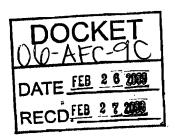


CGS09-L-0026 February 26, 2009

Mr. Dale Rundquist California Energy Commission 1516 Ninth Street, MS-2000 Sacramento, CA 95814

Mailing Address: Pacific Gas and Electric Company **Colusa Generating Station** P.O. Box 398 Maxwell, CA 95955 (530)934-9012



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Reference: Colusa Generating Station Project No. 5727461

Subject: Response to Data Requests 20-24 Related to PG&E's License Petition Amendment

Dear Mr. Rundquist:

Enclosed are Pacific Gas and Electric Company's responses to the California Energy Commission Staff's Data Requests 20-24 that were issued on February 2, 2009.

Should there be questions or comments concerning this matter, please contact Charles Price at (530)934-9007.

Regards,

Tom Miller Project Manager

TM\cml Enclosure

cc: File No. 3.6.2.1 Scott Galati, Galati & Blek LLP Steve Hill, Sierra Research Jerry Salamy, CH2MHill Andrea Grenier, Grenier & Associates

Colusa Generating Station (06-AFC-9C)

Data Responses

(Responses to Amendment 1 Data Requests 20-24)

Submitted to California Energy Commission

Submitted by Pacific Gas and Electric Company

February 2009

With Assistance from

CH2MHILL

2485 Natomas Park Drive Suite 600 Sacramento, CA 95833

Contents

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Introduction

Attached are Pacific Gas and Electric Company's responses to the California Energy Commission (CEC) staff's Data Requests (DRs) 20 through 24 related to PG&E's License Petition Amendment which was submitted to the CEC on August 14, 2008. DRs 20-24 relate to air quality. The attached responses are presented in the same order as the CEC staff presented them and are keyed to the Data Request numbers (20 through 24). New or revised graphics or tables are numbered in reference to the Data Request number. For example, the first table used in response to Data Request 20 would be numbered Table 20-1. The first figure used in response to Data Request 20 would be Figure 20-1, and so on.

Air Quality (20-24)

Background

The project owner provided a revised ERC list, specific to the emission reduction credits (ERCs) that will be used to mitigate the amended project emissions that both included new ERCs and eliminated the use of ERCs that were originally listed by the project owner. Staff's accounting of the offset package shows minor deficiencies in PM10 and SO2 credits that need to be rectified before staff can complete its analysis. Staff also believes that the offset package should be adjusted to provide the most defendable mitigation and that additional information is needed to fully describe the new ERCs being proposed by the project owner.

Data Request

20. Staff believes that the use of NOx ERCs for NOx offsetting, whenever available, should be used before using VOC for NOx interpollutant offsets. In fact staff's original finding that the mitigation package was acceptable was based on the amount of NOx ERCs being proposed. The project owner has decreased the total available NOx ERCs and has substantially increased the amount of VOC for NOx ERCs proposed. Staff notes that from the following ERCs from the original offset proposal, totaling 41.31 tons of NOx ERCs are no longer being proposed while other pollutants from these certificates are still being proposed for use, so staff believes that the project owner should be able to make these NOx ERCs available for use.

NOx ERC Certificates no longer proposed from certificates otherwise still being used: 06-01-02-03, 06-01-02-04, 06-01-02-05, 06-7-2001-1, 06-07-02-05, 06-06-11-01, and 06-07-02-01.

In addition three of the original certificates proposed, totaling 6.39 tons of NOx ERCs, are no longer proposed for use for any pollutants, but these four certificates are more than compensated for by the four new ERC certificates credits being proposed by the project owner.

Please provide a revised offset package to minimize the use of VOC for NOx interpollutant offsets, at least to the proportion of NOx ERCs originally proposed to offset the NOx emissions, or provide an updated analysis of the appropriateness of the interpollutant offset ratio.

Response: Pacific Gas and Electric Company (PG&E) has reviewed Staff's concerns and has revised the proposed emission reduction credit (ERC) proposal for the Colusa Generating Station (CGS) project. Attachment DR20-1 is a copy of an Authority to Construct permit application to the Colusa County Air Pollution Control District (APCD) requesting approval of this revised ERC proposal. Table 1 of Exhibit 2 of this application presents the ERCs being proposed for the CGS project. Specific highlights of Table 1 are incorporation most of the same ERC sources reviewed during the licensing of the project, use of the Highway 70 Stationary Source ERCs (for NO_x VOC, and PM₁₀), and the use of PG&E-owned stationary

source ERCs from a compressor station in Tehama County. PG&E's proposal assumes using approximately 102 tons of NO_x and 67.7 tons of PM₁₀ ERCs¹ from stationary sources.

PG&E expects the APCD to approve the ATC modification request by the middle of March and will forward a copy of any correspondence to the CEC when received.

Data Request

21. Given that staff believes that the use of stationary source ERCs, whenever available, is more definitive, and the California Air Resources Board (CARB) and Environmental Protection Agency (EPA) both support the use of stationary source ERCs, they should be used before using the agricultural burn cessation ERCs. Therefore, staff would want the project owner's offset proposal revised to include the Camptonville PM10 ERC source (certificate ERC-9937006-00T). Please provide a revised offset package to minimize the use of agricultural burn cessation ERCs and that also addresses Data Request 24.

Response: Please see the response to Data Request No. 20 above for a description of the current ERC proposal. Specifically, PG&E assume the use of the stationary source PM₁₀ ERCs from the Camptonville would have a reduced benefit to the local environment.

Data Request

22. In order to adequately update our analysis, and the Appendix A Table associated with condition of certification AQ-SC7, please identify the crops associated with each of the four new Emerald Farms agricultural burn cessation ERCs.

Response: The Emerald Farms agricultural burn ERCs are based on field used to grow rice and wheat crops.

Data Request

23. Staff's accounting of the project owner's annual SO₂ mitigation proposal shows a total of 31,329 lbs of ERCs proposed, while the revised annual emission limit in District Condition 26 is equivalent to 31,380 lbs, which means there is a deficit of 51 lbs to meet staff condition AQ-SC7 requirements. Please identify ERCs or revised annual emission limit proposed to cover this minor mitigation requirement deficit.

Response: As noted in the response to Data Request No. 20, which shows PG&E is providing a total of 31,400.9 pounds of SO₂ ERCs.

Data Request

24. Staff's accounting of the project owner's annual PM10 mitigation proposal shows a total of 77.89 tons of PM10 ERCs proposed after application of the applicable distance ratios, while the revised annual emission limit in District Condition would require 78.36 tons (103.36 tons emissions minus 25 ton offset threshold) of PM10 offsets per District rules, which means that there is a deficit of 0.47 tons to meet District offset requirements (please note that staff believes that the District's latest

¹ These values do not include any distance ratios and are face values from the ERC certificates.

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version of Condition 27 has an erroneous PM10 value). Please identify ERCs or revised annual emission limits proposed to cover this minor deficit.

Response: The response to Data Request No. 20 shows that PG&E is providing 78.36 tons of PM₁₀ ERCs after incorporating the required District distance ratios.



Colusa Generating Station Jon Maring Sr. Director – Fossil Plant Construction Power Generation P.O. Box 398 Maxwell, CA 95955

630-934-9012 Internal: 334-9012 Fax: 630-934-9023

CGS09-L-0019 File 3.1.5.1

February 13, 2009

Harry A. Krug Director of Air Quality Standards Colusa County Air Pollution Control District 100 Sunrise Boulevard, Suite A-3 Colusa, California 95932-3246

Reference: Colusa Generating Station Project No. 5727461

Subject: Request to Modify Determination of Compliance

Dear Mr. Krug:

Based on comments received from the California Energy Commission (CEC) on the proposed Emission Reduction Credit (ERC) package submitted to the District, Pacific Gas and Electric Company (PG&E) has revised its ERC package for the Colusa Generating Station (CGS).

Exhibit 1 contains a completed Authority to Construction Application and a check for the amount of \$180.00. Exhibit 2 presents the list of ERC sources and a demonstration that sufficient ERCs are held by PG&E to satisfy the District's and CEC's mitigation requirements.

Should there be questions or comments concerning this matter, please call Jerry Salamy of CH2M HILL at (916)286-0207 or myself to discuss.

Sincerely, Jon Marin

JM\cml Exhibits

cc: File No. 3.1,5.1 Dale Rundquist, CEC Shaheerah Kelly, US EPA Region IX

COLUSA COUNTY AIR POLLUTION CONTROL DISTRICT

100 Sunrise Blvd., Suite F, Colusa, California 95932, Phone: (530) 458-0590, FAX (530) 458-5744

APPLICATION FOR AUTHORITY TO CONSTRUCT

Please provide all pertinent facility information requested in the application checklist attached. Incomplete applications are not acceptable. Once approved, this authority to construct authorizes facility operation from the start-up date for a maximum period of 90 days until the permit to operate is issued. Please notify the District by letter when you are ready to operate so that we may verify that the facility was constructed in accordance with the plans submitted to the District and observe the equipment in operation before we issue a permit to operate. This form must be received and accepted, and application fees paid, prior to start of operation.

 PERMIT TO BE ISSUED TO:
 Pacific Gas and Electric Company

 MAILING ADDRESS:
 5025 Delevan Road, Maxwell, CA 95955

 LOCATION OF FACILITY:
 Legal Location: Sec 35 Twn 18N Rge 4W

 TYPE OF FACILITY:
 SUMMARY LIST OF PROPOSED EQUIPMENT CHANGES (attach permit information checklist):

 Revision to the emission reduction credit package and Condition 26.

CONSTRUCTION SCHEDULE - START: Se	ptember 2008	COMPLETE:	October 2010
SIGNATURE OF RESPONSIBLE MEMBER OF	FIRM:	n Ma 2/13/07	7
	STRICT USE ONLY	· _	· · · · · · · · · · · · · · · · · · ·
PERMIT: Accepted D Denied D			
PERMIT NUMBER:		APPLICA	TION FEE: \$155.00
PERMIT CONDITIONS (also see attachment): In the absence of specific permit conditions to a capacities, and hours of operation described in the p All equipment, including process and pollution abs approved permit to operate does not guarantee th control regulations.	permit application wi atement equipment, m	ll be considered manust be properly ma	aximum allowable limits. intained at all times. The
SIGNED:		DATE:	

06/06/01

Harry A. Krug Director of Air Quality Standards

Exhibit 2

Revisions to the Offset Pool

- Subsequent to the approval of the original offset package, negotiations with Emerald Farms resulted in acquisition of significant ERCs. These ERCs come from curtailment of agricultural burning on property adjacent to the Project site. Applicant requests that these ERCs be added to the pool from which offsets may be drawn to offset emissions from the Project.
- In reliance upon the agencies' approval of the VOC:NOx offset ratio of 1.4:1, and the agencies' analysis which indicated that this ratio results in an environmental benefit, the applicant has finalized its purchases from the original pool. In finalizing these purchases, some options were exercised, while others were allowed to expire unused. At this time, there are no options left to exercise. Applicant requests that those ERCs for which offsets have expired be removed from the pool from which offsets may be drawn, because they are no longer under applicant's control.
- Some of the offsets that were allowed to expire were direct NOx emissions. In
 order to meet new CEC requirements, applicant proposes to add sufficient NOx
 offsets from PG&E's Tehama ERC holdings to bring total direct NOx offsets up
 to the levels contained in the original package.
- There are also small shortfalls in PM10 and SO2 offsets. Applicant proposes to add sufficient offsets from PG&E's Tehama ERC holdings to meet those requirements.

The following tables demonstrate compliance with all offset requirements using the new offset pool.

Table 1 lists all of the offsets in the proposed pool. Because more VOCs were purchased than needed, some of those offsets will be retained by PG&E. The retained offsets will be the entire ERC balance from a number of certificates, plus a portion of the Highway 70 ERCs.

Table 2 summarizes the allocation of offsets from the pool (offsets to be surrendered, offsets to be retained).

Table 3 demonstrates that the surrendered offsets will meet both CEC and District requirements.

- Total offsets for each ozone or particulate precursor are equal to or greater than the Project emissions, on an annual basis (CEQA mitigation requirement);
- Total direct NOx offsets are equal to or greater than the direct NOx offsets in the original pool (CEC Staff requirement);
- Total offsets for VOC, NOx, and PM10, after adjustment for distance, are greater than or equal to the project emissions, less 25 TPY allowance, on an annual basis.
- Quarterly Offsets for VOC, NOx, and PM10 are each greater than or equal to the quarterly project emissions, less a portion of the 25 TPY allowance.

Compliance with District offset requirements results in surplus CEQA mitigation for VOC and PM10; compliance with CEQA mitigation requirements for SO2 results in surrender of more offsets than required under District regulations.

Table 1 PG&E Credits Available (Offset Pool)

PG&E Credits	Available ((Offset Pool)				Ánnual	Adjusted f	Annual				
	Pollutant	Q1 (Њ)	Q2 (Ib)	Q3 (Ib)	Q4 (1b)	(lbs)	Pollutant	Q1 (lb)	Q2 (lb)	Q3 (lb)	Q4 (lb)	(lbs)
Davis Ranches	NOx	0.0	0.0	0.0	0.0	0.0	NOx	0.0	0.0	0.0	0.0	0.0
06-7-2001-1	VOC	0.0	0.0	0.0		0.0	voc	0.0	0.0	0.0	0.0	0.0
>20 <50 miles	PM10	15,791.4	12,735.0	5,094.0	17,319.6	50,940.0	PM10	10,527.6	8,490.0	3,396.0	11,546.4	33,960.0
0.667	SO2	2,752.2	2,223.6	889.4	3,024.1	8,889.3	SO2	1,834.8	1,482.4	592.9	2,016.1	5,926.2
Jon Chaney	NOx	2,104.1	1,696.9	678.5	2,307.8	6,787.3	NOx	1,753.4	1,414.1	565.4	1,923.2	5,656.1
06-01-02-01	VOC	0.0	0.0	0.0		0.0	voc	0.0	0.0	0.0	0.0	0.0
<20 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0
0.833	SC2	445.1	359.0	143.6	488.2	1,435.9	SO2	370.9	299.2	119.7	406.8	1,196.6
Gunnersfield ENT	NOx	5,616.0	4,529.0	1,811.6	6,159.4		NOx	4,680.0	3,774.2	1,509.7	5,132.8	15,096.7
06-01-02-02	voc	0.0	0.0	0.0		0.0	voc	0.0	0.0	0.0	0.0	0.0
<20 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0
0.833	SO2	1,188.0	958.1	383,2	1,303.0	3,832.3	SO2	990.0	798.4	319.3	1,085.8	3,193.6
Baber Maxwell Ranch	NOx	0.0	0.0	0.0	0.0	0.0	NOx	0.0	0.0	0.0	. 0.0	0.0
06-01-02-03	voc	0.0	0.0	0.0	0.0	0.0	voc	0.0	0.0	0.0	0.0	0.0
<20 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0
0.833	SO2	212.5	171 <i>A</i>	68.6		685.6	SO2	177.1	142.8	57.2	194.3	
Baber Lewis	.502		1/1/4	00.0		000.0	302		144.0	5/2	1945	571.3
Ranch	NOx	0.0	0.0	0.0	0.0	0.0	NOx	0.0	0.0	0.0	0.0	0.0
06-01-02-04	VOC	0.0	0.0	0.0		0.0	voc	0.0	0.0	0.0	0.0	0.0
<20 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0
0.833	·SO2	508.1	409.7	163.9		1,638.9	SO2	423.4	341.4	136.6	464.3	1,365.8
Lewis Ranch Baber Estate	NOx	0.0	0.0	0.0	0.0	0.0	NOx	0.0	0.0	0.0	0.0	0.0
06-01-02-05	VOC	0.0	0.0	0.0		0.0	voc	0.0	0.0	0.0	0.0	0.0
<20 miles	PM10	. 0.0	0.0	0.0	<u>.0</u>	0.0	PM10	0.0	0.0	0.0	0.0	0.0
0.833	SO2	179.5	144.8	57.9	196.9	579.1	SO2	149.6	120.7	48.3	164.1	482.6
Lewis Ranch Pixie Baber	NOx	809.0	625.5	261.0	867.3	2,582.8	NOx	674.2	521.3	217.5	739.4	2,152.3
06-01-02-05.2	voc	0.0	0.0	0.0		0.0	voc	0.0	0.0	0.0	0.0	0.0

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Table 1 DC & Conditor A minilable (Office De al)

PG&E Credits	Available ((Offset Pool)				Annual	Adjusted f	or Distance				A	
	Pollutant	Q1 (lb)	Q2 (lb)	Q3 (lb)	Q4 (lb)	(lbs)	Pollutant	Q1 (Ib)	Q2 (Ib)	Q3 (Ib)	Q4 (lb)	Annual (lbs)	
<20 miles	PM10	980.2	790.5	316.2	1,075.0	3,161.9	PM10	816.8	658.8	263.5		2,634.9	
0.833	SO2	171.1	138.0	55.2	187.7	552.0	SO2	142.6	115.0	46.0	156.4	460.0	
Baber Garrette													
Ranch	NOx	587.8	474.1	189.6	644.7	1,896.2	NOx	489.8	395.1	158.0	537.3	1,580.2	1
06-01-02-06	VOC	531.3	428.5	171.4	582.7	<u>1,713.9</u>		442.8	357.1	142.8	485.6	1,428.3	Retained
<20 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0	
0.833	502	0.0	0.0	0.0	0.0	0.0	502	0.0	0.0	0.0	0.0	0.0	<u> </u>
Baber Webb Ranch	NOx	<u>1,577.2</u>	1,271.9	508.8	1,729.5	5,087.7	NOx	1,314.3	1,059.9	424.0	1,441.5	4,239.8	
06-01-02-09	VOC	1,425.5	1,149.6	459.9	1,563.5	4,598.5	voc	1,187.9	958.0	383.3	1,302.9	3,832.1	Retained
<20 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0]
0.833	SO2	0.0	0.0	0.0	0.0	0.0	SO2	.0.0	0.0	0.0	0.0	0.0	
Jim LaGrande	NOx	1,319.0	1,148.2	567.0	1,448.9	4,483.1	NOx	1,099.2	956.8	472,5	1,207.4	3,735.9	
06-01-03-01	voc	1,192.2	1,110.7	634.7	1,311.5	4,249.1	VOC	993.5	925.6	528.9	1,092.9	3,540.9	Retained
<20 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0	
0.833	SO2	0.0	0.0	0.0	0.0	0.0	502	0.0	0.0	0.0	0.0	0.0	
Jerry Maltby	NOx	0.0	0.0	0.0	0.0	0.0	NOx	0.0	0.0	0.0	0.0	0.0	
06-06-11-01	VOC	4,087.7	3,296.5	1,318.6	4,483.3	13,186.1	voc	3,406.4	2,747.1	1,098.8	3,736.1	10,988.4	Retained
<20 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	مە	0.0	1
0.833	SO2	956.7	771.5	308.6	1,049.3	3,086.1	502	797.3	642.9	257.2	874.4	2,571.8	
Tuttle Gordon Ranch	NOx	0.0	0.0	0.0	0.0	0.0	NOx	0.0	0.0	0.0	0.0	۵.0	
06-07-02-01	VOC	0.0	0.0	0.0	0.0	0.0	VOC	0.0	0.0	0.0	0.0	0.0	1
<20 miles	PM10	0.0	0.0	<u>0.0</u>	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0	1
0.833	502	336.8	306.0	166.3	370.3	1,179.4	SO2	280.7	255.0	138.6	308.6	982.8	
Tuttle Helphenstine													1
Ranch	NOx	0.0	85.8	143.8	23	231.9	NOx	0.0	71.5	119.8	1.9	193.3	
06-07-02-02	voc	0.0	151.7	254.2	4.1	410.0	voc	0.0	126.4	211.8	3.4	341.7	Retained
<20 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0	

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Table 1

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PG&E Credits Available (Offset Pool)

PG&E Credits	Available ((Offset Pool)				Annual	Adjusted f	or Distance				Annual	
	Pollutant	Q1 (b)	Q2 (Ib)	Q3 (Ib)	Q4 (lb)	(lbs)	Pollutant	Q1 (Ib)	Q2 (lb)	Q3 (Ib)	Q4 (lb)	(Ibs)	_
0.833	SO2	0.0	0.0	0.0	0.0	0.0	SO2	0.0	0.0	0.0	0.0	0.0	
Charles: Tuttle	NOx	1.6	118.8	352.8	3.2	<u>4</u> 76.4	NOx	<u>1.3</u>	· 99.0	294.0	2.7	397.0	
06-07-02-03	VOC	5.1	210.0	857.5	5.7	1,078.3	VOC	4.3	175.0	714.6	4.8	<u>898</u> .6	Retained
<20 miles	PM10	0.0	0.0	0.0	. 0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0	
0.833	.SO2	0.2	24.9	62.2	0.7	\$8.0	502	0.2	20.8	51.8	0.6	73.3	
Tuttle Williams Ranch	NOx	0.0	60.9	102.1	1.6	164.6	NOx	0.0	50.8	85.1	. 1.3	137.2	
06-07-02-04	VOC	0.0	107.7	180.4	2.9	291.0	voc	0.0	89.8	150.3	2.4	242.5	Retained
<20 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0	
0.833	SO2	0.0	12.8	21.4	0.3	34.5	SO2	0.0	10.7	17.8	0.3	28.8	
Jack De Wit	NOx	0.0	0.0	0.0	0.0	0.0	NOx	0.0	0.0	0.0	0.0	0.0	
06-07-02-05	voc	1,033.1	833.2	333.3	1,133.1	3,332.7	voc	860.9	694.3	277.8	944.3	2,777.3	Retained
<20 miles	PM10	0.0	0.0	0.0	Ö.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0	
0.833	SO2	241.8	195.0	. 78.0	265.2	780.0	SO2	201.5	162:5	65.0	221.0	650.0	
Highway 70 Industrial Park	NOx	35,000.0	35,000.0	35,000.0	35,000.0	140,000.0	NOx	23,333.3	23,333.3	23,333.3	23,333.3	93,333.3	
08-05-36,37, 39 >20 <50	voc	87,500.0.	87,500.0	87,500.0	87,500.0	350,000.0	voc	58,333.3	58,333.3	58,333.3	58,333.3	233,333.3	Partially retained
>2) <50 miles	. PM10	33,500.0	33,500.0	33,500.0	33,500.0	134,000.0	PM10	22,333.3	22,333.3	22,333.3	22,333.3	89,333.3	
0.667	SO2	0.0	0.0	0.0	0.0	0.0	SO2	0.0	0.0	0.0	0.0	0.0	
William Payne	NOx	1,701.0	1,874.0	3,033.0	1,901.0	8,509.0	NOx	1,134_0	1,249.3	2,022.0	1,267.3	5,672.7	
2001-26	VOC	1,538.0	2,362.0	8,034.0	1,718.0	13,652.0	voc	1,025.3	1,574.7	5,356.0	1,145.3	9,101.3	Retained
>20 <50 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0	
0.667	502	360.0	395.0	489.0	402.0	1,646.0	SO2	240.0	263.3	326.0	268.0	1,097.3	
Baber Yuba County Ranch	NOx	420.0	707.0	641.0	501.0	2,269.0	NOx	210.0	353.5	320.5	250.5	1,134.5	
9937006-00T	VOC	199.0	335.0	304.0	238.0	1,076.0	voc	99.5	167.5	152.0		538.0	Retained
>50 miles	PM10	0.0	0.0	0.0	0.0	0.0	PM10	0.0	0.0	0.0	0.0	0.0	J

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Table 1

PG&E Credits Available (Offset Pool)

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PG&E Credits	Available (C	Offset Pool)				Annual	Adjusted f	or Distance				Annual	
	Pollutant	Q1 (Ib)	Q2 (Ib)	Q3 (lb)	Q4 (D)	(Ibs)	Pollutant	Q1 (Ib)	Q2 (Ib)	Q3 (Ib)	Q4 (lb)	(Ibs)	
0.500	SO2	166.0	279.0	254.0	198.0	\$97.0	SO2	83.0	139.5	127.0	99.0	448.5	
Emerald Farms	NOx	3,274.7	2,981.1	1,626.4	3,600.9	11,483.1	NOx	2,728.9	2,484.3	1,355.3	3,000.8	9,569.3	
06-01-08-01	VOC	2,959.9	2,988.2	1,962.3	3,262.5	11,172.9	voc	2,466.6	2,490.2	1,635.3	2,718.8	9,310.8	Retained
<20 miles	PM10	3,967.5	4,038.2	2,685.0	4,374.1	15,064.8	PM10	3,306.3	3,365.2	2,237.5	3,645.1	12,554.0	
0.833	502	692.7	629.9	342.8	761.7	2,427.1	SO2	577.3	524.9	285.7	634.8	2,022.6	
Emerald Farms	NOx	465.9	375.7	150.3	510.9	1,502.8	NOx		313.1	125.3	425.8	1,252.3	
06-01-08-02	voc	421.1	339.6	195.8	461.8	1,418.3	VOC	350.9	283.0	163.2	384.8	1,181.9	Retained
<20 miles	PM10	564.4	455.2	182.1	619.0	1,820.7	PM10	470.3	379.3	151.8	515.8	1,517.3	
0.833	502	98.5	79.5	31.8	108.1	317.9	SO2	82.1	66.3	26.5	90.1	264.9	
Emerald Farms	NOx	4,136.6	3,338.0	1,334.4	4,536.9	13,345.9	NOx	3,447.2	2,781.7	1,112.0	3,780.8	11,121.6	
06-01-08-03	voc	3,738.9	3,015.2	1,208.1	4,100.7	12,062.9	voc	3,115.8	2,512,7	1,006.8	3,417.3	10,052.4	Retained
<20 miles	PM10	5,011.7	4,041.7	1,616.7	5A98.7	16,168.8	PM10	4,176.4	3,368.1	1,347.3	4,582.3	13,474.0	
0.833	SO2	875.1	705.7	282.3	959.7	2,822.8	SC2	729.3	588.1	235.3	799.8	2,352.3	
Emerald Farms	NOx	576.1	542.2	315.9	634.0	2,068-2	NOx	480.1	451.8	263.3	528.3	1,723.5	
06-01-08-04	VOC	520.7	557.1	397.9	574.8	2,050.5	voc	433.9	464.3	331.6	479.0	1,708.8	Retained
<20 miles	PM10	698.0	754.3	545.8	770.7	2,768.8	PM10	581.7	628.6	454.8	642.3	2,307.3	
0.833	SO2	121.9	114.5	66.5	134.1	437.0	SO2	101.6	95.4	55.4	111.8	364.2	
PGE credits (Tehama)	NOx	15,995.9	15,995.9	15,995.9	15,995.9	63,983.6	NOx	10,663.9	10,663.9	10,663.9	10,663.9	42,655.7	
()	voc					0.0	voc	0.0	0.0	0.0	0.0	0.0	
>20 <50 miles	PM10	352.2	352.2	352.2	352.2	1,408.8	PM10	234.8	234.8	234.8	234.8	939.2	1
0.667	502	• 18.0	18.0	18.0	18.0	72.0	502	12.0	12.0	12.0	12.0	48.0	1

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Table 2. Summary of ERC Pool

Pool from which offsets will be drawn

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total, Ib

NOx	73,584.9	70,825.0	62,712.1	75,865.6	282,987.6	NOX	52,397.9	49,973.5	43,041.6	54,238.2	199,651.2
VOC	105,152.5	104,385.0	103,812.1	106,942.6	420,292.2	voc	72,721.1	71,898.8	70,486.4	74,169.8	289,276.2
PM10	60,865.4	56,667.1	44,292.0	63,509.3	225,333.8	PM10	42,447,2	39,458.0	30,419.0	44,395.8	156,720.0
SO2	9,324.2	7,936.4	3,882.7	10,257.6	31,400.9	SO2	7,193.1	6,081.2	2,918.2	7,908.0	24,100.5

	ERCs retain	ned by PG&E	(from specifi	ed ERCs, plus		7,723.9	Ib VOC/qu	uarter from H	Fighway 70)	,		
total, Ib	NOx						NOx					
	voc	25,376.4	24,608.9	24,036.0	27,166.5	101,187.8	voc	19,537.0	18,714.8	17,302.3	20,985.8	76,539.9
	PM10	· · ·					PM10					
	SO2						SO2		_			
						Annual						Annual
	Pollutant	Q1 (Tb)	Q2 (lb)	Q3 (lb)	Q4 (lb)	(lbs)	Pollutant	Q1 (Ib)	Q2 (Ib)	Q3 (lb)	Q4 (lb)	(Ibs)
	To Be Surr	endered										
total, Ib	NOx	73,584.9	70,825.0	62,712.1	75,865.6	282,987.6	NOx	52,397.9	49,973.5	43,041.6	54,238.2	199,651.2
	VOC	79,776.1	79,776.1	79,776.1	79,776.1	319,104.4	VOC	53,184.1	53,184.1	53,184.1	53,184.1	212,736.3
	PM10	60,865.4	56,667.1	44,292.0	63,509,3	225,333.8	PM10	42,447.2	39,458.0	30,419.0	44,395.8	156,720.0
	SO2	9,324.2	7,936.4	3,882.7	10,257.6	31,400.9	SO2	7,193.1	6,081.2	2,918.2	7,908.0	24,100.5

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Total offsets,		<u> </u>					<u> </u>		<u> </u>			
ton	NOx	36.79	35.41	31.36	37.93	141.49	NOx	26.20	24.99	21.52	27.12	99.83
	voc	39.89	39.89	39.89	39.89	159.55	voc	26.59	26.59	<u> 26.59</u>	26.59	106.37
	PM10	30.43	28.33	22.15	31.75	112.67	PM10	21.22	19.73	15.21	22.20	78.36
	502	4.66	3.97	1.94	5.13	15.70	502	3.60	_3.04	1.46	3.95	12.05
		· ·					·					
VOC for NOx, Ton	NOx	8.77	8.17	19.94	6.34	43.22	NOx	14.78	14.01	18.53	12.57	59.88
	VOC	(12.27)	(11.43)	(27.92)	(8.87)	(60.50)	VOC	(20.69)	(19.61)	(25.94)	(17.59)	(83.84)
	PM10						PM10				<u>}</u>	
	SO2						502			-		
		<u></u>					L	 Q1	Q2	 Q3	Q4	Annual
Offset												
obligation, ton	NOx	45.56	43.58	51.30	44.27	184.70	NOx	45.56	43.58	51.30	44.27	159.71
	VOC	12.30		11.84	11.76	47.54	VOC	45.56	45.58	<u>51.50</u>	<u>44.2/</u>	22.53
	PMIO	25.54	25.78	26.02	26.02	103.36	PM10	25.54	25.78	26.02	26.02	78.36
	502	4.07	3.85	3.89	3.89	15.69	SO2	20078			20.02.	0.00
		4.0/				15.69	302		1			0.00
Allocation of 25 TPY	[
allowance	NOx	45.56	43.58	51.30	44.27	184.71	NOx	(4.58)	(4.58)	(11.25)	(4.58)	(25.00)
	VOC	12.30	11.63	11.84	11.76	47.53	voc	(6.40)	(4.65)	(11.19)	(2.76)	(25.00)
	PM10	25.54	25.78	26.02	26.02	103.36	PM10	(4.32)	(6.05)	(10.81)	(3.82)	(25.00)
	502	4.07	3.85	3.89	3.89	15.70	SO2					0.00
Excess (shortfall),							i.					
ton -	NOx	0.00	0.00	0.00	0.00	0.00	NOx	0.00	0.00	0.00	0.00	0.00
	voc	15.31	16.82	0.13	19.26	51.52	VOC	0.00	0.00	(0.00)	0.00	(0.00)
	PM10	4.89	2.55	(3.87)	5.73	9.31	PM10	0.00	0.00	(0.00)	0.00	(0.00)
	SO2 -	0.59	0.12	(1.95)	1.24	0.00	SO2	3.60	3.04	1.46	3.95	12.05

Table 3. Demonstration of Compliance

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