FACILITY PERMIT TO OPERATE

RELIANT ENERGY ETIWANDA, INC.
8996 ETIWANDA AVE
ETIWANDA, CA 91739

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
RELIANT ENERGY ETIWANDA, INC.

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 3 : POWER GENERATION-GAS TURBINES					
GAS TURBINE, UNIT NO. 1, NATURAL GAS, SIEMENS, MODEL SGT6-5000F, COMBINED CYCLE, 2027 MMBTU/HR AT 25 DEGREES F, WITH DRY LOW NOX COMBUSTOR WITH A/N:	D74	C79 C80 S82	NOX: MAJOR SOURCE**	**CO:** 2000 PPMV NATURAL GAS (5) [**RULE 407,4-2-1982]** ; **CO:** 2 PPMV NATURAL GAS (4) [**RULE 1703(a)(2) - PSD-BACT,10-7-1988]** **NOX:** 1.9 PPMV NATURAL GAS (4) [**RULE 1703(a)(2) - PSD-BACT,10-7-1988;RULE 2005,5-6-2005]** ; **NOX:** 0.05 LBS/MEGAWATT-HOUR NATURAL GAS (5A) [**RULE 1309.1,5-3-2002** **RULE 1309.1,8-3-2007]** ; **NOX:** 15 PPMV NATURAL GAS (8) [**40CFR 60 Subpart KKKK,7-6-2006]** ; **NOX:** 81 LBS/MMSCF NATURAL GAS (1) [**RULE 2012,5-6-2005]** **PM:** 11 LBS/HR (5) [**RULE 409,8-7-1981;RULE 475,10-8-1976;RULE 475,8-7-1978]** ; **PM:** 0.01 GRAINS/SCF (5A) [**RULE 475,10-8-1976** **RULE 475,8-7-1978]** ; **PM:** 0.1 GRAINS/SCF (5) [**RULE 409,8-7-1981;RULE 475,10-8-1976;RULE 475,8-7-1978]** ; **PM10:** 0.035 LBS/MEGAWATT-HOUR (5) [**RULE 1309.1,5-3-2002**	A63.1, A99.1, A99.2, A99.3, A195.7, A195.8, A195.9, A327.1, A433.1, B61.1, D29.2, D29.3, D29.4, D29.5, D82.1, E71.2, E193.5, E193.6, E193.7, I296.1, K40.3, K67.4

* (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
RELIANT ENERGY ETIWANDA, INC.

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 3 : POWER GENERATION-GAS TURBINES					
GENERATOR, 206.4 MW GROSS AT 25 DEGREES F GENERATOR, HEAT RECOVERY STEAM TURBINE, STEAM, COMMON WITH GAS TURBINE NO. 2, 340.0 MW GROSS AT 59 DEGREES F				**RULE 1309.1,8-3-2007]** ; **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 PPMM NATURAL GAS (4) **[RULE 1303(a)(1)-BACT,5-10-1996;RULE 1303(a)(1)-BACT,12-6-2002]**	
BURNER, DUCT, NATURAL GAS, LOCATED IN THE HRSG OF TURBINE NO. 1, 623 MMBTU/HR A/N:	D78		NOX: MAJOR SOURCE**	**CO:** 2000 PPMV NATURAL GAS (5) **[RULE 407,4-2-1982]** ; **CO:** 2 PPMV NATURAL GAS (4) **[RULE 1703(a)(2) - PSD-BACT,10-7-1988]**	A63.1, A99.1, A99.2, A99.3, A195.7, A195.8, A195.9, A327.1, A433.1, B61.1, D29.2, D29.3, D29.4,

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FACILITY PERMIT TO OPERATE
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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 3 : POWER GENERATION-GAS TURBINES					
				NOX: 1.9 PPMV NATURAL GAS (4) [**RULE 1703(a)(2) - PSD-BACT,10-7-1988;RULE 2005,5-6-2005]** ; **NOX:** 0.05 LBS/MEGAWATT-HOUR NATURAL GAS (5) [**RULE 1309.1,5-3-2002** **RULE 1309.1,8-3-2007]** ; **NOX:** 0.2 LBS/MMBTU (8) [**40CFR 60 Subpart Da,2-27-2006]** ; **NOX:** 81 LBS/MMSCF NATURAL GAS (1) [**RULE 2012,5-6-2005]** **NOX:** 15 PPMV NATURAL GAS (8) [**40CFR 60 Subpart KKKK,7-6-2006]** ; **PM:** 0.1 GRAINS/SCF (5) [**RULE 409,8-7-1981;RULE 475,10-8-1976** **RULE 475,8-7-1978]** ; **PM:** 11 LBS/HR (5) [**RULE 409,8-7-1981;RULE 475,10-8-1976;RULE 475,8-7-1978]** ; **PM:** 0.01 GRAINS/SCF (5A) [**RULE 475,10-8-1976** **RULE 475,8-7-1978]** ; **PM:** 0.015 LBS/MMBTU (8) [**40CFR 60 Subpart Da,2-27-2006]** ; **PM10:** 0.035 LBS/MEGAWATT-HOUR (5) [**RULE 1309.1,5-3-2002**	D29.5, D82.1, E71.2, E193.5, E193.6, E193.7, I296.1, K40.3, K67.4

* (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
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FACILITY PERMIT TO OPERATE
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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 3 : POWER GENERATION-GAS TURBINES					
				RULE 1309.1,8-3-2007] ; **SO2:** 0.2 LBS/MMBTU (8) **[40CFR 60 Subpart Da,2-27-2006]** ; **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]**	
CO OXIDATION CATALYST, SERVING GAS TURBINE NO. 1, ENGELHARD, 26 L X 3 W X 61 H, WITH 400 CU. FEET OF TOTAL CATALYST VOLUME A/N:	C79	D74			
SELECTIVE CATALYTIC REDUCTION, CORMATECH, VANADIUM TYPE, SERVING UNIT NO. 1, WITH 4500 CU. FEET OF TOTAL CATALYST VOLUME, WIDTH: 2 FT; HEIGHT: 67 FT; LENGTH: 34 FT WITH A/N: AMMONIA INJECTION, INJECTION GRID	C80	D74		**NH3:** 5 PPMV (4) **[RULE 1303(a)(1)-BACT,5-10-1996;RULE 1303(a)(1)-BACT,12-6-2002]**	A195.10, D12.6, D12.7, D12.8, E179.4, E179.5, E193.7
STACK, SERVING UNIT NO. 1, HEIGHT: 150 FT 6 IN; DIAMETER: 19 FT A/N:	S82	D74			

* (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
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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 3 : POWER GENERATION-GAS TURBINES					
GAS TURBINE, UNIT NO. 2, NATURAL GAS, SIEMENS, MODEL STG6-500F, COMBINED CYCLE, 2027 MMBTU/HR AT 25 DEGREES F, WITH DRY LOW NOX COMBUSTOR WITH A/N:	D83	C88 C89 S91	NOX: MAJOR SOURCE**	**CO:** 2000 PPMV (5) [**RULE 407,4-2-1982]** ; **CO:** 2 PPMV NATURAL GAS (4) [**RULE 1703(a)(2) - PSD-BACT,10-7-1988]** ; **NOX:** 1.9 PPMV NATURAL GAS (4) [**RULE 1703(a)(2) - PSD-BACT,10-7-1988 RULE 2005,5-6-2005]** ; **NOX:** 0.05 LBS/MEGAWATT-HOUR NATURAL GAS (5) [**RULE 1309.1,5-3-2002;RULE 1309.1,8-3-2007]** ; **NOX:** 15 PPMV NATURAL GAS (8) [**40CFR 60 Subpart KKKK,7-6-2006]** **NOX:** 81 LBS/MMSCF NATURAL GAS (1) [**RULE 2012,5-6-2005]** ; **PM:** 11 LBS/HR (5) [**RULE 409,8-7-1981;RULE 475,10-8-1976;RULE 475,8-7-1978]** **PM:** 0.01 GRAINS/SCF (5A) [**RULE 475,10-8-1976;RULE 475,8-7-1978]** ; **PM:** 0.1 GRAINS/SCF (5) [**RULE 409,8-7-1981;RULE 475,10-8-1976**	A63.1, A99.1, A99.2, A99.3, A195.7, A195.8, A195.9, A327.1, A433.1, B61.1, D29.2, D29.3, D29.4, D29.5, D82.1, E71.2, E193.5, E193.6, E193.7, I296.1, K40.3, K67.4

* (1)(1A)(1B) Denotes RECLAIM emission factor
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(9) See App B for Emission Limits
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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 3 : POWER GENERATION-GAS TURBINES					
GENERATOR, 206.4 MW GROSS AT 25 DEGREES F GENERATOR, HEAT RECOVERY STEAM TURBINE, STEAM, COMMON WITH GAS TURBINE NO. 1, 340.0 MW GROSS AT 59 DEGREES F				**RULE 475,8-7-1978]** ; **PM10:** 0.035 LBS/MEGAWATT-HOUR (5) [**RULE 1309.1,5-3-2002;RULE 1309.1,8-3-2007]** ; **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]**	
BURNER, DUCT, LOCATED IN THE HRSG OF TURBINE NO. 2 A/N:	D87		NOX: MAJOR SOURCE**	**CO:** 2000 PPMV (5) [**RULE 407,4-2-1982]** ; **CO:** 2 PPMV NATURAL GAS (4) [**RULE 1703(a)(2) - PSD-BACT,10-7-1988]** ; **NOX:** 1.9 PPMV NATURAL GAS (4) [**RULE 1703(a)(2) - PSD-BACT,10-7-1988**	A63.1, A99.1, A99.2, A99.3, A195.7, A195.8, A195.9, A327.1, A433.1, B61.1, D29.2, D29.3, D29.4,

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FACILITY PERMIT TO OPERATE
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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 3 : POWER GENERATION-GAS TURBINES					
				RULE 2005,5-6-2005] ; **NOX:** 0.05 LBS/MEGAWATT-HOUR NATURAL GAS (5) [**RULE 1309.1,5-3-2002;RULE 1309.1,8-3-2007]** ; **NOX:** 15 PPMV NATURAL GAS (8) [**40CFR 60 Subpart Da,2-27-2006** **40CFR 60 Subpart KKKK,7-6-2006]** ; **NOX:** 81 LBS/MMSCF NATURAL GAS (1) [**RULE 2012,5-6-2005]** ; **NOX:** 0.2 LBS/MMBTU NATURAL GAS (8) [**40CFR 60 Subpart Da,2-27-2006** **40CFR 60 Subpart KKKK,7-6-2006]** ; **PM:** 0.1 GRAINS/SCF (5) [**RULE 409,8-7-1981;RULE 475,10-8-1976;RULE 475,8-7-1978]** ; **PM:** 11 LBS/HR (5) [**RULE 409,8-7-1981** **RULE 475,10-8-1976;RULE 475,8-7-1978]** ; **PM:** 0.01 GRAINS/100 SCF (5A) [**RULE 475,10-8-1976;RULE 475,8-7-1978]** ; **PM:** 0.015 LBS/MMBTU (8) [**40CFR 60 Subpart Da,2-27-2006]**	D29.5, D82.1, E71.2, E193.5, E193.6, E193.7, I296.1, K40.3, K67.4

* (1)(1A)(1B) Denotes RECLAIM emission factor
(2)(2A)(2B) Denotes RECLAIM emission rate
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FACILITY PERMIT TO OPERATE
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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 3 : POWER GENERATION-GAS TURBINES					
				PM10: 0.035 LBS/MEGAWATT-HOUR (5) **[RULE 1309.1,5-3-2002;RULE 1309.1,8-3-2007]** ; **SO2:** 0.2 LBS/MMBTU (8) **[40CFR 60 Subpart Da,2-27-2006]** **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]**	
CO OXIDATION CATALYST, SERVING GAS TURBINE NO. 2, ENGELHARD, 26 L X 3 W X 61 H WITH 400 CU. FEET OF TOTAL CATALYST VOLUME A/N:	C88	D83			
SELECTIVE CATALYTIC REDUCTION, CORMATECH, VANADIUM TYPE, SERVING UNIT NO.2, WITH 4500 CU. FEET OF TOTAL CATALYST VOLUME, WIDTH: 2 FT; HEIGHT: 67 FT; LENGTH: 34 FT A/N:	C89	D83		**NH3:** 5 PPMV (4) **[RULE 1303(a)(1)-BACT,5-10-1996;RULE 1303(a)(1)-BACT,12-6-2002]**	
STACK, HEIGHT: 150 FT 6 IN; DIAMETER: 19 FT A/N:	S91	D83			

* (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
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FACILITY PERMIT TO OPERATE
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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 5 : AMMONIA STORAGE					
STORAGE TANK, NO. 3, AQUEOUS AMMONIA 29.4 PERCENT, WITH VAPOR RETURN LINE, 15000 GALS; DIAMETER: 9 FT; LENGTH: 50 FT A/N:	D92				C157.2, E144.2, E193.7
Process 8 : AUXILIARY BOILER					
BOILER, NATURAL GAS, ENGLISH, 56 MMBTU/HR WITH A/N: BURNER, NATURAL GAS, JOHN ZINK, MODEL TODD RMB, 56 MMBTU/HR	D93		NOX: MAJOR SOURCE**	**CO:** 25 PPMV (5A) [**RULE 1703(a)(2) - PSD-BACT,10-7-1988]** ; **CO:** 2000 PPMV (5) [**RULE 407,4-2-1982]** ; **NOX:** 9 PPMV (4) [**RULE 1703(a)(2) - PSD-BACT,10-7-1988** **RULE 2005,5-6-2005]** ; **NOX:** 55 LBS/MMSCF (1) [**RULE 2012,5-6-2005]** ; **PM:** 0.1 GRAINS/SCF (5) [**RULE 409,8-7-1981]** **VOC:** 3 PPMV (4) [**RULE 1303(a)(1)-BACT,5-10-1996;RULE 1303(a)(1)-BACT,12-6-2002]**	A63.2, A99.4, A195.11, A195.12, A195.13, C1.3, D29.6, D82.2, E193.5, E193.7, I296.1

* (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

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FACILITY PERMIT TO OPERATE
RELIANT ENERGY ETIWANDA, INC.

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
RELIANT ENERGY ETIWANDA, INC.

SECTION H: DEVICE ID INDEX

Device Index For Section H			
Device ID	**Section H Page No.**	**Process**	**System**
D74	1	3	0
D78	2	3	0
C79	4	3	0
C80	4	3	0
S82	4	3	0
D83	5	3	0
D87	6	3	0
C88	8	3	0
C89	8	3	0
S91	8	3	0
D92	9	5	0
D93	9	8	0

FACILITY PERMIT TO OPERATE
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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, 9-11-1998]

F18.1 Acid Rain SO2 Allowance Allocation for affected units are as follows:

Device ID	Boiler ID	Contaminant	Tons in any year
18	Boiler No. 1	SO2	115
20	Boiler No. 2	SO2	29
22	Boiler No. 3	SO2	1362
24	Boiler No. 4	SO2	261

a). The allowance allocation(s) shall apply to calendar years 2000 through 2009.

b). The number of allowances allocated to Phase II affected units by U.S. EPA may change in a 1998 revision to 40CFR73 Tables 2,3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO2 allowance allocations identified in this permit (see 40 CFR 72.84)

[40CFR 73 Subpart B, 1-11-1993]

FACILITY PERMIT TO OPERATE
RELIANT ENERGY ETIWANDA, INC.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

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

A. Emission Limits

A63.1 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 4464 LBS IN ANY ONE MONTH
SOX	Less than or equal to 1123 LBS IN ANY ONE MONTH
VOC	Less than or equal to 6064 LBS IN ANY ONE MONTH

The operator shall calculate the monthly emission limit(s) by using fuel use data and the following emission factors: VOC: 2.7 lbs/mmcf, PM10: 2.5 lbs/mmcf, and SOx: 0.57 lbs/mmcf

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

[Devices subject to this condition : D74, D78, D83, D87]

FACILITY PERMIT TO OPERATE
RELIANT ENERGY ETIWANDA, INC.

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

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

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 309.6 LBS IN ANY ONE MONTH
SOX	Less than or equal to 24.5 LBS IN ANY ONE MONTH
VOC	Less than or equal to 51.8 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: 1.28 lbs/mmcf, PM10: 7.6 lbs/mmcf, and SOx: 0.60 lbs/mmcf

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

[Devices subject to this condition : D93]

A99.1 The 1.9 PPM NOX emission limit(s) shall not apply during commissioning, start-up, and shutdown periods. Start ups and shutdowns are defined in Condition A433.1. Commissioning shall not exceed 516 hours per turbine, with no more than 192 hrs uncontrolled and all operation after the combined steam blow controlled with SCR and CO catalyst. The commissioning of the turbines shall not be conducted simultaneously except for the following tests: Combined Steam Blow 1 and Combined Steam Blow 2. Shutdowns shall not exceed 20 minutes total (2 turbines combined).

[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; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D74, D78, D83, D87]

A99.2 The 2 PPM CO emission limit(s) shall not apply during commissioning, start-up, and shutdown periods. Start ups and shutdowns are defined in Condition A433.1. Commissioning shall not exceed 516 hours per turbine, with no more than 192 hrs uncontrolled and all operation after the combined steam blow controlled with SCR and CO catalyst. The commissioning of the turbines shall not be conducted simultaneously except for the following tests: Combined Steam Blow 1 and Combined Steam Blow 2.. Shutdowns shall not exceed 20 minutes total (2 turbines combined).

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D74, D78, D83, D87]

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

A99.3 The 81 LBS/MMCF NOX emission limit(s) shall only apply during turbine operation prior to CEMS certification for reporting NOx emissions.

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D74, D78, D83, D87]

A99.4 The 55 LBS/MMCF NOX emission limit(s) shall only apply during boiler operation prior to CEMS certification for reporting NOx emissions.

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D93]

A195.7 The 1.9 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent O2, dry.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : D74, D78, D83, D87]

A195.8 The 2.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent O2, dry.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D74, D78, D83, D87]

A195.9 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)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D74, D78, D83, D87]

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

A195.10The 5 PPMV NH3 emission limit(s) is averaged over 60 minutes at 15% O2, dry basis. The operator shall calculate and continuously record the NH3 slip concentration using the following:.

NH3 (ppmv) = [a-b*c/1E+06]*1E+06/b

where,

a = NH3 injection rate (lbs/hr)/17(lb/lb-mol)

b = dry exhaust gas flow rate (scf/hr)/385.3 scf/lb-mol)

c = change in measured NOx across the SCR (ppmvd at 15% O2)

The operator shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppmv accurate to plus or minus 5 percent calibrated at least once every twelve months. The NOx 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]

[Devices subject to this condition : C80]

A195.11The 9.0 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent O2, dry.

[RULE 1703 - PSD Analysis, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : D93]

A195.12The 25.0 PPMV CO emission limit(s) is averaged over over 60 minutes at 15 percent O2, dry.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D93]

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

A195.13The 3.0 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 : D93]

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 : D74, D78, D83, D87]

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

A433.1 The operator shall comply at all times with the 2.0 ppm 1 hour BACT limit for NOx, except as defined in condition A99.1, and for the following operating scenarios::

Operating Scenario	Maximum Hourly Emission Limit	Operational Limit
Cold Start	134 lbs/hr	NOx emissions not to exceed 243 lbs total per cold start (2 turbines combined). Cold start not to exceed 150 minutes total (2 turbines combined), and 20 starts per year per turbine. Cold start is defined as a start which occurs after no steam has been sent to the steam turbine for a period of 72 hours or more
Warm Start	134 lbs/hr	NOx emissions not to exceed 192 lbs total per warm start (2 turbines combined). Warm start not to exceed 120 minutes total (2 turbines combined), and 50 starts per year per turbine. A warm start is defined as a start which occurs after no steam has been sent to the steam turbine for a period of 10 to 72 hours
Hot Start	79 lbs/hr	NOx emissions not to exceed 68 lbs total per hot start (2 turbines combined). Hot start not to exceed 40 minutes total (2 turbines combined), 30 starts per month and 164 starts per year per turbine. A hot start is defined as a start which occurs after no steam has been sent to the steam turbine for a period of less than 10 hours
Shutdown	65 lbs/hr	NOx emissions not to exceed 46 lbs total per shutdown (2 turbines combined). Shutdown not to exceed 20 minutes total (2 turbines combined), and 234 shutdowns per year per turbine

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

[RULE 1703 - PSD Analysis, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : D74, D78, D83, D87]

B. Material/Fuel Type Limits

B61.1 The operator shall not use natural gas containing the following specified compounds:

Compound	///////////	grain per 100 scf
H2S	greater than	0.25

This concentration limit is an annual average based on monthly sample of natural gas composition or gas supplier documentation. Gaseous fuel samples shall be tested using District Method 307-91 for total sulfur calculated as H2S

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

[Devices subject to this condition : D74, D78, D83, D87]

C. Throughput or Operating Parameter Limits

C1.3 The operator shall limit the fuel usage to no more than 224 MM cubic feet per year.

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

[Devices subject to this condition : D93]

C157.2 The operator shall install and maintain a pressure relief valve set at 25 psig.

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

[Devices subject to this condition : D92]

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

D. Monitoring/Testing Requirements

D12.6 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia.

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

The injected ammonia rate shall be maintained within 8 gal/min and 25 gal/min except during start ups and shutd

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

[Devices subject to this condition : C80]

D12.7 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

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

The exhaust temperature at the inlet of the SCR shall be maintained at 450 deg F except during start up and shutdowns

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

[Devices subject to this condition : C80]

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

D12.8 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of 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 twelve months

The differential pressure shall be maintained at 4 " WC plus or minus 2 " WC

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

[Devices subject to this condition : C80]

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

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
NOX emissions	District method 100.1	1 hour	Outlet of the SCR serving this equipment
CO emissions	District method 100.1	1 hour	Outlet of the SCR serving this equipment
SOX emissions	Approved District method	Not Applicable	Outlet of the SCR serving this equipment
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	District Method 5	District-approved averaging time	Outlet of the SCR serving this equipment
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 after AQMD approval of the source test protocol, but no later than 180 days after initial start-up. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test

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 testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical pro

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

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 deg F

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

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

approval except for the determination of compliance with theVOC 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 results, 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

[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 1703 - PSD Analysis, 10-7-1988; 40CFR 60 Subpart Da, 2-27-2006]

[Devices subject to this condition : D74, D78, D83, D87]

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 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 : D74, D78, D83, D87]

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

D29.4 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	AQMD Laboratory Method 307-91	Not Applicable	Outlet of the SCR serving this equipment
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	District Method 5	District-approved averaging time	Outlet of the SCR serving this equipment

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 testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical pro

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, 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 deg F

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 results, 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

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

[Devices subject to this condition : D74, D78, D83, D87]

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
NOX emissions	District method 100.1	1 hour	Outlet of the SCR serving this equipment
PM10 emissions	District Method 5	District-approved averaging time	Outlet of the SCR serving this equipment

The test shall be conducted after District approval of the source test protocol, but no later than 180 days after initial start up. The District shall be notified of the date and time of the test at least 10 days prior to the test

The test shall be conducted at full load to demonstrate compliance with the 0.050 lbs/MW-hr NOx and 0.035 lbs/MW-hr PM10 requirements set forth in Rule 1309.1. If the actual measurement is within the accuracy of the devices used electrical power measurement, the results will be acceptable

The lb/MW-hr emission rate of each electrical generating unit shall be determined by dividing (a) the lb/hr emission rate measured at the location and in accordance with the test method specified above, by (b) the gross electrical output of each electrical generating unit

The test shall be conducted in accordance with District approved test protocol. The protocol shall be submitted to the District engineer no later than 45 days before the proposed test date and shall be approved by the District before the test commences

The test protocol shall include the proposed operating conditions of the electrical generating unit during the test, the correction factor and documentation of its validity, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures

[RULE 1309.1, 5-3-2002; RULE 1309.1, 8-3-2007]

[Devices subject to this condition : D74, D78, D83, D87]

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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
NOX emissions	District method 100.1	1 hour	Outlet of the SCR serving this equipment
CO emissions	District method 100.1	1 hour	Outlet of the SCR serving this equipment
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR serving this equipment

The test shall be conducted after AQMD approval of the source test protocol, but no later than 180 days after initial start-up. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test

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

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 boiler during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical proc

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

[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 : D93]

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

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

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 approved AQMD Rule 218 and/or Reclaim 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 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*Cco*Fd[20.9/(20.9%-%O2 d)][(Qg*HHV)/10E6], where

K = 7.267*10-8 (lbs/scf)/ppm

Cco = Average of 4 consecutive 15 min. average CO concentrations, ppm

Fd = 8710 dscf/MMBTU natural gas

%O2, d = Hourly average % by volume O2 dry, corresponding to Cco

Qg = Fuel gas usage during the hour, scf/hr

HHV = Gross high heating value of the fuel gas, BTU/scf

[RULE 1703 - PSD Analysis, 10-7-1988; RULE 2005, 5-6-2005; RULE 2012, 5-6-2005]

[Devices subject to this condition : D74, D78, D83, D87]

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

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

NOx 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 CEMS plan application

The operator shall not install the CEMS prior to receiving initial approval from AQMD

The CEMS will convert the actual NOx 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 concentration over a 15 minute averaging time period

[RULE 1703 - PSD Analysis, 10-7-1988; RULE 2005, 5-6-2005; RULE 2012, 5-6-2005]

[Devices subject to this condition : D93]

E. Equipment Operation/Construction Requirements

E71.2 The operator shall not begin operation of this equipment until all sources within the District meet BARCT requirements, or on a schedule approved by the Executive Officer and no later than 3 years following the permit to construct issue date. The operator shall submit all supporting information and conduct a BARCT analysis pertaining to the existing cooling towers at this site prior to the completion of the public notice period of the draft permit for gas turbines 1 and 2.

[RULE 1309.1, 5-3-2002; RULE 1309.1, 8-3-2007]

[Devices subject to this condition : D74, D78, D83, D87]

E144.2 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 : D92]

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

E179.4 For the purpose of the following condition number(s), continuously record shall be defined as as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition Number D 12- 6

Condition Number D 12- 7

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

[Devices subject to this condition : C80]

E179.5 For the purpose of the following condition number(s), continuous monitoring shall be defined as measuring at least once every month and shall be calculated based upon the average of the continuous monitoring for that month.

Condition Number D 12- 8

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

[Devices subject to this condition : C80]

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

Gas turbines 1 and 2, their associated control equipment, and the auxiliary boiler shall be fully and legally operational within 3 years of the date of the Permit to Construct

[RULE 1309.1, 5-3-2002; RULE 1309.1, 8-3-2007]

[Devices subject to this condition : D74, D78, D83, D87, D93]

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

E193.6 The operator shall install this equipment according to the following requirements:

PM10 emission rates from this equipment shall not exceed 6 lbs/hr and 0.035 lbs/MW-hr

NOx emission rates from this equipment shall not exceed 0.050 lbs/MW-hr

Compliance with the PM10 and NOx emission rates shall be demonstrated once over the lifetime of the project in accordance with condition D29.5

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1309.1, 5-3-2002; RULE 1309.1, 8-3-2007]

[Devices subject to this condition : D74, D78, D83, D87]

E193.7 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 final California Energy Commission decision for the 07-AFC-2 project

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D74, D78, C80, D83, D87, D92, D93]

I. Administrative

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SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

I296.1 This equipment shall not be operated unless the operator demonstrates to the Executive Officer that the facility holds sufficient RTCs to offset the prorated annual emissions increase for the first compliance year of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the first compliance year of operation, the facility holds sufficient RTCs in an amount equal to the annual emissions increase.

To comply with this condition, the operator shall hold, prior to the 1st compliance year, a minimum of 98,657 (turbine 1) + 98,657 (turbine 2) + 1,446 (boiler) = 198,760 lbs/yr NOx RTC. This condition shall apply during the 1st 12 months of operation commencing with the initial operation of the gas turbine

To comply with this condition, the operator shall hold, prior to the beginning of all compliance years subsequent to the 1st compliance year, a minimum of 135,801 (turbine 1) + 135,800 (turbine 2) + 2,480 (boiler) = 274,081 lbs/yr of NOX RTCs. In accordance with Rule 2005(f), unused RTCs may be sold only during the reconciliation period for the fourth quarter of the applicable compliance year inclusive of the 1st compliance year

[RULE 2005, 5-6-2005]

[Devices subject to this condition : D74, D78, D83, D87, D93]

K. Record Keeping/Reporting

FACILITY PERMIT TO OPERATE
RELIANT ENERGY ETIWANDA, INC.

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

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

K40.3 The operator shall provide to the District a source test report in accordance with the following specifications:

Source test results shall be submitted to the District no later than 60 days after the source test required under conditions D29.2, D29.3, D29.4, D29.5, and D29.6 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 : D74, D78, D83, D87]

K67.4 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Commissioning hours and type of control and fuel use

Date and time of each start-up and shutdown

In addition to the requirements of a certified CEMS, natural gas fuel use records shall be kept during and after the commissioning period and prior to CEMS certification

Minute by minute data (NOx and O2 concentration and fuel flow at a minimum) for each turbine start up

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

[Devices subject to this condition : D74, D78, D83, D87]