

## DOCKETED

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<b>Project Title:</b>	Roseville Energy Park Compliance
<b>TN #:</b>	210870
<b>Document Title:</b>	Roseville Energy Park - Changes to Air Quality Conditions of Certification Pursuant to AQ-SC9 (20160328)
<b>Description:</b>	Roseville Energy Park - Changes to Air Quality Conditions of Certification Pursuant to AQ-SC9 (20160328)
<b>Filer:</b>	Mary Dyas
<b>Organization:</b>	Roseville Electric
<b>Submitter Role:</b>	Public
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Roseville Electric  
2090 Hilltop Circle  
Roseville, California 95747

March 8, 2016

Mary Dyas  
Compliance Project Manager  
Siting, Transmission and Environmental Protection Division  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-5112  
[mdyas@energy.ca.gov](mailto:mdyas@energy.ca.gov)

Subject: Roseville Energy Park (03-AFC-1C) Air Quality Conditions of Certification

Dear Ms. Dyas,

Pursuant to Air Quality Condition of Certification AQ-SC9 of the California Energy Commission's Final Decision ("Final Decision")<sup>1</sup> certifying the Roseville Energy Park ("Project"), the City of Roseville Electric Department ("Roseville Electric") submits these proposed changes to certain Air Quality Conditions of Certification, and requests that the Compliance Project Manager, in consultation with the Placer County Air Pollution Control District, approve the proposed changes set forth in Attachment A to this letter as insignificant changes.

Condition of Certification AQ-SC9 provides that the CPM, in consultation with the Placer County Air Pollution Control District ("PCAPCD"), may approve any change to a condition of certification regarding air quality as an insignificant change if the following requirements are met: (1) the Project remains in compliance with all applicable laws, ordinances, regulations, and standards, (2) the requested change clearly will not cause the Project to result in a significant environmental impact, (3) no additional mitigation or offsets will be required as a result of the change, (4) no existing daily, quarterly, or annual permit limit will be exceeded as a result of the change, and (5) no increase in any daily, quarterly, or annual permit limit will be necessary as a result of the change.

As discussed below, the proposed changes set forth in Attachment A meet all five requirements. The proposed changes are necessary to reflect detailed project design for the Project, to delete air quality conditions of certification that are no longer applicable to the Project now that it has selected a turbine manufacturer as provided for in the Final Decision, and to conform the air quality conditions of certification to the Permit to Operate and Title V Operating Permit issued by PCAPCD to the Project. The proposed changes are set forth in Attachment A to this letter. A copy of the application to modify the Permit to Operate for the Project, which was submitted to PCAPCD on March 7, 2016, is provided as Attachment B.

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<sup>1</sup> Final Decision Roseville Energy Park (03-AFC-1), CEC-800-2005-003 (April 2005), available at [http://www.energy.ca.gov/sitingcases/roseville/documents/2005-04-15\\_COMPLETE\\_FINAL\\_DECISION.PDF](http://www.energy.ca.gov/sitingcases/roseville/documents/2005-04-15_COMPLETE_FINAL_DECISION.PDF).

## DISCUSSION

The proposed changes involve three issues. The first change is purely administrative in nature. The Final Decision for the Project was adopted on April 13, 2005, and analyzed and approved the installation of one of two types of turbines for the Project: either the Alstom GTX100 gas turbine generator or the General Electric LM6000PC Sprint gas turbine generator.<sup>2</sup> The Final Decision included Air Quality Conditions of Certification that were applicable dependent on which gas turbine generator was selected. Roseville Electric elected to install two Alstom GTX100 gas turbine generators. After the adoption of the Final Decision, the Alstom GX100 was renamed as the Siemens SGT800, due to the acquisition by Siemens Power Generation Group of Alstom Power's small and medium-sized gas turbines and industrial steam turbine businesses. Therefore, we propose to change the conditions of certification to refer to the turbines as Siemens SGT800 turbines, rather than Alstom GX100 turbines. In addition, since the GE LM6000 PC was not installed we propose eliminating those conditions that are expressly applicable to that turbine type.

The second issue, deletion of AQ-13, is necessary to conform the condition of certification to a requested revision in the Title V Operating Permit and Permit to Operate.<sup>3</sup> Previously, AQ-13 limited the number of hours of operation each quarter, in part because there were insufficient Emission Reduction Credits ("ERCs") for NOx.

Subsequently, the Title V Operating Permit, Permit to Operate, and Air Quality Conditions of Certification in the Final Decision were amended to allow for a different source of ERCs and to allow for a different emissions limit for NOx. In the process of updating the emissions limits, the limitation on the hours of operation for the Project should have been addressed but was not. Because of the emissions limits and the efficiency of the Project, the limitation of the hours of operation set forth in AQ-13 is no longer needed for the Project as the emissions limit is more restrictive than the hourly limit. We ask that this change be approved contingent upon the corresponding changes in the Title V Operating Permit and Permit to Operate being approved.

The third issue, modification of AQ-51, is necessary to conform the condition of certification to a requested revision in the Title V Operating Permit and Permit to Operate. The Permit to Operate for the Project inadvertently omitted language regarding replacement, repair, and reconditioning of the SCR catalyst following an ammonia slip. Roseville Electric has requested that the PCAPCD amend the Title V Operating Permit and Permit to Operate to incorporate such language, and has proposed that the SCR catalyst be replaced, repaired, or reconditioned within 24 months of an ammonia slip exceeding 7ppm.

As explained below these proposed changes satisfy the requirements of AQ-SC9.

### **1. The Project remains in compliance with all applicable laws, ordinances, regulations, and standards.**

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<sup>2</sup> See, Roseville Energy Park Application for Certification (03-AFC-1) Final Decision, CEC-800-2005-003, pp. 71, 111-112, and 132- 166 (April 13, 2005).

<sup>3</sup> Permit to Operate Issued to the Roseville Energy Park, Placer County APCD Permit Number: REPR-09-01.

The proposed changes will not affect the Project's ability to comply with all applicable laws, ordinances, regulations, and standards ("LORS"), as the changes are proposed to reflect the selection of the Siemens SGT800 turbine generators for the Project as allowed for in the Final Decision. All conditions related to the GE LM6000 are no longer applicable or necessary, and changes to reflect the name of the generator selected will not affect the Project's compliance with LORS. Removal of the operating hours limit set forth in AQ-13 will not affect the Project's compliance with applicable LORS, as the Project will still meet all emissions limits. Finally, modification of AQ-51 to reflect a requested change in the Title V Operating Permit and Permit to Operate for the Project to account for replacement, repair, or reconditioning of the SCR catalyst will not affect the Project's compliance with applicable LORS.

**2. The requested change clearly will not cause the Project to result in a significant environmental impact.**

The proposed changes reflecting the change in name of the turbines installed will not result in any physical changes to the environment. Removal of the quarterly operating hours limit set forth in AQ-13 will not result in a significant environmental impact due to the efficiency of the Project and the strict emissions limits for the Project. Modification of AQ-51 to provide for replacement, repair, or reconditioning of the SCR catalyst after an ammonia slip will not result in a significant environmental impact as the Project will still be subject to the requirement that the ammonia slip shall not exceed 10 ppmv @ 15% O<sub>2</sub>. Thus, there is no possibility for a significant environmental impact.

**3. No additional mitigation or offsets will be required as a result of the change.**

There is no possibility of a significant environmental impact from the proposed changes, the Project will continue to meet all emissions limits, and all required offsets have been obtained for the Project as part of the licensing of the Project. No additional mitigation or offsets are required as a result of the proposed changes.

**4. No existing daily, quarterly, or annual permit limit will be exceeded as a result of the change.**

No existing daily, quarterly, or annual permit limit will be exceeded as a result of the modifications.

**5. No increase in any daily, quarterly, or annual permit limit will be necessary as a result of the change.**

No increase in any daily, quarterly, or annual permit limit will be necessary as a result of the modifications.



**ROSEVILLE ENERGY PARK (03-AFC-01C)**

**PROPOSED CHANGES TO AIR QUALITY CONDITIONS OF CERTIFICATION**

**ATTACHMENT A**

**SPECIFIC FACILITY CONDITIONS**

Offsets

~~**AQ-1.** If the GE LM-6000 turbines are selected, emission offsets shall be provided for all calendar quarters for NO<sub>x</sub> and PM10 in the following amounts, at the offset ratio specified in the PCAPCD Rule 502, New Source Review (8/01). (Offsets are not required for CO, SO<sub>x</sub> and VOC emissions under PCAPCD Rules and Regulations.)~~

GE LM6000 - OFFSETS REQUIRED					
POLLUTANT	QUARTER 1 (lbs/quarter)	QUARTER 2 (lbs/quarter)	QUARTER 3 (lbs/quarter)	QUARTER 4 (lbs/quarter)	Tons/year
NO <sub>x</sub>	15,546	13,412	17,646	15,572	31.09
PM10	17,523	15,246	18,999	18,788	35.28

~~**Verification:** The Project owner shall submit to the CPM documentation from the PCAPCD showing that all ERCs identified in Condition of Certification AQ-2 derived as required if the GE LM6000 turbines are selected.~~

~~**AQ-2.** The ERC certificates to be surrendered if the GE LM-6000 turbines are selected shall include the following:~~

NO <sub>x</sub>	District/ Certificat	Quarter 1	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
City of Roseville	PCAPCD /2001- 23 (2004-03)	5,050	5,050	5,050	5,050	10.1
Calpine Corp.	YSAQMD /EC-209 (EC-238)	0	6,199	0	3,188	4.69
Calpine Corp.	YSAQMD /EC-	0	9,558	0	3,973	6.77
Energy 2001 or SMAQMD		5,300	5,300	5,250	4,150	10.00

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<del>VOCS FOR NOX</del>	<del>District/Certificate</del>	<del>Quarter 1 (lbs)</del>	<del>Quarter 2 (lbs)</del>	<del>Quarter 3 (lbs)</del>	<del>Quarter 4 (lbs)</del>	<del>Annual (Tons)</del>
<del>City of Roseville</del>	<del>PCAPCD/2001-26 (2004-04)</del>	<del>33,512</del>	<del>33,512</del>	<del>33,512</del>	<del>33,512</del>	<del>67.0</del>
<del>PM10</del>	<del>District/Certificate</del>	<del>Quarter 1</del>	<del>Quarter 2 (lbs)</del>	<del>Quarter 3 (lbs)</del>	<del>Quarter 4 (lbs)</del>	<del>Annual (Tons)</del>
<del>City of Roseville</del>	<del>PCAPCD/2001-24 (2004-04)</del>	<del>22,680</del>	<del>0</del>	<del>13,252</del>	<del>21,490</del>	<del>28.71</del>
<del>City of Roseville</del>	<del>PCAPCD/2001-22 (2004-02)</del>	<del>2,578</del>	<del>19,820</del>	<del>16,085</del>	<del>15,916</del>	<del>27.20</del>

**Verification:** ~~The Project owner shall submit to the CPM documentation from the PCAPCD showing that all ERCs identified in this Condition have been surrendered as required in Conditions of Certification AQ-5, 6, 7, 8 and 9 if the GE LM6000 turbines are selected.~~

**AQ-3.** If the ~~Alstom GX100-Siemens SGT800~~ turbines are selected, emission offsets shall be provided for all calendar quarters for NO<sub>x</sub> and PM-10 in the following amounts, at the offset ratio specified in the PCAPCD Rule 502, New Source Review (8/01). (Offsets are not required for CO, SO<sub>x</sub> and VOC emissions under PCAPCD Rules and Regulations.)

<del>Alstom GX100-Siemens SGT800 - OFFSETS REQUIRED</del>					
<del>POLLUTANT</del>	<del>QUARTER 1 (lbs/quarter)</del>	<del>QUARTER 2 (lbs/quarter)</del>	<del>QUARTER 3 (lbs/quarter)</del>	<del>QUARTER 4 (lbs/quarter)</del>	<del>Tons/year</del>
<del>NOx</del>	<del>15,546</del>	<del>13,412</del>	<del>17,646</del>	<del>15,572</del>	<del>31.09</del>
<del>PM10</del>	<del>17,673</del>	<del>15,513</del>	<del>19,168</del>	<del>19,158</del>	<del>35.95</del>

**Verification:** The Project owner shall submit to the CPM documentation from the PCAPCD showing that all ERCs identified in Condition of Certification AQ-4 have been surrendered as required if the ~~Alstom GX100-Siemens SGT800~~ turbines are selected.

**AQ-4.** The ERC certificates to be surrendered if the ~~Alstom~~ Siemens SGT800 turbines are selected shall include the following:

<b>NOX</b>	District/ Certificate	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
City of Roseville	PCAPCD/ 2001-23 (2004-03)	5,050	5,050	5,050	5,050	10.1
Calpine Corp.	YSAQMD/ EC-209 (EC-238)	0	6,199	0	3,188	4.69
Calpine Corp.	YSAQMD/ EC-210	0	9,558	0	3,973	6.77
Energy 2001 or SMAQMD Bank		5,300	5,300	5,250	4,150	10.00
<b>VOCS FOR NOX</b>	District/ Certificate	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
SMUD	2008-02	12,475	12,695	12,573	12,644	24.19
SMUD	2006-09	1,260	1,230	1,260	1,260	2.52
SMUD	2007-03	2,200	470	1,359	924	2.48
SMUD	2007-06	431	557	557	475	1.01
City of Roseville	PCAPCD/ 2001-26	33,512	33,512	33,512	33,512	67.0
<b>PM10</b>	District/ Certificate	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
City of Roseville	PCAPCD/ 2001-22	2,578	20,167	16,085	15,916	27.37
City of Roseville	PCAPCD/ 2001-24	22,680	-	13,440	22,680	29.40
Enron North America	PCAPCD/ 22001-24 (2004-06)	362	-	420	-	0.39

**Verification:** The Project owner shall submit to the CPM documentation from the PCAPCD showing that all ERCs identified in this Condition have been surrendered as required in Conditions of Certification AQ-5,-6,-7,-8 and -9 and -9.5 if the ~~Alstom GX100~~ Siemens SGT800 turbines are selected.



**SPECIFIC FACILITY CONDITIONS**

Operating Limitations

~~AQ-13.~~ The hours of operation of each of the gas turbines shall not exceed the following:

<b>Power Plant Gas Turbine Operating Schedule</b>					
	<b>1<sup>st</sup></b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b>Annual</b>
Total operating hours	2,096	1,864	2,132	2,145	8,237

~~**Verification:** The Project owner shall include all operational data identified in this condition as part of the Quarterly Air Quality Report required by Condition of Certification AQ-SC6.~~

~~**AQ-51.** The ammonia slip shall not exceed 10 ppmv @ 15 percent O<sub>2</sub> averaged over 1 hour. The SCR catalyst shall be replaced, repaired or otherwise reconditioned within 24 months of the ammonia slip exceeding 7 ppm. The SCR catalyst shall be replaced, repaired or otherwise reconditioned within 12 months of the ammonia slip reaching 5 ppm @ 15 percent O<sub>2</sub> averaged over 24 hours. The SCR ammonia injection grid replacement, repair or reconditioning scheduled event may be canceled if the Project owner can demonstrate to the CPM that, subsequent to the initial exceedance, the ammonia slip consistently remains below 5 ppm @ 15 percent O<sub>2</sub> averaged over 24 hours and that the initial exceedance does not accurately indicate expected future operating conditions.~~

Compliance with ammonia slip limits shall be demonstrated by using the following calculation procedure:

$$\text{ammonia slip ppmv @ 15\% O}_2 = ((a-(bxc/1,000,000)) / b) \times d,$$

where

a = ammonia injection rate (lb/hr)/17(lb/lb. mol),

b = dry exhaust gas flow rate (lb/hr)/(29(lb/lb. mol),

c = change in measured NO<sub>x</sub> concentration ppmv at 15% O<sub>2</sub> across catalyst, and

d = correction factor.

The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip.

**Verification:** The Project owner shall include ammonia slip concentrations averaged on an hourly and 24-hour basis calculated via the protocol provided as part of the Quarterly Air Quality Report required in Condition of Certification AQ- SC6. The Project owner shall notify the CPM within 10 days of an exceedance of the 75-ppm ammonia slip limit herein. The Project owner shall notify the CPM no less than 30 days prior to the scheduled date of the SCR catalyst replacement, repair, or reconditioning event. If the Project owner finds that the exceedance of the 75-ppm ammonia slip limit does not accurately reflect expected future operation as provided for in this condition, the Project owner shall submit all relevant information to the CPM no less than 30 days prior to the scheduled date of the SCR catalyst replacement, repair or reconditioning event in order to cancel the event.

**AQ-54.** ~~If the GE LM6000 turbines are selected for the Project, emission rates from each gas turbine and heat recovery steam generator exhaust during startup and shutdown shall not exceed the following:~~

<del><b>GE LM6000 Combustion Turbine Emission Limitations during Startup and Shutdown</b></del>		
Pollutant	Maximum Pounds Per Hour (worst-case turbine)	Pounds per Startup or Shutdown (both turbines combined)
NO <sub>x</sub>	19.3	49.7
CO	14.3	42.2

~~**Verification:** The Project owner shall include all necessary emissions data to demonstrate compliance with the emission limits provided in this Condition as part of the Quarterly Air Quality Report required in Condition of Certification AQ-SC6.~~

**AQ-55.** If the ~~Alstom GX100~~ Siemens SGT800 turbines are selected for the Project, emission rates from each gas turbine and heat recovery steam generator exhaust during startup and shutdown shall not exceed the following:

<del><b>Alstom GX100</b></del> <b>Siemens SGT800 Combustion Turbine Emission Limitations during Startup and Shutdown</b>		
Pollutant	Maximum Pounds Per Hour (worst-case turbine)	Pounds per Startup or Shutdown (both turbines combined)
NO <sub>x</sub>	37.1	122.8
CO	89.5	204.8

**Verification:** The Project owner shall include all necessary emissions data to demonstrate compliance with the emission limits provided in this Condition as

part of the Quarterly Air Quality Report required in Condition of Certification AQ-SC6.

~~**AQ-56.** If the GE LM6000 turbines are selected for the Project, emission rates from each gas turbine and heat recovery steam generator exhaust, except during startup and/or shutdown or excursions, shall not exceed the following:~~

<del>GE LM6000 - COMBUSTION TURBINE EMISSION LIMITATIONS PER TURBINE EXCLUDING STARTUP AND SHUTDOWN</del>	
<del>POLLUTANT</del>	<del>POUNDS/HOUR</del>
<del>Carbon Monoxide (CO)</del>	<del>6.1 (three-hour rolling average)</del>
<del>Nitrogen Oxides (NOx)</del>	<del>5.0 (one-hour average)</del>
<del>PM10</del>	<del>4.6</del>
<del>Sulfur Oxides (SOx)</del>	<del>1.0</del>
<del>Volatile Organic Compounds (VOCs)</del>	<del>1.7</del>

~~**Verification:** The Project owner shall include all necessary emissions data to demonstrate compliance with the emission limits provided in this Condition as part of the Quarterly Air Quality Report required in Condition of Certification AQ- SC6.~~

~~**AQ-57.** If the Alstom GX100 Siemens SGT800 turbines are selected for the Project, emission rates from each gas turbine and heat recovery steam generator exhaust, except during startup and/or shutdown, or excursions shall not exceed the following:~~

<del>Alstom GX100 Siemens SGT800 - COMBUSTION TURBINE EMISSION LIMITATIONS PER TURBINE EXCLUDING STARTUP AND SHUTDOWN</del>	
<del>POLLUTANT</del>	<del>POUNDS/HOUR</del>
<del>Carbon Monoxide (CO)</del>	<del>6.2 (three-hour rolling average)</del>
<del>Nitrogen Oxides (NOx)</del>	<del>5.1 (one-hour average)</del>
<del>PM10</del>	<del>4.7</del>
<del>Sulfur Oxides (SOx)</del>	<del>1.0</del>
<del>Volatile Organic Compounds (VOCs)</del>	<del>1.8</del>

**Verification:** The Project owner shall include all necessary emissions data to demonstrate compliance with the emission limits provided in this Condition as part of the Quarterly Air Quality Report required in Condition of Certification AQ- SC6.

**AQ-58.** ~~If the GE LM6000 turbines are selected for the Project, the daily emissions shall not exceed the following rates:~~

<b>GE LM6000 - DAILY EMISSION LIMITS</b>					
POLLUTANT	Two GE Turbines	Auxiliary Boiler	Cooling Tower	Diesel Emergency Generator	Diesel Fire Pump
NO <sub>x</sub>	268.7	16.8	--	4.31	1.72
CO	300.8	52.8	--	0.84	0.09
VOC	83.6	7.2	--	0.16	0.05
PM10	221.6	14.4	16.3	0.14	0.03
SO <sub>2</sub>	46.0	1.92	--	0.10	0.19

~~**Verification:** The Project owner shall include all necessary emissions data to demonstrate compliance with the emission limits provided in this Condition as part of the Quarterly Air Quality Report required in Condition of Certification AQ- SC6.~~

**AQ-59.** If the Alstom GX100-Siemens SGT800 turbines are selected for the Project, the daily emissions shall not exceed the following rates:

<b>Alstom GX100-Siemens SGT800 - FACILITY DAILY EMISSION</b>					
POLLUTANT	Two Alstom Turbines	Auxiliary Boiler	Cooling Tower	Diesel Emergency Generator	Diesel Fire Pump
NO <sub>x</sub>	406.0	16.8	--	4.31	1.72
CO	629.5	52.8	--	0.84	0.09
VOC	223.1	7.2	--	0.16	0.05
PM10	226.8	14.4	16.3	0.14	0.03
SO <sub>2</sub>	47.1	1.92	--	0.10	0.19

**Verification:** The Project owner shall include all necessary emissions data to demonstrate compliance with the emission limits provided in this Condition as part of the Quarterly Air Quality Report required in Condition of Certification AQ- SC6.

**AQ-60.** If the ~~Alstom GX100 Siemens SGT800~~ turbine are selected, the quarterly emissions shall not exceed the levels shown below:

<b><del>Alstom GX100 Siemens SGT800</del> Gas Turbines</b>					
Pollutant	Quarter 1 (lbs/quarter) Two turbines	Quarter 2 (lbs/quarter) Two Turbines	Quarter 3 (lbs/quarter ) Two turbines	Quarter 4 (lbs/quarter ) Two Turbines	Tons / Year Two Turbines
NOx	15,399	12,965	17,496	15,422	30.64
CO	26,787	32,590	28,175	29,862	58.71
VOCs	5,791	7,306	6,630	6,848	13.29
PM0	16,300	13,692	17,789	17,569	32.67
SOx	3,385	2,843	3,694	3,648	6.78

**Verification:** The Project owner shall include all necessary emissions data to demonstrate compliance with the emission limits provided in this Condition as part of the Quarterly Air Quality Report required in Condition of Certification AQ-SC6.

**AQ-61.** If the ~~GE LM6000~~ turbines are selected, the quarterly emissions shall not exceed the levels shown below:

<b><del>GE LM6000 Gas Turbines</del></b>					
Pollutant	Quarter 1 (lbs/quarter) Two	Quarter 2 (lbs/quarter) Two	Quarter 3 (lbs/quarter) Two	Quarter 4 (lbs/quarter) Two	Tons/year Two Turbines
NOx	15,399	12,965	17,496	15,422	30.64
CO	21,291	18,454	23,160	22,982	42.94
VOCs	6,006	5,038	6,555	6,473	12.04
PM10	15,968	13,425	17,410	17,199	32.00
SOx	3,316	2,788	3,615	3,571	6.65

**Verification:** The Project owner shall include all necessary emissions data to demonstrate compliance with the emission limits provided in this Condition as part of the Quarterly Air Quality Report required in Condition of Certification AQ-SC6.

**AQ-62.** If the ~~GE LM6000~~ turbines are selected for the Project, the total facility emissions shall not exceed the following quarterly emission rates:

<b><del>GE LM6000 - FACILITY QUARTERLY EMISSION LIMITS</del></b>					
POLLUTANT	QUARTER 4 (lbs)	QUARTER 2 (lbs)	QUARTER 3 (lbs)	QUARTER 4 (lbs)	Tons/year

ROSEVILLE ENERGY PARK (03-AFC-01C)  
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ATTACHMENT A

NO <sub>x</sub>	<del>15,546</del>	<del>13,412</del>	<del>17,646</del>	<del>15,572</del>	<del>31.09</del>
CO	21,625	19,737	23,500	23,322	44.09
VOC	6,046	5,188	6,596	6,514	12.17
PM10	17,523	15,246	18,999	18,788	35.28
SO <sub>2</sub>	3,331	2,838	3,630	3,587	6.69

**Verification:** ~~The Project owner shall include all necessary emissions data to demonstrate compliance with the emission limits provided in this Condition as part of the Quarterly Air Quality Report required in Condition of Certification AQ- SC6.~~

**AQ-63.** If the ~~Alstom GX100~~ Siemens SGT800 turbines are selected for the Project, the total facility emissions shall not exceed the following quarterly emission rates:

<b><del>Alstom GX100</del> Siemens SGT800 - FACILITY QUARTERLY</b>					
POLLUTANT	QUARTER 1 (lbs)	QUARTER 2 (lbs)	QUARTER 3 (lbs)	QUARTER 4 (lbs)	Tons/year
NO <sub>x</sub>	15,546	13,412	17,646	15,572	31.09
CO	27,121	33,872	28,515	30,202	59.86
VOC	5,832	7,455	6,672	6,890	13.42
PM10	17,854	15,513	19,378	19,158	35.95
SO <sub>2</sub>	3,400	2,893	3,709	3,663	6.83

**Verification:** The Project owner shall include all necessary emissions data to demonstrate compliance with the emission limits provided in this Condition as part of the Quarterly Air Quality Report required in Condition of Certification AQ- SC6.

**ROSEVILLE ENERGY PARK (03-AFC-01C)**

**ATTACHMENT B**

**Application to Modify the Permit to Operate**



**Roseville Electric**  
2090 Hilltop Circle  
Roseville, California 95747

Mr. John Finnell, Manager  
Permitting & Engineering  
Placer County Air Pollution Control District  
110 Maple Street  
Auburn, CA 95603

RE: Roseville Energy Park- Application to Modify Permit to Operate REPR-09-01

Dear Mr. Finnell:

Enclosed with this letter is an application to modify Permit to Operate REPR-09-01 for the Roseville Energy Park. The proposed modifications to the Permit to Operate are provided as an attachment to the application, with proposed deletions submitted in ~~strikeout~~ and new text submitted in underline formats.

Please contact me at 916-746-1687 if you have any questions.

Thank you.

\_\_\_\_\_/s/\_\_\_\_\_  
\_\_\_\_\_

Jamie Johnson  
Electric Compliance Analyst  
Roseville Electric  
2090 Hilltop Circle  
Roseville, CA 95747





Placer County  
AIR POLLUTION CONTROL DISTRICT

110 Maple Street, Auburn, CA 95603 • (530) 745-2330 • Fax (530) 745-2373 • [www.placer.ca.gov/apcd](http://www.placer.ca.gov/apcd)

Erik C. White, Air Pollution Control Officer

<b>AUTHORITY TO CONSTRUCT AND PERMIT TO OPERATE APPLICATION</b>		<b>FOR APCD USE ONLY</b>	
		Date	Permit No.
			Amt Pd.
			Receipt
<b>COMPANY</b>	Company/Owner (printed or typed) City of Roseville (Roseville Electric)	Company Contact Shawn Matchim	
	Mailing Address 2090 Hilltop Circle	Title Regulatory Compliance Administrator	
	City, State & Zip Code Roseville, CA 95747	Phone (916) 746-1687	Email smatchim@roseville.ca.us
<b>FACILITY</b>	Name of Facility (if different than above): Roseville Energy Park	Facility Contact and Title Matt Garner	
	Street Address: 5120 Phillips Rd	Title Power Plant Superintendent	
	City, State and Zip Code Roseville, CA 95747	Phone (916) 746-1687	Email mgarner@roseville.ca.us
<b>PREPARER</b>	Firm Name of Application Preparer City of Roseville (Roseville Electric)	Name of Preparer Jamie Johnson	
	Mailing Address of Firm 2090 Hilltop Circle	Title Electric Compliance Analyst	
	City, State & Zip Code Roseville, CA 95747	Phone (916) 746-1687	Email jjohnson@roseville.ca.us
<b>APPLICATION TYPE</b>	<input type="checkbox"/> Authority to Construct – New Facility <input checked="" type="checkbox"/> Permit Amendment <input type="checkbox"/> Title V (Major Source)		
	<input type="checkbox"/> Authority to Construct – Modified Facility <input type="checkbox"/> Emission Reduction Credit <input type="checkbox"/> Synthetic Minor Source Status		
	<input type="checkbox"/> Authority to Construct – Gasoline Dispensing Facility - Number of Nozzles (Gas Only) _____		
	Is the location within 1000 feet from the boundary of a K – 12 school? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Brief Description of the Project/Request (attach detailed permit application information) <b>Application to modify Permit to Operate REPR-09-01.</b>			
Schedule of Operation _____ hours/day _____ days/week _____ weeks/year			
What is this Facility's SIC (Standard Industrial Classification) Code?		4911	
For Authority to Construct applications, complete the following:			
Construction Start Date _____	Construction Completion Date _____	Equipment/Process Start-up Date _____	
Indicate where the following documents will be mailed:			
Authority to Construct (check all that apply)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Permit(s) to Operate (check only one)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Invoice(s) (check only one)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Statement of Company's Responsible Person</b> "I am familiar with the Rules and Regulation of the Placer County Air Pollution Control District and I certify that the information herein and the data submitted with the application is true with regards to the operation of the plant and /or equipment which is the subject of this application and that such operation will comply with said Rules and Regulations." The applicant/permittee has an obligation to defend and indemnify the District against third party challenges in accordance with District Rule 411, Indemnification of District.			
Signature of Company's Responsible Person _____		Title <u>ELECTRIC REGULATORY COMPLIANCE ADMIN.</u>	
Name (Printed or Typed) <u>SHAWN MATCHIM</u>		Date <u>02/18/16</u>	

**Print Form**



PLACER COUNTY APCD  
 110 Maple Street  
 Auburn, California 95603  
 (530) 745-2330 - Fax (530) 745-2373

**PERMIT TO OPERATE**

**ISSUED TO:**  
 ROSEVILLE ENERGY PARK  
 5120 PHILLIP RD  
 ROSEVILLE, CA 95747

**PERMIT NUMBER:** REPR-09-01

**FACILITY LOCATION:**  
 5120 PHILLIP RD  
 ROSEVILLE, CA 95747

**VALID FROM:**  
 10/1/2015 - 9/30/2016

Thomas J. Christofk  
 Air Pollution Control Officer

10/5/2015  
 Issue Date

**PROCESS DESCRIPTION:** COMBUSTION TURBINE GENERATOR #1

**EQUIPMENT**

No.	Equipment	Rating
1	Combustion turbine generator #1, natural gas fired, combined cycle with dry low NOx combustors; manufacturer: Siemens, model: SGT800; serial # B005712, heat input rating 457.3 MMBtu/hr; nominal MW rating of 62.5 MW and peak capacity of 80 MW (with duct burner)	MBTU-457300
2	Heat recovery steam generator #1, with duct burner; manufacturer Coen, serial # 40D-14757-1-000; rated 188 MMBtu/hr (LHV) and maximum of 225 MMBtu/hr	MBTU-225000
3	Steam turbine	
4	Selective catalytic reduction (SCR), ammonia injection system within the heat recovery steam generator, make: Peerless, serial# 70373	
5	Carbon Monoxide (CO) catalyst	
6	Continuous emissions monitoring system	

**TOTAL RATINGS** – MBTU- 682300 .

~~1. If the GE LM-6000 turbines are selected, emission offsets shall be provided for all calendar quarters for NOx and PM-10 in the following amounts, at the offset ratio specified in the PCAPCD Rule 502, New Source Review (8/01). (Offsets are not required for CO, SOx and VOC emissions under PCAPCD Rules and Regulations.)~~

**GE LM6000 - OFFSETS REQUIRED**

POLLUTANT	QUARTER 1 (lbs/quarter)	QUARTER 2 (lbs/quarter)	QUARTER 3 (lbs/quarter)	QUARTER 4 (lbs/quarter)	Tons/year
NOx	15,546	13,412	17,646	15,572	31.09
PM-10	17,523	15,246	18,999	18,788	35.28

2. ~~The ERC certificates to be surrendered if the GE LM-6000 turbines are selected shall include the following:~~

<b>ERCs GE LM6000</b>						
<b>NOx</b>	District/ Certificate	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
Current Owner of Certificate						
City of Roseville	PCAPCD/ 2001-23 (2004-03)	5,050	5,050	5,050	5,050	10.1
Calpine Corp.	YSAQMD/ EC-209 (EC-238)	0	6,199	0	3,188	4.69
Calpine Corp.	YSAQMD/ EC-210	0	9,558	0	3,973	6.77
Energy 2001/ SMAQMD Bank		5,300	5,300	5,250	4,150	10.00
<b>VOCs for NOx</b>	District/ Certificate	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
City of Roseville	PCAPCD/ 2001-26 (2004-04)	33,512	33,512	33,512	33,512	67.0
<b>PM-10</b>	District/ Certificate	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
City of Roseville	PCAPCD/ 2001-24 (2004-04)	22,680	0	13,252	21,490	28.71
City of Roseville	PCAPCD/ 2001-22 (2004-02)	2,578	19,820	16,085	15,916	27.20

3. If the Alstom GX100 Siemens SGT800 turbines are selected, emission offsets shall be provided for all calendar quarters for NOx and PM-10 in the following amounts, at the offset ratio specified in the PCAPCD Rule 502, New Source Review (8/01). (Offsets are not required for CO, SOx and VOC emissions under PCAPCD Rules and Regulations.)

<b>ALSTOM GX100SGT800 - OFFSETS REQUIRED</b>					
	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 4	Tons/year

POLLUTANT	(lbs/quarter)	(lbs/quarter)	(lbs/quarter)	(lbs/quarter)	
NOx	15,546	13,412	17,646	15,572	31.09
PM-10	17,673	15,513	19,168	19,158	35.95

4. The ERC certificates to be surrendered if the ~~Alstom~~ Siemens SGT800 turbines are selected shall include the following:

ERCs ALSTOM GTX-100						
<b>NOx</b>	District/ Certificate	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
City of Roseville	PCAPCD/ 2001-23 (2004-03)	5,050	5,050	5,050	5,050	10.1
Calpine Corp.	YSAQMD/ EC-209 (EC-238)	0	6,199	0	3,188	4.69
Calpine Corp.	YSAQMD/ EC-210	0	9,558	0	3,973	6.77
Energy 2001 or SMAQMD Bank		5,300	5,300	5,250	4,150	10.00
<b>VOCs for NOx</b>	District/ Certificate	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
SMUD	2008-02	12,475	12,695	12,573	12,644	24.19
SMUD	2006-09	1,260	1,260	1,260	1,260	2.52
SMUD	2007-03	2,200	470	1,359	924	2.48
SMUD	2007-06	431	557	557	475	1.01
City of Roseville	PCAPCD/ 2001-26	33,512	33,512	33,512	33,512	67.0
<b>PM10</b>	District/ Certificate	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
City of Roseville	PCAPCD/ 2001-24	2,578	20,167	16,085	15,916	27.37
City of Roseville	PCAPCD/ 2001-22	22,680	-	13,440	22,680	29.40
Enron North America	PCAPCD/2 2001-24 (2004-06)	362	-	420	-	0.39

5. The ERC Certificates PCAPCD 2001-23, YSAQMD EC-209 (EC-238), YSAQMD EC-210, PCAPCD 2001-26, PCAPCD 2001-24 and PCAPCD/ 2001-22 shall be submitted to the PCAPCD at least 30 days prior to start of construction. Copies of the ERCs surrendered shall be submitted to the Energy Commission by that date. For the purpose of this condition, start of construction shall be defined as the pouring of foundation on site.
6. ERCs obtained from reductions at Energy 2001 shall be submitted to the PCAPCD at least 30 days prior to commencing operation of any of the stationary source equipment

(gas turbines, boiler, emergency fire pump, or emergency generator). Copies of the ERCs surrendered shall be submitted to the Energy Commission by that date. For the purpose of this condition, commencing operation shall be defined as first fire of any of the stationary source equipment listed herein.

7. If the NOx ERCs listed in the Energy 2001 row are alternatively obtained in part at or in whole from the Sacramento Air Quality Management District (SMAQMD) Bank at an offset ratio of 2.1 to 1. The offset ratio of 1.3 to 1 shall apply to Energy 2001 offsets. An offset ratio of 2.1 to 1 shall apply to SMAQMD Bank offsets. The combined quantity shall be sufficient to offset the following NOx emissions:

NOx	Quarter 1 (lbs)	Quarter 2 (lbs)	Quarter 3 (lbs)	Quarter 4 (lbs)	Annual (Tons)
	4,077	4,077	4,038	3,192	7.69

Compliance to be determined by the following:

$$(\text{NOx ERCs Energy 2001} / 1.3) + (\text{NOx ERCs SMAQMD Bank} / 2.1) = \text{Quarterly requirement.}$$

8. ERCs obtained from the SMAQMD Bank shall be submitted to the PCAPCD at least 30 days prior to commencing operation of any of the stationary source equipment (gas turbines, boiler, emergency fire pump, or emergency generator). Copies of the ERCs surrendered shall be submitted to the Energy Commission by that date. For the purpose of this condition, commencing operation shall be defined as first fire of any of the stationary source equipment listed herein.
9. Prior to the use of ERCs from the SMAQMD Bank, Roseville Electric shall appear before the PCAPCD District Board and gain approval of the transfer of ERCs per Health and Safety Code, Section 40709.6, Offset by reduction to stationary source located in another District.

A. The project owner may, as an alternative to obtaining emission reduction credits (ERCs) from either the Energy 2001 facility or the Sacramento Air Quality Management District, purchase valid VOC ERCs within the Placer County Air Pollution Control District. The project owner must use an interpollutant trading ratio of no less than 2.6 to 1 (VOC to NOx) and a distance offset ratio consistent with Placer County Air Pollution Control District Rule 502. The project owner must surrender the VOC ERCs from AIR QUALITY AQ-9.5 Table 1 sufficient to offset the project NOx emissions in the amounts shown in AIR QUALITY AQ-9.5 Table 2. The project owner may bank any excess VOC ERCs with the Placer County Air Pollution Control District.

<b>AIR QUALITY</b>					
<b>Placer County Air Pollution Control District</b>					
<b>VOC Emission Reduction Credits (pounds)</b>					
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual

2008-02	9,889	11,493	10,474	8,131	39,987
2006-09	1,260	1,260	1,260	1,260	5,040
2007-03	2,200	470	1,359	924	4,953
2007-06	431	557	557	475	2,020

<b>AIR QUALITY</b>					
<b>Required NOx Offsets for Project NOx Emissions</b>					
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Annual
Required NOx Offsets	4,077	4,077	4,038	3,192	7.69

10. The gas turbines and auxillary boiler shall be fired exclusively on pipeline grade natural gas.
11. Roseville Electric shall maintain an Operating Compliance Plan for the new CTG/HRSG which will assure that the air pollution control equipment will be properly maintained and that necessary operational procedures are in place to continuously achieve compliance with this permit. The Operating Compliance Plan shall include a description of the process monitoring program and devices to be used.
  - A. The plan shall specify the frequency of surveillance checks that will be made of process monitoring devices and indicators to determine continued operation within permit limits. A record or log of individual surveillance checks shall be kept to document performance of the surveillance.
  - B. The plan shall include the frequency and methods of calibrating the process monitoring devices.
  - C. The plan shall specify for each emission control device:
    - i. Operation and maintenance procedures that will demonstrate continuous operation of the emission control device during emission producing operations; and
    - ii. Records that must be kept to document the performance of required periodic maintenance procedures.
  - D. The plan shall identify what records will be kept to comply with air pollution control requirements and regulations and the specific format of the records. These records shall include at least the Recordkeeping information required by this permit. The information must include emission monitoring evaluations, calibration checks and adjustments, and maintenance performed on such monitoring systems.
  - E. The plan shall be submitted to the PCAPCD 30 days prior to startup of the gas turbines and boiler. The plan must be implemented upon approval by the PCAPCD Air Pollution Control Officer.

F. The plan shall be resubmitted to the PCAPCD for approval upon any changes to compliance procedures described in the plan, or upon the request of the PCAPCD Air Pollution Control Officer

12. CEMS Remote Polling:

- A. Roseville Electric shall install and maintain equipment, facilities, software and systems at the facility and at the PCAPCD office that will allow the District to poll or receive electronic data from the CEMS. Roseville Electric shall make CEMS data available for automatic polling of the daily records. Roseville Electric shall make hourly records available for manual polling within no more than a one hour delay. The basic elements of this equipment include a telephone line, modem and datalogger. Alternatively, an internet based system may be used. The costs of installing and operating this equipment, excluding District costs, shall be borne by the REP.
- B. Upon notice by the District that the facility's polling system is not operating, the REP shall provide the data by a District-approved alternative format and method for up to a maximum of 30 days.
- C. The polling data is not a substitute for other required recordkeeping or reporting. (Rule 404 § C; Rule 501 § 304.2.c; HSC 42706)

**OPERATING LIMITATIONS**

~~13. The hours of operation of each gas turbine shall not exceed the following:~~

<b>Power Plant Gas Turbine Operating Schedule</b>					
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	<b>Annual</b>
<b>Total operating hours</b>	2,096	1,864	2,132	2,145	8,237

- 14. Roseville Electric shall submit design details for the selective catalytic reduction, oxidation catalyst, and continuous emission monitor system to the PCAPCD at least 30 days prior to commencement of construction of these components.
- 15. Roseville Electric shall install a selective catalytic reduction (SCR) system and an oxidation catalyst on the gas turbine. The SCR and oxidation catalyst equipment shall be operated whenever the gas turbine is operated except during commissioning.
- 16. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators.
- 17. The gas turbines and auxiliary boiler shall be equipped with continuously recording, nonresettable fuel gas flowmeters on each unit.

18. Each gas turbine exhaust shall be equipped with continuously recording emissions monitor for NO<sub>x</sub>, CO, and O<sub>2</sub> dedicated to this unit. Continuous emission monitor shall meet the requirements of 40 CFR parts 60 and 75, and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. The system shall be installed and operational prior to the cessation of commissioning when their operability will be confirmed by source testing.
19. The gas turbine exhaust stacks and boiler exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. Access ladders and/or stairs and platforms shall allow easy access to the sampling ports.
20. The gas turbine engine shall be fired exclusively on pipeline quality natural gas with a sulfur content no greater than 0.50 grains of sulfur compounds per 100 dry scf of natural gas.
21. Startup is defined as the period beginning with turbine light-off (firing) until the unit meets the lb/hr and ppmv emission limits in conditions 52, 54 and 55. Shutdown is defined as the period beginning with initiation of turbine shutdown sequence and ending with cessation of firing of the gas turbine engine. Startup and shutdown durations shall not exceed 3.0 hours and 1 hour, respectively, per occurrence.
22. NO<sub>x</sub>, excluding the thermal stabilization period (i.e. startup period which is not to exceed 3 hours), shall not exceed the following levels under load conditions:

9 x EFF/25 ppm, @ 15% O<sub>2</sub>, averaged over 15 minutes:

Where: EFF (efficiency) is the higher of the following:

$$EFF1 = \frac{3412 \times 100\%}{AHR}$$

AHR = Actual Heat Rate at HHV of Fuel (BTU/KW-HR)]

or

$$EFF2 = \frac{MRE \times LHV}{HHV}$$

MRE = Manufacturer's Rated Efficiency with Air Pollution Equipment at LHV, which is the manufacturer's continuous rated percent efficiency of the gas turbine with air pollution equipment after correction from LHV to HHV of the fuel at peak load for that facility.

### **COMMISSIONING**

23. The commissioning period commences when all mechanical and electrical systems are installed and individual startup has been completed or when a gas turbine is first fired whichever comes first. The period ends when the plant has completed performance testing and is available for commercial operation.



24. The gas turbines shall be tuned to minimize the air emissions. At the earliest feasible time, in accordance with the recommendations of the equipment manufacturer and construction contractor, the air pollution control equipment shall be installed, adjusted and operated to minimize emissions from the combustion turbines.
25. The total number of firing hours of each gas turbine without abatement shall not exceed 160 hours during the commissioning period. Such operation shall only be limited to such activities that can only be properly executed without the air pollution control equipment. The total operating days during conditioning shall not exceed 33 calendar days.
26. During the commissioning operations, CO emissions shall not exceed 829 pounds per hour for any one-hour block average. Compliance to be determined by emission factors to be determined prior to startup and approved by the District. (This condition was established to prevent impacts from exceeding 500 ug/m<sup>3</sup> over an 8-hour average).
27. The total mass emissions of each regulated pollutant that are emitted during the commissioning period shall not exceed the quarterly emission limits specified in these conditions.

### **REPORTING AND RECORDKEEPING**

28. Roseville Electric shall submit a CEMS QA/QC plan to the PCAPCD for approval. Approval should also be required for any future changes to the plan.
29. Roseville Electric shall submit to the PCAPCD, prior to issuance of a Permit to Operate, information correlating the control system operating parameters to the associated NO<sub>x</sub>, CO, PM-10, VOC and SO<sub>x</sub> emissions. This information may be used by the PCAPCD Air Pollution Control Officer to determine compliance where there is no continuous emission monitoring system available or when the continuous emission monitoring system is not operating properly.
30. Provide source test information annually regarding the exhaust gas NO<sub>x</sub> concentration at ISO conditions corrected to 15 percent oxygen on a dry basis, and the demonstrated percent efficiency (EFF) of the turbine unit.
31. A gas turbine operating log shall be kept which includes, on a daily basis, the actual Pacific Standard Time start-up and stop time, total hours of operation, type and quantity of fuel used (liquid/gas). This information shall be available for inspection at any time from the date of entry.
32. Hourly records of NO<sub>x</sub> and CO emission concentrations (ppmv @ 15% O<sub>2</sub>), and hourly, daily, and quarterly records of NO<sub>x</sub> and CO emissions shall be kept. Ongoing compliance with the CO emission limits during normal operation shall be deemed compliance with the VOC emission limits during normal operation.
33. Records of SO<sub>x</sub> lb/hr, lb/day, and lb/quarter emissions shall be kept. SO<sub>x</sub> emissions shall be based on fuel use records, natural gas sulfur content, and mass balance calculations.

34. The following records shall be kept: occurrence, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any continuous emission monitor emission measurements, total daily and rolling twelve month average hours of operation, hourly quantity of fuel used, and gross three hour average operating load.
35. All records which are required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P. paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA.
36. Roseville Electric shall notify the PCAPCD of any breakdown condition as soon as reasonably possible, but no later than two PCAPCD business hours after its detection.
37. Any violation of any emission standard listed in this permit which is indicated by the CEMS shall be reported to the PCAPCD no later than 96 hours after such occurrence per California Health and Safety Code 42706.
38. The PCAPCD shall be notified in writing within seven calendar days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations.
39. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The PCAPCD shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the PCAPCD.
40. Roseville Electric shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F.
41. Roseville Electric shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred.
42. Roseville Electric shall provide the PCAPCD with a written emission statement showing actual emissions of volatile organic compounds and oxides of nitrogen. Pursuant to

PCAPCD Rule 503 Roseville Electric shall submit this emission statement on a form or in a format specified by the PCAPCD Air Pollution Control Officer. The statement shall contain the following information:

- A. Information contained in the California Air Resources Board's Emission Inventory Turn Around Document as described in Instructions for the Emission Data System Review and Update Report; and
- B. Actual emissions of volatile organic compounds and oxides of nitrogen, in tons per year, for the calendar year prior to the preparation of the emission statement; and
- C. Information regarding seasonal or diurnal peaks in the emission of affected pollutants; and
- D. Certification by a responsible official of Roseville Electric that the information contained in the emission statement is accurate to the best knowledge of the individual certifying the emission statement.

### **PERFORMANCE TESTING**

43. Compliance with the short term emission limits (lb/hr and ppmv @ 15% O<sub>2</sub>) shall be demonstrated by a performance test conducted within 60 days of reaching maximum production and not later than 180 days after initial startup of each gas turbine engine.
44. A performance test shall be conducted annually for each combustion turbine/heat recovery steam generator unit.
45. Compliance with the cold start NO<sub>x</sub>, and CO mass emission limits shall be demonstrated for each of the gas turbines by performance testing no later than 180 days after initial operation and at least once every seven years thereafter by an ARB certified independent test firm.
46. The following test methods shall be used PM<sub>10</sub>: EPA Method 202 (front half and back half), NO<sub>x</sub>: EPA Method 20, CO: EPA Method 10, VOC: EPA method 18, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the PCAPCD may also be used to address the source testing requirements of this permit.

### **EMISSION LIMITATIONS**

47. No emissions are permitted, from any source, which are a nuisance per PCAPCD Rule 205, Nuisance. (Rule 205)
48. Stack emission opacity as dark or darker than Ringelmann No. 1 (20% opacity) for period or periods aggregating more than three (3) minutes in any one hour is prohibited and is in violation of PCAPCD Rule 202, Visible Emissions. (Rule 202)
49. Particulate matter emissions shall not exceed 0.1 grains per cubic foot of gas calculated at 12 percent CO at standard conditions. (Rule 210)
50. Sulfur compound emissions calculated as SO<sub>2</sub> shall not exceed 0.2 percent by volume. (Rule 210).

51. The ammonia slip shall not exceed 10 ppmv @15% O<sub>2</sub>, averaged over 1 hour. The SCR catalyst shall be replaced, repaired or otherwise reconditioned within 24 months of the ammonia slip exceeding 7 ppm.

Compliance with ammonia slip shall be demonstrated by using the following calculation procedure:

$$\text{Ammonia slip ppmv @ 15\% O}_2 = ((a - (b \times c / 1,000,000)) \times 1,000,000) / b \times d.$$

where

- a = ammonia injection rate (lb/hr)/17 (lb/lb.mol.),
- b = dry exhaust gas flow rate (lb/hr)/29(lb/lb.mol.),
- c = change in measured NO<sub>x</sub> concentration ppmv at 15% O<sub>2</sub> across catalyst, and
- d = correction factor

The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip.

52. The emissions from the gas turbine after air pollution controls shall not exceed the following:

<b>Gas Turbine PPMV Limitations Excluding Startup, Shutdown and Excursions</b>		
NOX	CO	VOC
2.0 ppmvd @ 15% O <sub>2</sub> , 1-hour average	4 ppmvd @ 15% O <sub>2</sub> , 3-hour average	2 ppmvd @ 15% O <sub>2</sub> , 1-hour average

53. The 2.0 ppmvd NO<sub>x</sub> emission limit is averaged over 1 hour at 15 percent oxygen, dry basis. The limit shall not apply to the first six (6) 1-hour average NO<sub>x</sub> emissions above 2.0 ppmvd, dry basis at 15% O<sub>2</sub>, in any calendar quarter period for each combustion gas turbine provided that it meets all of the following requirements:

- A. This equipment operates under any one of the qualified conditions described below:
  1. Rapid combustion turbine load changes due to the following conditions:
    - i. Load changes initiated by the California ISO or a successor entity when the plant is operating under Automatic Generation Control; or
    - ii. Activation of a plant automatic safety or equipment protection system which rapidly decreases turbine load
  2. The first two 1-hour reporting periods following the initiation/shutdown of a fogging system injection pump
  3. The first two 1-hour reporting periods following the initiation/shutdown of combustion turbine water injection
  4. The first two 1-hour reporting periods following the initiation of HRSG duct burners

5. Events as the result of technological limitations identified by the operator and approved in writing by the PCAPCD.

B. The 1-hour average NOx emissions above 2.0 ppmv, dry basis at 15% O2, did not occur as a result of operator neglect, improper operation or maintenance, or qualified breakdown under Rule 404, Upset Conditions, Breakdown or Scheduled Maintenance. Notification to the PCAPCD is required within two hours of a qualified event.

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 date and time of entry into the log/CEMS and the plant operating conditions responsible for NOx emissions exceeding the 2.0 ppmv 1-hour average limit. In addition, these excursions must be identified in the CEMS quarterly reports.

D. The 1-hour average NOx concentration for periods that result from a qualified operating condition does not exceed 25 ppmv, dry basis at 15 percent O2.

E. All NOx emissions during these events shall be included in all calculations of hourly, daily, and annual mass emission rates as required by this permit.

~~54. If the GE LM6000 turbines are selected for the project, emission rates from each gas turbine and heat recovery steam generator exhaust during startup and shutdown shall not exceed the following:~~

<b>GE LM6000 Combustion Turbine Emission Limitations during Startup and Shutdown</b>		
<b>Pollutant</b>	<b>Maximum Pounds Per Hour (worst-case turbine)</b>	<b>Pounds per Startup or Shutdown (both turbines combined)</b>
NOx	49.3	49.7
CO	14.3	42.2

55. If the ~~Alstom GX100~~ Siemens SGT800 turbines are selected for the project, emission rates from each gas turbine and heat recovery steam generator exhaust during startup and shutdown shall not exceed the following:

<b>Alstom GX100 Siemens SGT800 Combustion Turbine Emission Limitations during Startup and Shutdown</b>		
<b>Pollutant</b>	<b>Maximum Pounds Per Hour (worst-case turbine)</b>	<b>Pounds per Startup or Shutdown (both turbines combined)</b>
NOx	37.1	122.8
CO	89.5	204.8

56. If the GE LM6000 turbines are selected for the project, emission rates from each gas turbine and heat recovery steam generator exhaust, except during startup and/or shutdown or excursions, shall not exceed the following:

<b>GE LM6000 - COMBUSTION TURBINE EMISSION LIMITATIONS PER TURBINE EXCLUDING STARTUP AND SHUTDOWN</b>	
POLLUTANT	POUNDS/HOUR
Carbon Monoxide (CO)	6.1 (three-hour rolling average)
Nitrogen Oxides (NOx)	5.0 (one-hour average)
PM-10	4.6
Sulfur Oxides (SOx)	1.0
Volatile Organic Compounds (VOCs)	1.7

57. If the ~~Alstom GX100~~ Siemens SGT800 turbines are selected for the project, emission rates from each gas turbine and heat recovery steam generator exhaust, except during startup and/or shutdown, or excursions shall not exceed the following:

<b><del>Alstom GTX100</del> Siemens SGT800 - COMBUSTION TURBINE EMISSION LIMITATIONS PER TURBINE EXCLUDING STARTUP AND SHUTDOWN</b>	
POLLUTANT	POUNDS/HOUR
Carbon Monoxide (CO)	6.2 (three-hour rolling average)
Nitrogen Oxides (NOx)	5.1 (one-hour average)
PM-10	4.7
Sulfur Oxides (SOx)	1.0
Volatile Organic Compounds (VOCs)	1.8

58. If the GE LM6000 turbines are selected for the project, the daily emissions shall not exceed the following rates:

<b>GE LM6000 - DAILY EMISSION LIMITS</b>					
POLLUTANT	Two GE Turbines	Auxiliary Boiler	Cooling Tower	Diesel Emergency Generator	Diesel Fire Pump
NOx	268.7	16.8	--	4.31	1.72
CO	300.8	52.8	--	0.84	0.09
VOC	83.6	7.2	--	0.16	0.05

PM10	221.6	14.4	16.3	0.14	0.03
SO2	46.0	1.92	--	0.10	0.19

59. If the ~~Alstom GX100~~ Siemens SGT800 turbines are selected for the project, the daily emissions shall not exceed the following rates:

<b>Alstom GX100 Siemens SGT800 - FACILITY DAILY EMISSION LIMITS</b>					
POLLUTANT	Two Alstom Turbines	Auxiliary Boiler	Cooling Tower	Diesel Emergency Generator	Diesel Fire Pump
NOx	406.0	16.8	--	4.31	1.72
CO	629.5	52.8	--	0.84	0.09
VOC	223.1	7.2	--	0.16	0.05
PM10	226.8	14.4	16.3	0.14	0.03
SO2	47.1	1.92	--	0.10	0.19

60. If the ~~Alstom GTX100~~ Siemens SGT800 turbine are selected, the quarterly emissions shall not exceed the levels shown below:

<b>Alstom GTX100 Siemens SGT800 Gas Turbines</b>							
Pollutant	Lbs/hr Max Two Turbine	Lbs/day Max Two Turbines	Quarter 1 (lbs/quarter) Two turbines	Quarter 2 (lbs/quarter) Two Turbines	Quarter 3 (lbs/quarter) Two turbines	Quarter 4 (lbs/quarter) Two Turbines	Tons/Year Two Turbines
NOx	74.2	406.0	15,399	12,965	17,496	15,422	30.64
CO	179.0	629.5	26,787	32,590	28,175	29,862	58.71
VOCs	39.4	223.1	5,791	7,306	6,630	6,848	13.29
PM-10	6.4	211.8	16,300	13,692	17,789	17,569	32.67
SOx	1.3	44.0	3,385	2,843	3,694	3,648	6.78

61. ~~If the GE LM6000 turbines are selected, the quarterly emissions shall not exceed the levels shown below:~~

<b>GE LM6000 Gas Turbines</b>							
Pollutant	Lbs/hr Max Two Turbine	Lbs/day Max Two Turbines	Quarter 1 (lbs/quarter) Two Turbines	Quarter 2 (lbs/quarter) Two Turbines	Quarter 3 (lbs/quarter) Two Turbines	Quarter 4 (lbs/quarter) Two Turbines	Tons/year Two Turbines
NOx	38.7	268.7	15,399	12,965	17,496	15,422	30.64
CO	28.7	300.8	21,291	18,454	23,160	22,982	42.94
VOCs	3.5	83.6	6,006	5,038	6,555	6,473	12.04
PM-10	9.2	221.6	15,968	13,425	17,410	17,199	32.00
SOx	1.9	46.0	3,316	2,788	3,615	3,571	6.65

62. ~~If the GE LM6000 turbines are selected for the project, the total facility emissions shall not exceed the following quarterly emission rates:~~

<b>GE LM6000 - FACILITY QUARTERLY EMISSION LIMITS</b>					
POLLUTANT	QUARTER 1 (lbs)	QUARTER 2 (lbs)	QUARTER 3 (lbs)	QUARTER 4 (lbs)	Tons/year
NOx	15,546	13,412	17,646	15,572	31.09
CO	21,625	19,737	23,500	23,322	44.09
VOC	6,046	5,188	6,596	6,514	12.17
PM10	17,523	15,246	18,999	18,788	35.28
SO2	3,331	2,838	3,630	3,587	6.69

63. ~~If the Alstom GX100 Siemens SGT800 turbines are selected for the project, the total facility emissions shall not exceed the following quarterly emission rates:~~

<b><del>ALSTOM GX100</del> <u>Siemens SGT800</u> - FACILITY QUARTERLY EMISSION LIMITS</b>					
POLLUTANT	QUARTER 1 (lbs)	QUARTER 2 (lbs)	QUARTER 3 (lbs)	QUARTER 4 (lbs)	Tons/year
NOx	15,546	13,412	17,646	15,572	31.09
CO	27,121	33,872	28,515	30,202	59.86
VOC	5,832	7,455	6,672	6,890	13.42
PM10	17,673	15,513	19,168	19,158	35.95
SO2	3,400	2,893	3,709	3,663	6.83

64. 40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines

The gas turbines are required to meet the notification, recordkeeping and performance test requirements of this regulation. Roseville Electric must submit a written quarterly excess emission report to the Administrator. A performance test is required within 60 days of achieving maximum production or no later than 180 days of initial startup.



## **COOLING TOWERS**

### **OPERATING LIMITATIONS**

- 65. Permittee shall submit drift eliminator design details at least 30 days prior to commencement of construction of the cooling towers basin.
- 66. No hexavalent chromium containing compounds shall be added to the cooling water.
- 67. Drift eliminator drift rate shall not exceed 0.0005% of the circulating water flow.

### **PERFORMANCE TESTING**

- 68. An analysis of the cooling tower water shall be performed within 180 days of initial operation and annually thereafter.

### **EMISSION LIMITATIONS**

- 69. No emissions are permitted, from any source, which are a nuisance per PCAPCD Rule 205, Nuisance. (Rule 205)
- 70. PM-10 emission rate shall not exceed the following:

<b>COOLING TOWER EMISSION LIMITATIONS</b>					
<b>Pollutant</b>	<b>POUNDS PER DAY</b>	<b>QUARTER 1 (Pounds/quarter)</b>	<b>QUARTER 2 (Pounds/quarter)</b>	<b>QUARTER 3 (Pounds/quarter)</b>	<b>QUARTER 4 (Pounds/quarter)</b>
PM-10	16.3	1,471	1,487	1,504	1,504

- 71. Compliance with the PM-10 emission limit shall be demonstrated as follows: PM-10 = cooling water recirculation rate \* total dissolved solids concentration in the blowdown water \* design drift rate.

### **AUXILLARY BOILER**

#### **OPERATING LIMITATIONS**

- 72. An ultra-low NOx burner and flue gas recirculation system shall be installed and operated on the auxillary boiler.
- 73. A non-resetable fuel meter shall be installed on the gas line serving the boiler.
- 74. The hours of operation of the auxillary boiler shall not exceed the following:

<b>Table 66 – Boiler Hours of Operation</b>				
	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Boiler Hours of	140	568	143	143

Operation				
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**PERFORMANCE TESTING**

- 75. Compliance with the boiler emission limits on pounds per hour and ppmv emission limits shall be demonstrated by an initial performance test conducted within 60 days of reaching maximum production and not later than 180 days from initial startup.
- 76. The initial performance test shall be conducted for NOx, VOC, SOx, PM-10, CO, CO2, and O2.
- 77. Performance tests shall be conducted on the boiler every other calendar year after the initial testing. These tests shall include NOx, CO, CO2, and O2.
- 78. All boiler source tests shall be made in the as-found operating condition, except that source tests shall include at least one test conducted at the maximum feasible firing rate allowed by the PCAPCD permit. No source test shall be conducted within two hours after a continuous period in which fuel flow to the unit is zero, or shut off, for thirty minutes or longer.
- 79. At least thirty (30) days prior to the compliance source tests, a written test plan detailing the test methods and procedures to be used shall be submitted for approval by the PCAPCD Air Pollution Control Officer. The plan shall cite the test methods to be used for the determination of compliance with the emission limitations of this rule.
- 80. A report of the compliance test shall be submitted to the PCAPCD within sixty (60) days of completion of the source test.

**EMISSION LIMITATIONS**

- 81. The NOx emissions from the boiler shall not exceed 9.0 ppmv @ 3% O2 on a three hour average.
- 82. The CO emissions from the boiler shall not exceed 50 ppmv @ 3% O2 on a three hour average.
- 83. The boiler emissions shall not exceed any of the following:

<b>Table 67 - BOILER EMISSION LIMITATIONS</b>					
<b>Pollutant</b>	<b>POUNDS Per Hour</b>	<b>QUARTER 1 (Pounds/quarter)</b>	<b>QUARTER 2 (Pounds/quarter)</b>	<b>QUARTER 3 (Pounds/quarter)</b>	<b>QUARTER 4 (Pounds/quarter)</b>
NOx	0.7	92	372	94	94
CO	2.2	311	1,259	317	317
VOC	0.3	36	144	36	36
PM10	0.6	82	332	84	84
SO2	0.08	11	46	12	12

**DIESEL FIRED IC ENGINE POWERING FIRE PUMP**

### **OPERATING LIMITATIONS**

84. Permittee shall submit IC engine design details to the PCAPCD at least 30 days prior to commencement of construction of the fire water pump foundation.
85. A non-resettable hour meter shall be installed on each engine/generator set to record the hours of operation.
86. Operation for maintenance and testing of the diesel engine fire pump shall be limited to 30 hours per year.
87. Operation for other than maintenance and testing purposes shall be limited to involuntary interruptions of electrical power.
88. The sulfur content of the diesel fuel used shall not exceed 15 ppm by weight.

### **REPORTING AND RECORDKEEPING**

89. Records of operation and maintenance shall be kept by the Owner or Operator for a period of five years and shall be made available to the PCAPCD upon request. Information required for reporting to the PCAPCD includes, but is not limited to:
  - A. The hours of operation the engine was run for maintenance and testing.
  - B. The hours of operation the engine was run during interruption of electrical power.
  - C. Records of the sulfur content of the diesel fuel used.

### **EMISSION LIMITATIONS**

90. No emissions are permitted, from any source, which are a nuisance per PCAPCD Rule 205, Nuisance.
91. Stack emission opacity as dark or darker than Ringelmann No. 1 (20% opacity) for period or periods aggregating more than three (3) minutes in any one hour is prohibited and is in violation of PCAPCD Rule 202, Visible Emissions.
92. Particulate matter emissions shall not to exceed 0.1 grains per cubic foot of gas calculated at 12 percent CO at standard conditions.
93. Sulfur compound emissions calculated as SO<sub>2</sub> shall not exceed 0.2 percent by volume.
94. Nitrogen oxide emissions from the fire pump diesel engine shall not exceed 6.9 grams per brake horsepower - hour. This may be demonstrated by manufacturer's emissions data sheet.
95. PM-10 emissions from the fire pump diesel engine shall not exceed 0.4 grams per brake horsepower - hour. This may be demonstrated by manufacturer's emissions data sheet.

96. The fire pump diesel engine shall meet the requirements of the California Air Resources Board Airborne Toxic Control Measure for Stationary Compression Ignition Engines when it becomes effective.

## **DIESEL IC ENGINE POWERING EMERGENCY GENERATOR**

### **OPERATING LIMITATIONS**

97. Permittee shall submit IC engine design details to the PCAPCD at least 30 days prior to commencement of construction of the IC engine foundation.
98. A non-resettable hour meter shall be installed on each engine/generator set to record the hours of operation.
99. Operation for maintenance and testing of the emergency diesel engine and generator shall be limited to 30 hours per year.
100. Operation for other than maintenance and testing purposes shall be limited to involuntary interruptions of electrical power.
101. The sulfur content of the diesel fuel used shall not exceed 15 ppm by weight.

### **REPORTING AND RECORDKEEPING**

102. Records of operation and maintenance shall be kept by the Owner or Operator for a period of five years and shall be made available to the PCAPCD upon request. Information required for reporting to the PCAPCD includes, but is not limited to:
- A. The hours of operation the engine was run for maintenance and testing.
  - B. The hours of operation the engine was run during interruption of electrical power.
  - C. Records of the sulfur content of the diesel fuel used.

### **EMISSION LIMITATIONS**

103. No emissions are permitted, from any source, which are a nuisance per PCAPCD Rule 205, Nuisance. (Rule 205)
104. Stack emission opacity as dark or darker than Ringelmann No. 1 (20% opacity) for period or periods aggregating more than three (3) minutes in any one hour is prohibited and is in violation of PCAPCD Rule 202, Visible Emissions. (Rule 202)
105. Particulate matter emissions shall not to exceed 0.1 grains per cubic foot of gas calculated at 12 percent CO at standard conditions. (Rule 210)
106. Sulfur compound emissions calculated as SO<sub>2</sub> shall not exceed 0.2 percent by volume. (Rule 210).

107. Nitrogen oxide emissions from the emergency generator diesel engine shall not exceed 6.9 grams per brake horsepower - hour. This may be demonstrated by manufacturer's emissions data sheet.
108. PM-10 emissions from the emergency generator diesel engine shall not exceed 0.4 grams per brake horsepower - hour. This may be demonstrated by manufacturer's emissions data sheet.
109. The engine shall meet the requirements of the California Air Resources Board Airborne Toxic Control Measure for Stationary Compression Ignition Engines when it becomes effective.

### **PORTABLE EQUIPMENT**

110. Portable equipment shall comply with all applicable requirements while operating at the facility, including PCAPCD Permit and Prohibitory Regulations, or be State-registered portable equipment. State-registered portable equipment shall comply with State registration requirements. A copy of the State registration shall be readily available whenever the State-registered portable equipment is at the facility.

### **TITLE V CONDITION**

111. The Owner/Operator shall file a complete application for a Title V permit pursuant to Rule 507, Federal Operating Permit Program by no later than one year after commencing operation.

### **PCAPCD GENERAL CONDITIONS**

112. Authorization to construct the equipment listed and as prescribed in the approved plans and specifications is hereby granted, subject to the specified permit conditions. The construction and operation of listed equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted in the conditions. Deviation from the approved plans is not permissible without first securing approval for the changes from the PCAPCD Air Pollution Control Officer. (Rule 501)
113. Written notification shall be submitted to the PCAPCD no later than seven (7) days after completion of construction. (Rule 501)
114. This permit shall be maintained on the premises of the subject equipment. (Rule 501)
115. The authorized PCAPCD agents shall have the right of entry to any premises on which an air pollution emission source is located for the purpose of inspecting such source, including securing samples of emissions therefrom, or any records required to be maintained therewith by the PCAPCD. (Rule 402)
116. In the event of any violation of the PCAPCD Rules and Regulations, Roseville Electric shall take action to end such violation. (Rule 502)

117. Roseville Electric shall notify the PCAPCD within two hours of any upset conditions, breakdown or scheduled maintenance which cause emissions in excess of limits established by PCAPCD Rules and Regulations. (Rule 404)
118. Any alteration of the subject equipment, including a change in the method of operation, shall be reported to the PCAPCD. Such alterations may require an Authority to Construct Permit. (Rule 501)
119. Exceeding any of the limiting condition is prohibited without prior application for, and the subsequent granting of a permit modification pursuant to PCAPCD Rule 501, General Permit Requirements, Section 400.
120. In the event of a change of ownership, an application must be submitted to the PCAPCD. Upon any change in control or ownership of facilities constructed, operated, or modified under authority of this permit, the requirements contained in this Authority to Construct shall be binding on all subsequent owners and operators. (Rule 501)
121. Compliance of the permitted facility is required with the provisions of the "Air Toxics `Hot Spots' Information and Assessment Act" of 1987 (Health and Safety Code Sections 44300 et seq.).
122. Performance Test Requirements: If the PCAPCD finds that additional performance tests are required to determine compliance with PCAPCD Rules and Regulations and Conditions of this Authority to Construct, reasonable written notice shall be provided to Roseville Electric. The performance tests shall be subject to the following restrictions (Rule 501):
  - A. At least thirty (30) days prior to the actual testing, a written test plan shall be submitted to the PCAPCD Air Pollution Control Officer detailing the sampling methods, analytical methods or detection principles to be used. The prior written approval of the PCAPCD Air Pollution Control Officer is required for the use of alternate test methods.
  - B. The PCAPCD may require, upon reasonable written notice, the conduct by Roseville Electric of such emissions testing or analysis as may be deemed necessary by the PCAPCD to demonstrate compliance with PCAPCD Rules and Regulations and the limiting conditions of this permit.
  - C. Testing shall be conducted in accordance with 40 CFR 60, Appendix A, Methods, or equivalent methods approved by the State of California Air Resources Board (ARB) by reference in Title 17 of the California Administrative Code, or other methods specified by Roseville Electric and approved in writing by the PCAPCD Air Pollution Control Officer. Independent testing contractors and analytical laboratories shall be Air Resources Board certified for the test or analysis conducted. Particulate matter testing, if requested, shall include both filterable and condensed particulate matter (e.g. Method 5 modified to include impinger catch).
  - D. A report of the testing shall be submitted to the PCAPCD no later than sixty (60) days after the source test is performed.