



# South Coast Air Quality Management District



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

September 25, 2014

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

**SUBJECT:** Title V Facility Permit Revision (Facility ID: 160437)

Dear Mr. Sillat:

Please find attached the revised Sections A and D of your Title V Facility Permit. The revised sections reflects the approval of the permit revision requested in your Application No. 562527. The proposed minor permit revision was submitted to EPA for a 45-day review on August 1, 2014. EPA's review period ended on September 15, 2014, and no comments were received.

This permit revision includes revising the time between calibration of the SCR thermocouples and ammonia flow meters from 12 months to 13 months and updating the Responsible Official. The corresponding application numbers are shown in the table below:

Equipment	Application No.	Device No.	Process	Permit Type
SCR 3-1	562528	C24	1	PO
SCR 3-2	562529	C33	1	PO
SCR 4-1	562530	C42	1	PO
SCR 4-2	562531	C51	1	PO

Please review the attached sections carefully. Insert the enclosed sections 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:CDT:JTY:cgp

Attachment

cc: Gerardo Rios, EPA Region IX  
Ed Pupka, SCAQMD Compliance



## FACILITY PERMIT TO OPERATE

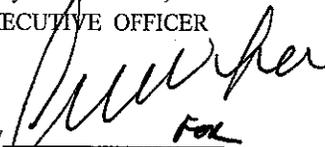
**SOUTHERN CALIFORNIA EDISON  
2492 W SAN BERNARDINO AVE  
REDLANDS, CA 92374**

### 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 SOUTHERN CALIFORNIA EDISON

### TABLE OF CONTENTS

Section	Description	Revision #	Date Issued
A	Facility Information	1	09/24/2014
B	RECLAIM Annual Emission Allocation	3	01/01/2014
C	Facility Plot Plan	TO BE DEVELOPED	
D	Facility Description and Equipment Specific Conditions	4	09/24/2014
E	Administrative Conditions	0	10/13/2011
F	RECLAIM Monitoring and Source Testing Requirements	0	10/13/2011
G	Recordkeeping and Reporting Requirements for RECLAIM Sources	0	10/13/2011
H	Permit To Construct and Temporary Permit to Operate	0	10/13/2011
I	Compliance Plans & Schedules	0	10/13/2011
J	Air Toxics	0	10/13/2011
K	Title V Administration	0	10/13/2011
Appendix			
A	NOx and SOx Emitting Equipment Exempt From Written Permit Pursuant to Rule 219	0	10/13/2011
B	Rule Emission Limits	0	10/13/2011



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION A: FACILITY INFORMATION

**LEGAL OWNER &/OR OPERATOR:** SOUTHERN CALIFORNIA EDISON

**LEGAL OPERATOR (if different than owner):**

**EQUIPMENT LOCATION:** 2492 W SAN BERNARDINO AVE  
REDLANDS, CA 92374-5016

**MAILING ADDRESS:** 2492 W SAN BERNARDINO AVE  
REDLANDS, CA 92374

**RESPONSIBLE OFFICIAL:** HENRY MARTINEZ

**TITLE:** VP POWER PRODUCTION

**TELEPHONE NUMBER:** (626) 302-0500

**CONTACT PERSON:** IAN CUTHBERTSON

**TITLE:** PLANT MANAGER

**TELEPHONE NUMBER:** (909) 478-1713

**INITIAL TITLE V PERMIT ISSUED:** April 09, 2010

**TITLE V PERMIT EXPIRATION DATE:** April 08, 2015

<b>TITLE V</b>	<b>RECLAIM</b>
----------------	----------------

<b>YES</b>	<b>NOx:</b>	<b>YES</b>
	<b>SOx:</b>	<b>NO</b>
	<b>CYCLE:</b>	<b>1</b>
	<b>ZONE:</b>	<b>INLAND</b>



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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:	INTERNAL COMBUSTION				
System 1:	POWER GENERATION				

\* (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 SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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
<b>Process 1: INTERNAL COMBUSTION</b>					
STEAM TURBINE, STEAM, COMMON WITH GAS TURBINE 3-2, 209.2 MW (MAXIMUM GROSS OUTPUT)					
BURNER, DUCT, NATURAL GAS, 135 MMBTU/HR A/N: 500208	D21		NOX: MAJOR SOURCE**		
OXIDIZER, CARBON MONOXIDE, NO. 3-1, WITH 240 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 562528	C23	D18			
SELECTIVE CATALYTIC REDUCTION, NO. 3-1, WITH 2750 CUBIC FEET OF TOTAL CATALYST VOLUME, WIDTH: 25 FT 6 IN; HEIGHT: 72 FT ; LENGTH: 1 FT 6 IN WITH A/N: 562528  AMMONIA INJECTION, INJECTION GRID	C24	D18		NH3: 5 PPMV (4) [RULE 1303(a) (1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.4, D12.3, D12.4, D12.5, D29.3, E179.1, E179.2
STACK, NO. 3-1 A/N: 500208	S26	D18			

<p>* (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</p>	<p>(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</p>
---	---

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





## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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
<b>Process 1: INTERNAL COMBUSTION</b>					
BURNER, DUCT, NATURAL GAS, 135 MMBTU/HR A/N: 500211	D30		NOX: MAJOR SOURCE**		
OXIDIZER, CARBON MONOXIDE, NO. 3-2, WITH 240 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 562529	C32	D27			
SELECTIVE CATALYTIC REDUCTION, NO. 3-2, WITH 2750 CUBIC FEET OF TOTAL CATALYST VOLUME, WIDTH: 25 FT 6 IN; HEIGHT: 72 FT ; LENGTH: 1 FT 6 IN WITH A/N: 562529  AMMONIA INJECTION, INJECTION GRID	C33	D27		NH3: 5 PPMV (4) [RULE 1303(a) (1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.4, D12.3, D12.4, D12.5, D29.3, E179.1, E179.2
STACK, NO. 3-2 A/N: 500211	S35	D27			

* (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  
SOUTHERN CALIFORNIA EDISON**

**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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
<b>Process 1: INTERNAL COMBUSTION</b>					
BURNER, DUCT, NATURAL GAS, 135 MMBTU/HR A/N: 500212	D39		NOX: MAJOR SOURCE**		
OXIDIZER, CARBON MONOXIDE, NO. 4-1, WITH 240 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 562530	C41	D36			
SELECTIVE CATALYTIC REDUCTION, NO. 4-1, WITH 2750 CUBIC FEET OF TOTAL CATALYST VOLUME, WIDTH: 25 FT 6 IN; HEIGHT: 72 FT ; LENGTH: 1 FT 6 IN WITH A/N: 562530  AMMONIA INJECTION, INJECTION GRID	C42	D36		NH3: 5 PPMV (4) [RULE 1303(a) (1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996]	A195.4, D12.3, D12.4, D12.5, D29.3, E179.1, E179.2
STACK, NO. 4-1 A/N: 500212	S44	D36			

\* (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 SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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
<b>Process 1: INTERNAL COMBUSTION</b>					
BURNER, DUCT, NATURAL GAS, 135 MMBTU/HR A/N: 500213	D48		NOX: MAJOR SOURCE**		
OXIDIZER, CARBON MONOXIDE, NO. 4-2, WITH 240 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 562531	C50	D45			
SELECTIVE CATALYTIC REDUCTION, NO. 4-2, WITH 2750 CUBIC FEET OF TOTAL CATALYST VOLUME, WIDTH: 25 FT 6 IN; HEIGHT: 72 FT ; LENGTH: 1 FT 6 IN WITH A/N: 562531  AMMONIA INJECTION, INJECTION GRID	C51	D45		NH3: 5 PPMV (4) [RULE 1303(a) (1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.4, D12.3, D12.4, D12.5, D29.3, E179.1, E179.2
STACK, NO. 4-2 A/N: 500213	S53	D45			
<b>System 2: DIESEL ENGINES</b>					

\* (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 SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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
<b>Process 1: INTERNAL COMBUSTION</b>					
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, LEAN BURN, DIESEL FUEL, CLARKE, MODEL JW6H-UF60, FUEL INJECTION TIMING RETARD, WITH AFTERCOOLER, TURBOCHARGER, 375 BHP A/N: 500220	D58		NOX: PROCESS UNIT**	CO: 8.5 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 6.9 GRAM/BHP-HR DIESEL (4) [RULE 2005, 4-20-2001; RULE 2005, 5-6-2005]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 5-11-2001; RULE 2012, 12-5-2003]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.38 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]; VOC: 1 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]	B61.1, C1.1, C177.2, I298.5, K67.3

\* (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 SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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
<b>Process 1: INTERNAL COMBUSTION</b>					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, LEAN BURN, DIESEL FUEL, CATERPILLAR, MODEL 3512B, AUTOMATIC FUEL INJECTION TIMING RETARD, WITH AFTERCOOLER, TURBOCHARGER, 2155 BHP WITH A/N: 500222  FILTER, DIESEL PARTICULATES, WAMECO PASSIVE FILTER, MODEL FC3J24VPE, 14 CARTRIGES, 250 FT <sup>2</sup> ., CLEANAIR SYSTEMS "PERMIT", WITH SIX 15" X 15" PARALLEL OXIDIZING FILTER ELEMENTS, HEIGHT: 60 FT ; DIAMETER: 12 FT	D61		NOX: PROCESS UNIT**	CO: 0.072 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; NOX: 6.53 GRAM/BHP-HR DIESEL (4) [RULE 2005, 4-9-1999]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 12-5-2003]; PM: (9) ; PM10: 0.024 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]; VOC: 0.026 GRAM/BHP-HR DIESEL (4) [RULE 1303(a)(1)-BACT, 5-10-1996]	B61.1, C1.2, E193.2, I298.6, K67.5
<b>Process 2: STORAGE TANKS</b>					
STORAGE TANK, TK-3, 19%W AQUEOUS AMMONIA, SERVING SCR 3-1, 3-2, 4-1, AND 4-2 WITH A VAPOR RETURN LINE, 36000 GALS; DIAMETER: 15 FT ; LENGTH: 27 FT A/N: 500221	D60				C157.1, E144.1
<b>Process 3: R219 EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULE</b>					

\* (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 SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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
<b>Process 3: R219-EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULE</b>					
RULE 219 EXEMPT EQUIPMENT, ABRASIVE BLASTING EQUIPMENT, GLOVE-BOX, <= 53 FT3, WITH DUST FILTER	E14			PM: (9) [RULE 1140, 8-2-1985; RULE 404, 2-7-1986; RULE 405, 2-7-1986]	D322.1, D381.1, K67.1
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E16			ROG: (9) [RULE 1113, 11-8-1996; RULE 1113, 7-9-2004; RULE 1171, 11-7-2003; RULE 1171, 5-6-2005]	K67.2
<b>Process 6: DRY STORAGE</b>					
STORAGE SILO, SODA ASH, 5000 FT3, WITH PASSIVE FILTER, 14 CARTRIGES, 250 FT2 FILTER AREA, HEIGHT: 60 FT ; DIAMETER: 12 FT A/N: 523195	D63				E193.5
TANK, SODA ASH MIXING, FULLY ENCLOSED, 600 GALS; DIAMETER: 5 FT ; HEIGHT: 5 FT A/N: 523197	D64				E193.5
UNLOADING STATION, WITH 1 PNEUMATIC HOSE A/N: 523195	D65				E193.5

\* (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  
SOUTHERN CALIFORNIA EDISON**

---

**SECTION D: 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  
SOUTHERN CALIFORNIA EDISON**

**SECTION D: DEVICE ID INDEX**

Device Index For Section D			
Device ID	Section D Page No.	Process	System
E14	12	3	0
E16	12	3	0
D18	3	1	1
D21	3	1	1
C23	3	1	1
C24	3	1	1
S26	3	1	1
D27	4	1	1
D30	5	1	1
C32	5	1	1
C33	5	1	1
S35	5	1	1
D36	6	1	1
D39	7	1	1
C41	7	1	1
C42	7	1	1
S44	7	1	1
D45	8	1	1
D48	9	1	1
C50	9	1	1
C51	9	1	1
S53	9	1	1
D58	10	1	2
D60	11	2	0
D61	11	1	2
D63	12	6	0
D64	12	6	0
D65	12	6	0



**FACILITY PERMIT TO OPERATE  
SOUTHERN CALIFORNIA EDISON**

**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

**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.

F14.1 The operator shall not use diesel fuel containing sulfur compounds in excess of 0.05 percent by weight.

F14.2 The operator shall not purchase diesel fuel containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

**DEVICE CONDITIONS**

**A. Emission Limits**

A63.2 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 8610 LBS IN ANY ONE MONTH
VOC	Less than or equal to 3569 LBS IN ANY ONE MONTH



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

PM10	Less than or equal to 7725 LBS IN ANY ONE MONTH
SOX	Less than or equal to 1005 LBS IN ANY ONE MONTH

The operator shall calculate the monthly emissions for VOC, PM10 and SOx using the equation below and the following emission factors: VOC - 2.51 lbs/mmscf; PM10 - 5.57 lbs/mmscf; and SOx - 0.71 lbs/mmscf.

$$\text{Monthly Emissions, lbs/mon} = X (\text{E.F.})$$

where X = monthly fuel usage, mmscf/mon and E.F = emission factor indicated above.

Compliance with the CO emission limit shall be verified through valid CEMS data.

The operator shall calculate the emission limit(s) for the purpose of determining compliance with the monthly CO limit in the absence of valid CEMS data by using the above equation and the following emission factor(s):

(C) After CO CEMS certification testing - 13.10 lbs CO/mmscf. After CO CEMS certification test is approved by the AQMD, the emissions monitored by the CEMS and calculated in accordance with Condition 82.1 shall be used to calculate emissions.

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

[Devices subject to this condition : D18, D27, D36, D45]

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

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 694 LBS IN ANY ONE DAY



**FACILITY PERMIT TO OPERATE  
SOUTHERN CALIFORNIA EDISON**

**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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

The operator shall calculate the emission limit(s) from valid CEMS data. In the absence of valid CEMS data, the daily CO emissions shall be calculated by using daily fuel use data and the following emission factor: 13.10 lbs/mmcf.

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

[Devices subject to this condition : D18, D27, D36, D45]

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

CONTAMINANT	EMISSIONS LIMIT
NOX	Less than 3419 LBS IN ANY ONE DAY

The limit shall be based on the emissions of all 4 turbines combined

[40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : D18, D27, D36, D45]

A99.2 The 2.0 PPM NOX emission limit(s) shall not apply during a startup. Startup time shall not exceed 4 hours per day, except for a cold startup or combustor tuning activities, which shall not exceed 6 hours per day. A shutdown event shall not exceed 30 minutes.



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

A cold start up shall be defined as a start up of the gas turbine after the steam turbine has been shut down for a period of 72 hours or more

A gas turbine shutdown event shall be defined as the period beginning with the inability to comply with the 2.0 ppmv limit after initiation of the combustion turbine shutdown sequence and ending either with 1) the cessation of firing of the combustion turbine, or 2) when the unit ramps back up after an aborted shutdown, to the attainment of minimum load

Total start up and shutdown time for all four gas turbines shall not exceed 3008 hours per year

[RULE 2005, 4-20-2001; RULE 2005, 5-6-2005; 40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : D18, D27, D36, D45]

A99.3 The 6.0 PPM CO emission limit(s) shall not apply during a startup. Startup time shall not exceed 4 hours per day, except for a cold startup or combustor tuning activities, which shall not exceed 6 hours per day. A shutdown event shall not exceed 30 minutes.

A cold startup shall be defined as a start up of the gas turbine after the steam turbine has been shutdown for a period of 72 hours or more

A gas turbine shutdown event shall be defined as the period beginning with the inability to comply with the 2.0 ppmv NOx limit after initiation of the combustion turbine shutdown sequence and ending either with 1) the cessation of firing of the combustion turbine, or 2) when the unit ramps back up after an aborted shutdown, to the attainment of minimum load

Total start up and shutdown time for all four gas turbines shall not exceed 3008 hours per year

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; 40CFR 52.21 - PSD, 6-19-1978]



---

## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

---

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D18, D27, D36, D45]

- A195.1 The 2.0 PPM NOX emission limit(s) is averaged over 60 minutes at 15 percent oxygen, dry. The limit shall not apply to the first fifteen 1-hour average NOx emissions above 2.0 ppmv, dry basis at 15% O<sub>2</sub>, in any rolling 12-month period for each combustion gas turbine provided that it meets all of the following requirements in subsections A, B, C, and D below.



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

A. This equipment operates under any one of the following qualified conditions listed under a, b, c, or d.

a) Rapid combustion turbine load changes due to the following conditions: 1) Load changes initiated by the California ISO or a successor entity when the plant is operating under Automatic Generation Control; or 2) Activation of a plant automatic safety or equipment protection system which rapidly decreases turbine load.

b) The first two 1-hour reporting periods following the initiation/shutdown of an evaporative cooler, c) The first two 1-hour reporting periods following the initiation/shutdown of HRSG duct burners, d) events as the result of technological limitation identified by the operator and approved in writing by the EPA and AQMD EO or his designees.

B. The 1-hour average NO<sub>x</sub> emissions above 2.0 ppmv, dry basis at 15 percent O<sub>2</sub>, did not occur as a result of operator neglect, improper operation or maintenance, or qualified breakdown under Rule 2004(i).

C. The qualified operating conditions described in (A) above are recorded in the plant's operating log within 24 hours of the event, and in the CEMS by 5 p.m. the next business day following the qualified operating condition. The notations in the log and CEMS must describe the data and time of entry into the log/CEMS and the plant operating conditions responsible for NO<sub>x</sub> emissions exceeding the 2.0 ppmv 1-hour average limit.

D. The 1-hour average NO<sub>x</sub> concentration for periods that result from a qualified operating condition does not exceed 25 ppmv, dry basis at 15 percent O<sub>2</sub>.

All NO<sub>x</sub> emissions during these events shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit.

[RULE 2005, 4-20-2001; RULE 2005, 5-6-2005; 40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : D18, D27, D36, D45]



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

A195.2 The 6.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent oxygen, dry.

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

[Devices subject to this condition : D18, D27, D36, D45]

A195.4 The 5.0 PPM NH<sub>3</sub> emission limit(s) is averaged over 60 minutes at 15 percent O<sub>2</sub>, dry. The operator shall calculate and continuously record the NH<sub>3</sub> slip concentration using the following:  $NH_3(\text{ppmv}) = [a - b * (c * 1.2) / 1E6] * 1E6 / b$ , where a = NH<sub>3</sub> injection rate (lb/hr)/17(lb/lbmol), b = dry exhaust flow rate (scf/hr)/(385.5 scf/lbmol), c = change in measured NO<sub>x</sub> across the SCR, ppmvd at 15 percent O<sub>2</sub>. The operator shall install a NO<sub>x</sub> analyzer to measure the SCR inlet NO<sub>x</sub> ppm accurate to within +/- 5 percent calibrated at least once every 12 months.

The operator shall use the method described above 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 determination 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]

[Devices subject to this condition : C24, C33, C42, C51]

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]



**FACILITY PERMIT TO OPERATE  
SOUTHERN CALIFORNIA EDISON**

**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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

[Devices subject to this condition : D18, D27, D36, D45]

A433.1 The operator shall comply with the 2.0 ppmvd NOx BACT emission concentration limit at all times, except as specified in Condition A195.1 and under the following conditions:

Emission Limit	Averaging Time	Operation Requirements
600 lbs/startup	6 Hour	The 600 lbs/startup emission limit shall apply to a single turbine during a cold startup which shall not exceed 6 hours per day.
400 lbs/startup	4 Hour	The 400 lbs/startup emission limit shall apply to a single turbine during a startup other than a cold startup. Startup time shall not exceed 4 hours/day.
320 lbs/hr	1 Hour	The 320 lbs/hr limit shall only apply when a turbine is in any startup mode. The limit shall be based on the total emissions from the 4 turbines (D18, D27, D36, D45) and the duct burners (D21, D30, D39, and D48)

For purposes of this entire condition, a cold startup shall be defined as a start up of a gas turbine after the steam turbine has been shutdown for a period of 72 hours or more

[RULE 2005, 4-20-2001; RULE 2005, 5-6-2005; 40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : D18, D27, D36, D45]



**FACILITY PERMIT TO OPERATE  
SOUTHERN CALIFORNIA EDISON**

**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

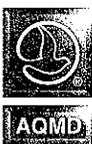
**The operator shall comply with the terms and conditions set forth below:**

A433.2 The operator shall comply with the 2.0 ppmvd NOx BACT emission concentration limit at all times, except as specified in Condition A195.1 and under the following conditions:

Emission Limit	Averaging Time	Operation Requirements
80 lbs/hr	1 Hour	The 80 lbs/hr emission limit shall apply to combustor tuning. Combustor tuning activity shall not exceed 6 hrs/day. The operator shall notify the AQMD via email at <a href="mailto:REFINERYENERGY@AQMD.GOV">REFINERYENERGY@AQMD.GOV</a> within 2 weeks of combustor tuning activity.
160 lbs/hr	3 Hour	The 160 lbs/hr emission limit shall apply to a single turbine during startups. Startup time shall not exceed 4 hours/day, except for a cold startup which shall not exceed 6 hours per day.
70 lbs/shutdown	30 minutes	The 70 lbs/shutdown emission limit shall apply to a single gas turbine during a shutdown event which shall not exceed 30 minutes per event

For purposes of this entire condition, a cold startup shall be defined as a start up of a gas turbine after the steam turbine has been shutdown for a period of 72 hours or more

[RULE 2005, 4-20-2001; RULE 2005, 5-6-2005; 40CFR 52.21 - PSD, 6-19-1978]



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D18, D27, D36, D45]

#### B. Material/Fuel Type Limits

B61.1 The operator shall only use Diesel fuel containing the following specified compounds:

Compound	Limit	ppm by weight
Sulfur	less than or equal to	15

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1470, 3-4-2005]

[Devices subject to this condition : D58, D61]

#### C. Throughput or Operating Parameter Limits

C1.1 The operator shall limit the operating time to no more than 199 hour(s) in any one year.

To comply with this condition, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

The 199 hours per year shall include no more than 34 hours in any one year for maintenance and testing purposes..

[RULE 1110.2, 11-14-1997; RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996; RULE 1401, 5-3-2002; RULE 1470, 6-1-2007; RULE 2012, 5-11-2001; RULE 2012, 12-5-2003; 40CFR 52.21 - PSD, 6-19-1978]



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D58]

C1.2 The operator shall limit the operating time to no more than 200 hour(s) in any one year.

To comply with this condition, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

The total operating time allowed under this condition includes no more than 50 hours in any one year for maintenance and testing.

Operation of the engine beyond the 50 hr/yr allotted for engine maintenance and testing shall be allowed only in the event of a loss of grid power, emergency operation as defined in R 1470, or up to 30 min prior to a rotating outage, if the grid operator or utility has ordered rotating outages in the control area where the engine is located or has indicated that it expects to issue such an order at a certain time, and the engine is located in a utility service block that is subject to the rotating outage.

Engine operation shall be terminated immediately after the utility distribution company advises that a rotating outage is no longer imminent or in effect.

[RULE 1110.2, 11-14-1997; **RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996**; RULE 1401, 5-3-2002; RULE 1470, 6-1-2007; **RULE 2012, 12-5-2003**; **RULE 2012, 1-7-2005**]

[Devices subject to this condition : D61]

C157.1 The operator shall install and maintain a pressure relief valve with a minimum pressure set at 25 psig.

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



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D60]

C177.2 The operator shall set and maintain the fuel injection timing of the engine at 9.7 degrees retarded relative to standard timing.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 4-20-2001; RULE 2005, 5-6-2005; 40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : D58]

#### D. Monitoring/Testing Requirements

D12.3 The operator shall install and maintain a(n) continuous monitoring system to accurately indicate the ammonia injection rate of the ammonia injection system.

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 13 months.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; 40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : C24, C33, C42, C51]

D12.4 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the SCR catalyst.

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 13 months.



**FACILITY PERMIT TO OPERATE  
SOUTHERN CALIFORNIA EDISON**

**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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

**[RULE 2005, 4-20-2001; RULE 2005, 5-6-2005; 40CFR 52.21 - PSD, 6-19-1978]**

[Devices subject to this condition : C24, C33, C42, C51]

D12.5 The operator shall install and maintain a(n) pressure gauge to accurately indicate the pressure across the SCR catalyst bed in inches water column.

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 12 months.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; 40CFR 52.21 - PSD, 6-19-1978]**

[Devices subject to this condition : C24, C33, C42, C51]

D29.2 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	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 SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

The test(s) shall be conducted at least once every three years. In the case where 3 consecutive annual PM tests (required under condition D372.1) show compliance, the once every 3 year frequency of this condition shall take precedence over the once every 5 year time frame specified in condition D372.1.

The test shall be conducted and the results submitted to the District within 60 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 in accordance with a District approved source test protocol. The protocol shall be submitted to the District permitting engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences. The protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the lab certifying that it meets the criteria of R304, and a description of all sampling and analytical procedures.

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

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 (MW).

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

For natural gas fired turbines only, VOC compliance shall be demonstrated as follows: a) Stack gas samples are extracted into Summa canisters, maintaining a final canister pressure between 400 - 500 mm Hg absolute, b) Pressurization of canisters are done with zero gas analyzed/certified to contain less than 0.05 ppmv total hydrocarbon as carbon, and c) Analysis of canisters are per EPA Method TO-12 (with pre-concentration) and temperature of canisters when extracting samples for analysis is not below 70 degF



**FACILITY PERMIT TO OPERATE  
SOUTHERN CALIFORNIA EDISON**

**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than AQMD Method 25.3, nor does it mean that it may be used in lieu of AQMD method 25.3 without prior approval, except for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines.

Because the VOC BACT level was set using data derived from various source test methods, this alternate VOC compliance method provides a fair comparison and represents the best sampling and analysis technique for this purpose at this time. The test results shall be reported with two significant digits.

The test shall be conducted when this equipment is operating at loads of 100, 75, and 50 percent of maximum load.

**[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 : D18, D27, D36, D45]

D29.3 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	1 hour	Outlet of the SCR serving this equipment



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

The test shall be conducted once each calendar quarter during the first 12 months of operation and at least annually thereafter. The NO<sub>x</sub> 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 NO<sub>x</sub> 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.

The test shall be conducted when the equipment is operating at 80 percent load or greater.

The test shall be conducted and the results submitted to the AQMD permitting engineer within 45 days after the test date.

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

[Devices subject to this condition : C24, C33, C42, C51]

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



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operated to measure CO concentrations over a 15 minute averaging time period

The CEMS would 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 =  $K C_{co} F_d [20.9/(20.9\% - \%O_2 d )]$   $[(Q_g \times HHV)/1.0E+06]$ , where:

1.  $K = 7.267E-08$  (lb/scf)/ppm
2.  $C_{co}$  = Average of four consecutive 15-min. ave. CO concentration, ppm
3.  $F_d$  = 8710 dscf/mmBTU natural gas
4.  $\%O_2 d$  = Hourly ave. % by vol. O<sub>2</sub> dry, corresponding to  $C_{co}$ .
5.  $Q_g$  = Fuel gas usage during the hour, scf/hr
6. HHV = Gross high heating value of fuel gas, BTU/scf

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 218, 8-7-1981; RULE 218, 5-14-1999]**

[Devices subject to this condition : D18, D27, D36, D45]

D82.2 The operator shall install and maintain a CEMS to measure the following parameters:



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

NOX concentration in ppmv

The CEMS shall meet EPA monitoring performance and quality assurance specifications of 40 CFR Part 60, Appendix B and Appendix F, and 40 CFR Part 75.

Concentrations shall be corrected to 15% oxygen on a dry basis

The CEMS shall be operated during start ups and shutdowns

**[RULE 2012, 5-11-2001; RULE 2012, 12-5-2003; 40CFR 52.21 - PSD, 6-19-1978]**

[Devices subject to this condition : D18, D27, D36, D45]

D182.1 The operator shall test this equipment in accordance with the following specifications:



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

the test shall be constructed to determine the NOx emissions using EPA methods 1-4 and 7E measured over a 60 minute averaging period. In lieu of the above mentioned test methods, equivalent methods may be used with prior written approval from EPA

The test shall be conducted within 60 days after achieving the maximum production rate, but no later than 180 days after initial start up (as defined in 40 CFR 60.2), and annually thereafter (within 30 days of the anniversary of the initial performance test). Upon written request from the permittee (Attn: Air 5), and adequate justification, EPA may waive a specific annual test and/or allow for testing to be done at less than maximum operating capacity

The EPA shall be notified of the date and time of the test at least 30 days prior to the test

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

For the initial source test, the test shall be conducted when the equipment is operating at or near loads of 100 percent, 75 percent, and 50 percent of maximum load. For the annual source tests, the test shall be conducted when the equipment is operating at or near maximum load

The test shall be conducted in accordance with an EPA approved source test protocol. The protocol shall be submitted to the EPA no later than 45 days prior to the proposed test date and shall be approved by the EPA before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the test, the identity of the testing lab, and a description of all sampling and analytical procedures

[40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : D18, D27, D36, D45]



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

D322.1 The operator shall perform annual inspection of the equipment and filter media for leaks, broken or torn filter media, and improperly installed filter media.

**[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : E14]

D372.1 The operator shall determine compliance with the particulate matter (PM) emission limit by conducting a source test at the outlet of the exhaust stack annually using AQMD Method 5.1. Each test shall include:

(a) One test using natural gas operating at minimum load under normal operating conditions, if natural gas is burned more than 120 consecutive hours or 200 hours accumulated over any 12 consecutive months. The test shall be conducted no later than six months after the time limit has been exceeded;

(b) One test using natural gas operating at maximum load under normal operating conditions, if natural gas is burned more than 120 consecutive hours or 200 hours accumulated over any 12 consecutive months. The test shall be conducted no later than six months after the time limit has been exceeded;

(c) One test using fuel oil operating at maximum load under normal operating conditions, if fuel oil is burned more than 120 consecutive hours or 200 hours accumulated over any twelve consecutive months. However, this condition does not apply if fuel oil is not burned. The test shall be conducted no later than six months after the time limit has been exceeded.

The annual source test frequency will be reduced to at least once every five years for each fuel type under the highest emitting load if three consecutive annual tests show compliance with either the concentration limit or the mass emission limit.

No test shall be required in any one year for which the equipment is not in operation.



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : D18, D27, D36, D45]

D381.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on an annual basis, at least, unless the equipment did not operate during the entire annual period. The routine annual inspection shall be conducted while the equipment is in operation and during daylight hours. If any visible emissions (not including condensed water vapor) are detected, the operator shall take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions; and
- 3). Date and time visible emission was abated.

**[RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : E14]

#### **E. Equipment Operation/Construction Requirements**

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



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

During a turbine start up, ammonia injection must be initiated as soon as the SCR catalyst temperature exceed 480 degrees F and the ammonia vaporizer outlet temperature has been at least 495 degrees F for a period of 30 minutes.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2005, 4-20-2001; RULE 2005, 5-6-2005; 40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : D18, D27, D36, D45]

E144.1 The operator shall vent this equipment, during filling, only to the vessel from which it is being filled.

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

[Devices subject to this condition : D60]

E179.1 For the purpose of the following condition number(s), continuous monitoring shall be defined as measuring at least once every 15 minutes, except as allowed by Rule 2000.

Condition Number D 12- 3

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; 40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : C24, C33, C42, C51]

E179.2 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Condition Number D 12- 3

Condition Number D 12- 4

Condition Number D 12- 5

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

[Devices subject to this condition : C24, C33, C42, C51]

E193.1 The operator shall operate and maintain this equipment according to the following specifications:

A data acquisition system shall be installed and maintained to monitor and record the combined NO<sub>x</sub> emissions in pounds per hour from all gas turbines, Devices D18, D27, D36, and D45 and their respective Duct Burners, Devices D21, D30, D39 and D48, whenever at least one gas turbine is in startup mode. This data shall be used to determine compliance with permit condition A433.1

[**RULE 2005, 4-20-2001; RULE 2005, 5-6-2005; 40CFR 52.21 - PSD, 6-19-1978**]

[Devices subject to this condition : D18, D27, D36, D45]

E193.2 The operator shall operate and maintain this equipment according to the following specifications:



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

The Cleanair Systems "PERMIT" filter system installed for the equipment shall be operated according to the following criteria: (1) The maximum consecutive minutes at idle shall not exceed 240 minutes; (2) The number of 10-minute idle sessions before regeneration is required shall be after 24 consecutive sessions; (3) The minimum temperature/load/time for regeneration shall not be less than 40% load or 300 deg. C for 30% of operating time or 2 hrs, whichever is longer.

The Cleanair Systems "PERMIT" filter system installed for the equipment shall be provided with a data logging and alarm system to record and monitor the equipment's exhaust backpressure and temperature during operation.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1470, 3-4-2005]

[Devices subject to this condition : D61]

E193.3 The operator shall construct, operate, and maintain this equipment according to the following specifications:

In compliance with all applicable provisions of all other applicable Federal, State, and local air quality regulations, including, but not limited to 40 CFR Parts 52, 60, and 61

[40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : D18, D27, D36, D45]

E193.4 The operator shall operate and maintain this equipment according to the following specifications:

All equipment, facilities and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollution emissions



**FACILITY PERMIT TO OPERATE  
SOUTHERN CALIFORNIA EDISON**

**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

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

[40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : D18, D27, D36, D45]

E193.5 The operator shall operate and maintain this equipment according to the following specifications:

The bin vent filter shall be in the ON position at all times during filling of the silo, and for at least 1 hour after filling has ended

Filling of the silo shall be stopped immediately if the high level switch is activated

The storage silo shall not be filled past the high level switch

The unload truck hose shall be equipped with a dust cap. The dust cap shall be in place at all times except during the actual filling operation

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 403, 4-2-2004; RULE 403, 6-3-2005]

[Devices subject to this condition : D63, D64, D65]

**H. Applicable Rules**

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	40CFR60, SUBPART	GG
SOX	40CFR60, SUBPART	GG

[40CFR 63 Subpart GG, 4-20-2006]



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[Devices subject to this condition : D18, D27, D36, D45]

#### **I. Administrative**

I298.1 This equipment shall not be operated unless the facility holds 122170 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start 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 start of operation, the facility holds 114845 pounds of NOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 6-3-2011]

[Devices subject to this condition : D18]



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

I298.2 This equipment shall not be operated unless the facility holds 122170 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start 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 start of operation, the facility holds 114845 pounds of NOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 6-3-2011]

[Devices subject to this condition : D27]

I298.3 This equipment shall not be operated unless the facility holds 122170 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start 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 start of operation, the facility holds 114846 pounds of NOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

**[RULE 2005, 6-3-2011]**

[Devices subject to this condition : D36]

- I298.4 This equipment shall not be operated unless the facility holds 122170 pounds of NO<sub>x</sub> RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start 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 start of operation, the facility holds 114846 pounds of NO<sub>x</sub> RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

**[RULE 2005, 6-3-2011]**

[Devices subject to this condition : D45]



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

I298.5 This equipment shall not be operated unless the facility holds 841 pounds of NO<sub>x</sub> RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start 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 start of operation, the facility holds 841 pounds of NO<sub>x</sub> RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 6-3-2011]

[Devices subject to this condition : D58]

I298.6 This equipment shall not be operated unless the facility holds 1549 pounds of NO<sub>x</sub> RTCs in its allocation account to offset the annual emissions increase for the first year of operation. The RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start 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 start of operation, the facility holds 1549 pounds of NO<sub>x</sub> RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.



## FACILITY PERMIT TO OPERATE SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

[RULE 2005, 6-3-2011]

[Devices subject to this condition : D61]

#### **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 SOUTHERN CALIFORNIA EDISON

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

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

Source test results shall also include turbine and generator output under which the test was conducted.

Source test results shall also include turbine fuel flow rate under which the test was conducted.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

Emission data shall be expressed in terms of lbs/MM cubic feet.

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.

Emission data shall be expressed in terms of mass rate (lbs/hr). In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

Source test results shall also include exhaust gas moisture content under which the test was conducted.

Source test results shall be submitted to the EPA no later than 60 days after the source test was conducted. Written correspondence shall be forwarded to EPA at the following address: Director, Air Division (Attn: Air-1), US EPA Region 9, 75 Hawthorne St, San Francisco, CA 94105

**[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; RULE 2005, 4-20-2001; RULE 2005, 5-6-2005; 40CFR 52.21 - PSD, 6-19-1978]**

[Devices subject to this condition : D18, D27, D36, D45]