

December 2, 2004

Mr. Thomas Goff  
Permit Services Manager  
Southern Region  
San Joaquin Valley Air Pollution Control District  
2700 M Street, Suite 275  
Bakersfield, CA 93301

Subject: Pastoria Energy Facility  
Project Number: S-1040705

Dear Mr. Goff:

This letter is written to confirm our recent discussions with the District staff regarding the use of SO<sub>x</sub> ERCs to fulfill the PM<sub>10</sub> offset requirement for Pastoria Energy Facility. In our letter dated April 29, 2004, we proposed to change the SO<sub>x</sub>/PM<sub>10</sub> ratio based on a new analysis of air quality in the project area. However, at this time we are agreeing to accept the previously-approved offset ratio, based on the understanding that we will continue to discuss the issue with the District and with EPA Region IX. We proposed to revise Condition 27 of the June 2002 Authority to Construct to implement this offset condition as follows:

27. SO<sub>x</sub> ERCs may be used to offset PM<sub>10</sub> emission increases at a ratio of 3.1 lb SO<sub>x</sub> for each 1 lb PM<sub>10</sub> emissions for SO<sub>x</sub> reductions occurring within 15 miles of this facility and at a ratio of 3.4 lb SO<sub>x</sub> for each 1 lb PM<sub>10</sub> emissions for SO<sub>x</sub> reductions occurring greater than 15 miles from this facility. A different SO<sub>x</sub>/PM<sub>10</sub> ratio may be used upon concurrence of the federal EPA and the District. [District Rule 2201]

Further, we understand that we are not required by regulation to surrender the ERCs for the project until just before first fire of the gas turbines. We have already submitted the required forms for surrendering the NO<sub>x</sub> and VOC ERCs and still wish to tender those certificates at this time. However, since the final SO<sub>x</sub>/PM<sub>10</sub> ratio is still being discussed, we would prefer to postpone the surrender of the SO<sub>x</sub> ERCs until a final decision has been made regarding the ratio.

We are providing revised tables showing the allocation of the SO<sub>x</sub> ERCs from Certificate N-270-5 in accordance with the 3.4 to 1.0 ratio to demonstrate that we own sufficient ERCs to meet this obligation for the project.

Please do not hesitate to contact me at (925) 479-6729 should you have any questions regarding this submittal.

Respectfully Submitted,

Ms. Barbara McBride  
Director of Safety, Health & Environment  
Calpine Western and California Power Regions

attachment

xc: Nancy Tronaas, California Energy Commission  
Will Walters, Aspen Environmental  
Lance Shaw, California Energy Commission  
Fred Salzmman, Pastoria Energy Facility  
David Warner, SJVAPCD Central Office  
Ed Pike, EPA Region IX  
Gary Rubenstein, Sierra Research

**Table 1 (revised 11/2/04)**

<b>Pastoria Energy Facility Emission Reduction Credits - SJVAPCD Requirements</b>						
	Q1 (lbs)	Q2 (lbs)	Q3 (lbs)	Q4 (lbs)	Annual, lbs	
<b>NOx</b>	90	91	92	92	365	Exclusion 20,000
Project Emissions	84,942	85,885	86,829	86,829	344,485	
Project Emissions Subject to Offset	80,010	80,899	81,787	81,788	324,484	
Required Offsets (1.5 ratio)	120,015	121,349	122,681	122,682	486,727	
S-1554-2	11,385	12,719	14,051	14,053	52,208	
C-375-2	12,500	12,500	12,500	12,500	50,000	
C-376-2	54,301	54,301	54,301	54,301	217,204	
N-195-2	41,829	41,829	41,829	41,828	167,315	
Total ERCs Allocated to Pastoria	120,015	121,349	122,681	122,682	486,727	
Net Surplus NOx ERCs	0	0	0	0	0	
<b>VOC</b>						
Project Emissions	56,125	56,748	57,372	57,372	227,617	
Project Emissions Subject to Offset	51,194	51,762	52,331	52,332	207,619	
Required Offsets (1.5 ratio)	76,791	77,643	78,496	78,498	311,428	
S-1549-1	76,791	77,643	78,496	78,498	311,428	
Total ERCs Allocated to Pastoria	76,791	77,643	78,496	78,498	311,428	
Net Surplus VOC ERC's	0	0	0	0	0	
<b>SOx</b>						-
Project Emissions	20,905	21,137	21,369	21,369	84,780	
Project Emissions Subject to Offset	20,905	21,137	21,369	21,369	84,780	
Required Offsets (1.5 ratio)	31,358	31,706	32,054	32,054	127,172	
N-270-5	<b>122,314</b>	<b>123,673</b>	<b>125,032</b>	<b>125,032</b>	<b>496,051</b>	
Total ERCs Allocated to Pastoria	<b>122,314</b>	<b>123,673</b>	<b>125,032</b>	<b>125,032</b>	<b>496,051</b>	
Surplus SOx ERC's	<b>90,956</b>	<b>91,967</b>	<b>92,978</b>	<b>92,978</b>	<b>368,879</b>	
SOx ERCs Used to Offset PM10	<b>90,956</b>	<b>91,967</b>	<b>92,978</b>	<b>92,978</b>	<b>368,879</b>	
Net Surplus SOx ERCs	0	0	0	0	0	
<b>PM10</b>						- Ratio w/o dist 1.06
Project Emissions (1)	58,305	58,953	59,601	59,601	236,460	
Project Emissions Subject to Offset	58,305	58,953	59,601	59,601	236,460	
Required Offsets (1.5 ratio)	<b>87,458</b>	<b>88,430</b>	<b>89,402</b>	<b>89,402</b>	<b>354,692</b>	
PM10 from Surplus SOx ERCs	<b>87,458</b>	<b>88,430</b>	<b>89,402</b>	<b>89,402</b>	<b>354,692</b>	
Net Surplus PM10 ERCs	0	0	0	0	0	
1. PM10 quarterly emissions reflect latest Commission approved post-certification amendment approved July 3, 2002, which differs from attached Commission letter dated August, 11, 2003.						

**Table 2 (revised 11/2/04)**

<b>Pastoria Energy Facility Emission Reduction Credits - CEC Requirements</b>						
	Q1 (lbs)	Q2 (lbs)	Q3 (lbs)	Q4 (lbs)	Annual, lbs	
<b>NOx</b>	90	91	92	92	365	Exclusion 0
Project Emissions	85,296	86,243	87,191	87,191	345,921	
Required Mitigation (1.0 ratio)	85,296	86,243	87,191	87,191	345,921	
S-1554-2	11,385	12,719	14,051	14,053	52,208	
C-375-2	12,500	12,500	12,500	12,500	50,000	
C-376-2	54,301	54,301	54,301	54,301	217,204	
N-195-2	41,829	41,829	41,829	41,828	167,315	
Total ERCs Allocated to Pastoria	120,015	121,349	122,681	122,682	486,727	
Net Surplus NOx ERCs	34,719	35,106	35,490	35,491	140,806	
<b>VOC</b>						
Project Emissions	56,139	56,762	57,386	57,386	227,673	
Required Mitigation (1.0 ratio)	56,139	56,762	57,386	57,386	227,673	
S-1549-1	76,791	77,643	78,496	78,498	311,428	
Total ERCs Allocated to Pastoria	76,791	77,643	78,496	78,498	311,428	
Net Surplus VOC ERC's	20,652	20,881	21,110	21,112	83,755	
<b>SOx</b>						0
Project Emissions	20,912	21,145	21,377	21,377	84,811	
Required Mitigation (1.0 ratio)	20,912	21,145	21,377	21,377	84,811	
N-270-5	<b>122,314</b>	<b>123,673</b>	<b>125,032</b>	<b>125,032</b>	<b>496,051</b>	
Total ERCs Allocated to Pastoria	<b>122,314</b>	<b>123,673</b>	<b>125,032</b>	<b>125,032</b>	<b>496,051</b>	
Surplus SOx ERC's	<b>101,402</b>	<b>102,528</b>	<b>103,655</b>	<b>103,655</b>	<b>411,240</b>	
SOx ERCs Used to Offset PM10	<b>61,810</b>	<b>62,496</b>	<b>63,183</b>	<b>63,183</b>	<b>250,673</b>	
Net Surplus SOx ERCs	<b>39,592</b>	<b>40,032</b>	<b>40,472</b>	<b>40,472</b>	<b>160,568</b>	
<b>PM10</b>						Ratio w/o dist 1.06
Project Emissions (1)	58,311	58,959	59,607	59,607	236,484	
Required Offsets (1.0 ratio)	58,311	58,959	59,607	59,607	236,484	
PM10 from Surplus SOx ERCs	58,311	58,959	59,607	59,607	236,484	
Net Surplus PM10 ERCs	0	0	0	0	0	
1. PM10 quarterly emissions reflect latest Commission approved post-certification amendment approved July 3, 2002, which differs from attached Commission letter dated August, 11, 2003.						

**Table 3 (revised 11/2/04)**

Calpine Corporation San Joaquin Valley ERC Reconciliation																					
Certificate Owner	Number	Total Certificate Value (lbs)					Allocated to Pastoria					Allocated to SJVEC (lbs)					Remaining Certificate Value (lbs)				
		Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
<b>NOx ERCs</b>																					
Calpine	C-375-2	12,500	12,500	12,500	12,500	50,000	12,500	12,500	12,500	12,500	50,000						0	0	0	0	0
Calpine	C-376-2	54,301	54,301	54,301	54,301	217,204	54,301	54,301	54,301	54,301	217,204						0	0	0	0	0
Calpine	N-195-2	41,829	41,829	41,829	41,828	167,315	41,829	41,829	41,829	41,828	167,315						0	0	0	0	0
Pastoria	S-1547-2	3,986	9,681	19,140	9,076	41,883					0	3,986	9,681	19,140	9,076	41,883	0	0	0	0	0
Pastoria	S-1550-2	1,160	7,055	4,075	3,491	15,781					0	1,160	7,055	4,075	3,491	15,781	0	0	0	0	0
Pastoria	S-1554-2	306,647	310,056	313,464	313,464	1,243,631	11,385	12,719	14,051	14,053	52,208	185,327	175,853	171,491	182,139	714,810	109,935	121,484	127,922	117,272	476,613
<b>Totals</b>		<b>420,423</b>	<b>435,422</b>	<b>445,309</b>	<b>434,660</b>	<b>1,735,814</b>	<b>120,015</b>	<b>121,349</b>	<b>122,681</b>	<b>122,682</b>	<b>486,727</b>	<b>190,473</b>	<b>192,589</b>	<b>194,706</b>	<b>194,706</b>	<b>772,474</b>	<b>109,935</b>	<b>121,484</b>	<b>127,922</b>	<b>117,272</b>	<b>476,613</b>
<b>VOC ERCs</b>																					
Calpine	C-348-1	30,485	30,519	30,470	30,501	121,975					0	30,485	30,519	30,470	30,501	121,975	0	0	0	0	0
Calpine	N-303-1	53,352	43,607	47,208	38,670	182,837					0	5,717	6,073	6,542	6,514	24,846	47,635	37,534	40,666	32,156	157,991
Pastoria	S-1549-1	82,952	83,873	84,795	84,794	336,414	76,791	77,643	78,496	78,498	311,428	6,161	6,230	6,299	6,296	24,986	0	0	0	0	0
Calpine	S-1665-1	8,440	8,546	8,621	8,621	34,228					0	8,440	8,546	8,621	8,621	34,228	0	0	0	0	0
<b>Totals</b>		<b>175,229</b>	<b>166,545</b>	<b>171,094</b>	<b>162,586</b>	<b>675,454</b>	<b>76,791</b>	<b>77,643</b>	<b>78,496</b>	<b>78,498</b>	<b>311,428</b>	<b>50,803</b>	<b>51,368</b>	<b>51,932</b>	<b>51,932</b>	<b>206,035</b>	<b>47,635</b>	<b>37,534</b>	<b>40,666</b>	<b>32,156</b>	<b>157,991</b>
<b>SOx ERCs</b>																					
Calpine	N-270-5	395,000	344,100	298,948	298,948	1,336,996	122,314	123,673	125,032	125,032	496,051	10,765	10,885	11,004	11,004	43,658	261,921	209,542	162,912	162,912	797,287
<b>Totals</b>		<b>395,000</b>	<b>344,100</b>	<b>298,948</b>	<b>298,948</b>	<b>1,336,996</b>	<b>122,314</b>	<b>123,673</b>	<b>125,032</b>	<b>125,032</b>	<b>496,051</b>	<b>10,765</b>	<b>10,885</b>	<b>11,004</b>	<b>11,004</b>	<b>43,658</b>	<b>261,921</b>	<b>209,542</b>	<b>162,912</b>	<b>162,912</b>	<b>797,287</b>
<b>PM10 ERCs</b>																					
Calpine	C-347-4	50,845	67,976	8,408	42,056	169,285					0	50,845	67,976	8,408	42,056	169,285	0	0	0	0	0
Calpine	C-448-4	1,067	1,067	1,067	1,067	4,268					0	1,067	1,067	1,067	1,067	4,268	0	0	0	0	0
Calpine	C-449-4	82	28	373	674	1,157					0	82	28	373	674	1,157	0	0	0	0	0
Calpine	N-208-4	715	8,177	6,581	715	16,188					0	715	8,177	6,581	715	16,188	0	0	0	0	0
Calpine	N-297-4	0	0	101	66,394	66,495					0	0	0	101	66,394	66,495	0	0	0	0	0
Calpine	S-1577-4	489	0	0	23,085	23,574					0	489	0	0	23,085	23,574	0	0	0	0	0
Calpine	S-1578-4	421	0	176	46,954	47,551					0	421	0	176	46,954	47,551	0	0	0	0	0
Calpine	S-1666-4	0	0	0	18,238	18,238					0	0	0	0	11,831	11,831	0	0	0	6,407	6,407
Calpine	S-1683-4	0	0	0	1,462	1,462					0	0	0	0	1,462	1,462	0	0	0	0	0
Calpine	S-1684-4	0	0	0	11,843	11,843					0	0	0	0	11,843	11,843	0	0	0	0	0
Calpine	S-1687-4	0	0	610	0	610					0	0	0	610	0	610	0	0	0	0	0
Calpine	S-1689-4	0	0	0	2,604	2,604					0	0	0	0	2,604	2,604	0	0	0	0	0
Calpine	S-1690-4	0	0	0	1,830	1,830					0	0	0	0	1,830	1,830	0	0	0	0	0
Calpine	S-1691-4	0	0	0	856	856					0	0	0	0	856	856	0	0	0	0	0
Calpine	S-1692-4	0	0	987	14,019	15,006					0	0	0	987	14,019	15,006	0	0	0	0	0
Calpine	S-1693-4	1,091	1,103	1,115	1,115	4,424					0	1,091	1,103	1,115	1,115	4,424	0	0	0	0	0
<b>Totals</b>		<b>54,710</b>	<b>78,351</b>	<b>19,418</b>	<b>232,912</b>	<b>385,391</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>54,710</b>	<b>78,351</b>	<b>19,418</b>	<b>226,505</b>	<b>378,984</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6,407</b>	<b>6,407</b>