lbs/hr during any start up hour, or any hour in which there is both a start up and a shutdown, and 7.86 lbs/hr during any shutdown hour. The operator shall use the appropriate missing data procedures if NOx data is not available.

If a CEMS calibration occurs within 60 minutes of a start up, NOx emissions for the calibration period shall be calculated using the actual duration of the calibration in minutes times a factor of 0.0802 lb/min, and shall only occur when the NOx emissions average for the five minutes immediately before calibration are at or below BACT levels

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

A63.6 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
NOX	Less than 55 LBS IN ANY ONE DAY



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The purpose of this condition is to ensure that the facility emissions are below the CEQA thresholds, and the limit is based on the total emissions from the turbine and the black start generator. The operator shall keep records on the NOx daily emissions.

The 55 lbs/day limit shall not apply when the unit undergoes CAL-ISO required black start testing, performance tuning, and WECC required generator modeling. During these periods, the daily total NOx from all operations shall not exceed 90 lbs/day.

[RULE 212, 12-7-1995; RULE 212, 11-14-1997; CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D1]

- A99.1 The 2.5 PPM NOX emission limit(s) shall not apply during, start-up, shutdown, an emergency electrical grid system blackout when the turbine is used to re-start another major electric generating station, and during CAL-ISO required testing, performance tuning, and WECC required generator modeling. Each start-up shall not exceed 15 min. Each shutdown shall not exceed 10 min. There shall be no more than 350 start-ups/yr..



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

NOx emissions for the 60 minutes beginning with a start shall not exceed 10.52 lbs, and for the 60 minutes ending with a shutdown 6.53 lbs.

In the case of a start during an emergency electrical grid system blackout, total NOx shall not exceed 28.23 lbs/hr.

In case of a turbine shutdown which occurs less than 75 minutes from a start up, for determination of compliance with the start up and shutdown limits only, the emissions calculated for the shutdown 60 minute period shall not include any of the first 15 minutes of the start up, and the emissions calculated for the start up 60 minute period shall not include any of the last 10 minutes of the shutdown.

A shutdown is defined as a reduction in turbine load ending in a period of zero fuel flow. The hour which includes a shutdown is defined as the 60 minutes counted back from the period of zero fuel flow.

A start up is defined as whenever the turbine begins combusting fuel after a period of zero fuel flow. If the turbine does not complete its full start up sequence, and is restarted, the restart is defined as a separate start up

During CAL-ISO required testing and performance tuning, NOx emissions shall not exceed 50 lbs/hr for no more than 4 hrs in any one calendar year (including the start up and shut down hours) while the turbine is being operated without ammonia injection for performance tuning.

During CAL-ISO required testing and performance tuning, NOx emissions shall not exceed 45 lbs/hr for no more than 2 hrs in any calendar year (including start up and shut down hours) while the turbine is being operated without ammonia injection for performance tuning.

During CAL-ISO required testing and performance tuning, NOx emissions shall not exceed 40 lbs/hr for no more than 4 hrs in any calendar year (including start up and shut down hours) while the turbine is operated to perform black start testing (including unsuccessful attempts).

During CAL-ISO required testing and performance tuning, NOx emissions shall



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

not exceed 6 lbs/hr for no more than 22 hrs in any calendar year (not including start up and shut down hours) while the turbine is being operated for performance tuning.

In any one calendar year, the total time of turbine operation for testing activities shall be no more than 32 hours. In any one calendar year, there shall be no more than 1 completed successful black start test. The black start testing hours (including unsuccessful attempts) shall not exceed 4 hours per calendar year.

The unit performance tuning activities shall not exceed 28 hours except during the calendar year when the turbine will be operated to perform WECC required generator modeling which will take place once every 5 calendar years for 10 hours.

During WECC required generator modeling, the NO_x emission rate shall not exceed 6 lbs/hr (not including start up and shut down hours) for 8 hours, and 45 lbs/hr (including start up and shut down hours) for 2 hours. During a calendar year in which the WECC generator modeling is performed, turbine operation time for unit performance tuning activities shall not exceed to 18 hours for the calendar year.

The operator shall maintain all records demonstrating compliance with this permit condition.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

- A99.2 The 6.0 PPM CO emission limit(s) shall not apply during, start-up, shutdown, an emergency electrical grid system blackout when the turbine is used to re-start another major electric generating station, and during CAL-ISO required testing performance tuning, and WECC required generator modeling. Each start-up shall not exceed 15 min. Each shutdown shall not exceed 10 min. There shall be no more than 350 start-ups/yr.



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

CO emissions for the 60 minutes beginning with a start shall not exceed 8.74 lbs, and for the 60 minutes which end with a shutdown 7.86 lbs

During CAL-ISO required testing and performance tuning, CO emissions shall not exceed 10 lbs/hr. In any one calendar year, there shall be no more than 32 hours of total test time (including any aborted test time)

In case of a turbine shutdown which occurs less than 75 minutes from a start up, for determination of compliance with the start up and shutdown limits only, the emissions calculated for the shutdown 60 minute period shall not include any of the first 15 minutes of the start up, and the emissions calculated for the start up 60 minute period shall not include any of the last 10 minutes of the shutdown.

A shutdown is defined as a reduction in turbine load ending in a period of zero fuel flow. The hour which includes a shutdown is defined as the 60 minutes counted back from the period of zero fuel flow.

A start up is defined as whenever the turbine begins combusting fuel after a period of zero fuel flow. If the turbine does not complete its full start up sequence, and is restarted, the restart is defined as a separate start up if 1) it is more than 15 minutes from the initial start, or 2) the NOx or CO emissions for the 60 minutes beginning with the initial start exceed the limit in this condition.

A start up is defined as whenever the turbine begins combusting fuel after a period of zero fuel flow. If the turbine does not complete its full start up sequence, and is restarted, the restart is defined as a separate start up.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

A195.5 The 2.5 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent O₂, dry.



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

A195.6 The 6.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent O₂, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

A195.7 The 2.0 PPMV VOC emission limit(s) is averaged over 60 minutes at 15 percent O₂, dry.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

A195.8 The 5.0 PPMV NH₃ emission limit(s) is averaged over 60 minutes at 15 percent O₂, dry.



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The operator shall calculate and continuously record the ammonia slip concentration using the following:

$$\text{NH}_3 \text{ (ppmv)} = [a-b*c/1E+06]*1E+06/b.$$

1. a = NH₃ injection rate (lbs/hr)/17(lb/lb-mol)
2. b = dry exhaust gas flow rate (scf/hr)/385.3 scf/lb-mol)
3. c = change in measured NO_x across the SCR (ppmvd at 15% O₂)

The operator shall install and maintain a NO_x analyzer to measure the SCR inlet NO_x ppmv accurate to plus or minus 5 percent calibrated at least once every twelve months. The NO_x analyzer shall be installed and operated within 90 days of initial start-up..

The operator shall use the above described method or another alternative method approved by the Executive Officer..

The ammonia slip calculation procedures described above shall not be used for compliance determination or emission information without corroborative data using an approved reference method for the determination of ammonia..

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

- A327.1 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

[RULE 475, 10-8-1976; RULE 475, 8-7-1978]

[Devices subject to this condition : D1]



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

C. Throughput or Operating Parameter Limits

C1.3 The operator shall limit the fuel usage to no more than 465 MM cubic feet per year.



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The operator may increase the annual fuel use, if the turbine Start Ups are 325 or less, in accordance with the following:

If the Start Ups over the previous 12 months are equal to or less than 325, but more than 300, then the fuel use limit for that 12 month period shall not exceed 485 mmscf.

If the Start Ups over the previous 12 months are equal to or less than 300, but more than 275, then the fuel use limit for that 12 month period shall not exceed 500 mmscf.

If the Start Ups over the previous 12 months are equal to or less than 275, but more than 250, then the fuel use limit for that 12 month period shall not exceed 520 mmscf.

If the Start Ups over the previous 12 month period are equal to or less than 250, but more than 225, then the fuel use limit for that 12 month period shall not exceed 540 mmscf.

If the Start Ups over the previous 12 month period are equal to or less than 225, but more than 200, then the fuel use limit for that 12 month period shall not exceed 560 mmscf.

If the Start Ups over the previous 12 month period are equal to or less than 200, but more than 175, then the fuel use limit for that 12 month period shall not exceed 580 mmscf.

If the Start Ups over the previous 12 month period are equal to or less than 175, but more than 150, then the fuel use limit for that 12 month period shall not exceed 600 mmscf.

If the Start Ups over the previous 12 month period are equal to or less than 150, but more than 125, then the fuel use limit for that 12 month period shall not exceed 620 mmscf.

If the Start Ups over the previous 12 month period are equal to or less than 125,



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

but more than 100, then the fuel use limit for that 12 month period shall not exceed 640 mmscf.

If the Start Ups over the previous 12 month period are equal to or less than 100, then the fuel use limit for that 12 month period shall not exceed 660 mmscf.

The number of start ups and the fuel use shall be determined on a twelve (12) consecutive month rolling basis, with a new 12 month period beginning on the first day of each calendar month..

The data acquisition system shall record the number of start ups per month..

Exceeding the fuel use and start up limits for any 12 month period, as defined in this condition, shall require the operator to supply emission offsets and submit an application(s) to enter this facility into RECLAIM..

The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition and the records shall be made available upon AQMD request.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

C1.6 The operator shall limit the fuel usage to no more than 4.70 MM cubic feet per day.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

D. Monitoring/Testing Requirements

D12.6 The operator shall install and maintain a(n) flow meter to accurately indicate the fuel usage being supplied to the turbine.



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every twelve months.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

D29.5 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	District method 207.1 and 5.3 or EPA method 17	1 hour	Outlet of the SCR serving this equipment

The test shall be conducted and the results submitted to the District within 45 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration limit

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D1]



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

D29.6 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
SOX emissions	Approved District method	District-approved averaging time	Fuel Sample
VOC emissions	Approved District method	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	Approved District method	District-approved averaging time	Outlet of the SCR serving this equipment



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

The test shall be conducted at least once every three years.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine generating output in MW.

The test shall be conducted in accordance with AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the AQMD before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the test lab, a statement from the test lab certifying that it meets the criteria of R304, and a description of all sampling and analytical procedures

The test shall be conducted when this equipment is operating at 100 percent load.

The test shall be conducted for compliance verification of the BACT VOC 2.0 ppmv limit.

For natural gas fired turbines only, an alternative to AQMD Method 25.3 for the purpose of demonstrating compliance with VOC BACT as determined by CARB and AQMD, may be the following: a) Triplicate stack gas samples are extracted directly into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of the Summa canisters is done with zero gas analyzed/certified to containing less than 0.05 ppmv total hydrocarbons as carbon,

and c) Analysis of Summa canisters is per unmodified EPA Method TO-12 (with preconcentration) or the canister analysis portion of AQMD Method 25.3 with a minimum detection limit of 0.3 ppmvC or less and reported to two significant figures, and (d) The temperature of the Summa canisters when extracting samples for analysis is not to be below 70 degrees Fahrenheit.

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than unmodified AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD Method 25.3 without prior approval,



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

except for the determination of compliance with the BACT level of 2.0 ppmv
VOC calculated as carbon set by CARB for natural gas fired turbines.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE
1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D1]

D82.1 The operator shall install and maintain a CEMS to measure the following parameters:



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

NOx and CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis. The CEMS shall be installed and operating no later than 90 days after initial startup of the turbine, in accordance with an approved AQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from AQMD.

The CEMS will convert the actual NOx and CO concentrations to mass emission rates (lbs/hr) and record the hourly emission rates on a continuous basis.

The CEMS shall be installed and operated to measure the NOx and CO concentration over a 15 minute, or more frequent, averaging time period.

The CEMS shall convert the actual CO concentrations to mass emission rates (lbs/hr) using the equation below and record the hourly emission rates on a continuous basis.

CO Emission Rate, lbs/hr = $K * C_{co} * F_d [20.9 / (20.9\% - \%O_2 d)] [(Q_g * HHV) / 10E6]$,
where

1. $K = 7.267 * 10^{-8}$ (lbs/scf)/ppm
2. C_{co} = CO concentrations, ppm
3. F_d = 8710 dscf/MMBTU natural gas
4. $\%O_2, d$ = Hourly average % by volume O2 dry, corresponding to C_{co}
5. Q_g = Fuel gas usage during the hour, scf/hr
6. HHV = Gross high heating value of the fuel gas, BTU/scf

When the measured O2 concentration is > 19 percent, a default of 19 percent O2 shall be used in the calculation of NOx and CO mass emissions.



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002**]

[Devices subject to this condition : D1]

E. Equipment Operation/Construction Requirements

E57.1 The operator shall vent this equipment to the SCR and oxidation catalyst whenever the turbine is in operation.

Ammonia injection shall commence once the exhaust temperature into the SCR catalyst has reached 540 degrees F.

[**RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002**]

[Devices subject to this condition : D1]

E193.4 The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

in accordance with all mitigation measures stipulated in the Negative Declaration prepared for this project (CEQA State Clearinghouse No. 2006121109).

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D1]

K. Record Keeping/Reporting

K40.1 The operator shall provide to the District a source test report in accordance with the following specifications:



FACILITY PERMIT TO OPERATE SO CAL EDISON CO

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lb/hr), and lb/MMCF. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains/DSCF.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute. All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]

K67.5 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Date and time of each start-up and shutdown

CEMS minute data during the 60 minute periods which include a start up or a shutdown

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1]