TETRA TECH EC, INC.

DOCKET	
11-AFC-3	
DATE	APR 03 2012
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April 3, 2012

Mr. Eric Solorio
California Energy Commission
Docket No. 11-AFC-3
1516 9th St.
Sacramento, CA 95814

Cogentrix Quail Brush Generation Project - Docket Number 11-AFC-3, Minor Changes to the Quail Brush Power Project Air Quality Emissions and Impact Analysis

Docket Clerk:

Pursuant to the provisions of Title 20, California Code of Regulation, and on behalf of Quail Brush Genco, LLC, a wholly owned subsidiary of Cogentrix Energy, LLC, Tetra Tech hereby submits the Minor Changes to the Quail Brush Power Project Air Quality Emissions and Impact Analysis. This information is pursuant to a technical conference call with the San Diego APCD, CEC, and Aerowest on March 20, 2012. The Quail Brush generation Project is a 100 megawatt natural gas fired electric generation peaking facility to be located in the City of San Diego, California.

If you have any questions regarding this submittal, please contact Rick Neff at (704) 525-3800 or me at (303) 980.3653.

Sincerely,

Constance E. Farmer
Project Manager/Tetra Tech

cc: Lori Ziebart, Cogentrix
John Collins, Cogentrix
Rick Neff, Cogentrix
Proof of Service List

MEMO

To: Mr. Eric Solorio, Project Manager-CEC
Mr. Gerry Bemis, ARS-CEC
Mr. Joseph Hughes, ARE-CEC

From: Richard Booth, AEROWEST

Date: April 2, 2012

Re: Quail Brush Power Project

Gentlemen,

Please note the following minor changes to the Quail Brush Power Project air quality emissions and impact analysis. These changes are in response to issues identified by the San Diego APCD staff on March 20, 2012, and Mr. Rick Tyler (CEC staff) on March 20, 2012.

1. The commissioning emissions in Appendix F.1-Table F.1-11, have been revised at the request of the San Diego APCD. The revisions are essentially as follows:

    a. The ppm data at the top of the table (F.1-11, attached) is from the East Shore project and is applicable to the 20V34SG engine rated at ~73 mmtbu/hr. We have removed the lb/hr values as these were for the East Shore project and they were not used in our calculations, i.e., we only used the ppm values. This change clears up some confusion in the table.
    b. The multiplier factors for PM10/2.5 as derived from the East Shore data were used to scale up our engine specific PM emissions data as provided by Wartsila. The previous values were for the East Shore project, and since the QBPP engines have a lower steady state PM emissions rate, the change updates these values.
    c. The SO2 emissions rates were scaled down from the steady state rate of 0.256 lbs/hr based on the following assumptions, (1) the engines use less fuel at lower loads so the fuel bound SO2 contribution is less, and (2) the engines are running slower, so the lube oil contribution is less as well (based on load fractions).
    d. The worst case hourly emissions are presented in the revised table. The hourly values for NOx and CO did NOT change. Secondly, only NOx and CO commissioning emissions were modeled, and neither of these pollutants have daily standards, just hourly (1 hour for NOx and 1 and 8 hours for CO), therefore the NOx and CO commissioning modeling text has not changed.
    e. The total commissioning period emissions are now shown on page 2 of the calculations, and rely upon the commissioning assumptions in the AFC text, with the following exceptions as revised based on new commissioning scheduling data.
        i. For the initial engine tuning scenario, QBPP used an average of 20 days, at 8 hrs/day, instead of the maximum 30 days, which was our initial estimate.

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ii. For the final tuning scenario, QBPP used 20 days at 10 hrs/day, instead of 30 days, at 12 hrs/day, which was our initial estimate.

2. The GHG emissions as presented in Appendix F.6, have been slightly revised to address the following:
   a. SF6 emissions have decreased due to the use of a smaller breaker on the proposed 138kV line versus the previous breaker on the 238kV line. The new breaker holds only 75 lbs of SF6 versus the previous breaker which was rated at 290 lbs of SF6. The CO2e emissions from this process decrease from 31.5 metric tons CO2e per year to a level of 8.15 metric tons CO2e per year. *Please note that EPA Region 9 may be requiring a leak rate of 0.5% as BACT which will further lower the estimated potential emissions of SF6.*
   b. At the request of the CEC (Mr. Rick Tyler), QBPP has added a GHG emissions estimate for CO2 generated from the in-stack decomposition of urea used in the SCR system. The urea proposed for use is a 40% solution, delivered in liquid form to the plant site. The facility is forecasting an annual use rate of approximately 362,780 gallons per year. Urea will be injected into the engine exhaust downstream of the engine and upstream of the SCR catalyst. Static mixing vanes in the exhaust duct will mix the urea into the exhaust flow prior to reaching the catalyst bed. The maximum predicted CO2 contribution from the urea decomposition is based on the following:

i. Assuming 8.5 gal/hr (per engine) of 40% urea solution, with a density of 9.28 #/gal of solution, results in 78.9 lb/hr of solution and 31.6 lb of urea.

ii. Urea is $(NH_2)_2CO$ with a molecular weight of 60. Therefore, there is (12/60) x 31.6 lb/hr of carbon or 6.32 lb carbon/hr. This equates to (44/12) x 6.32 or 23.2 lb/hr of CO_2 per engine.

iii. Engine use rates are 4032 hours per year, with 3800 hrs/yr in steady state mode in which urea will be injected. Total engine facility hours will be (3800)(11) = 41,800.

iv. 41,800 hours per year at 23.2 lbs CO2 per hour, results in a CO2 emissions rate of 484.9 tons CO2/yr. Converting this value to metric tons results in a value of 440.8 metric tons of CO2/yr. No methane or N2O emissions are predicted from this decomposition process.

   c. Incorporating these reductions and increases, results in a revised facility total of GHG emissions of approximately 201,587 metric tons CO2e/year (221,746 short tons CO2e/year). These revisions result in a 0.2% change in emissions. The revisions do not impact any of the GHG BACT analyses or determinations.

   d. The air quality summary and background air quality tables have been revised to add in the recently available 2011 data obtained from the EPA AIRS database, as well as making some corrections to the analysis of the values. Revised Table 4.7-17 is presented below. This table presents the revised data as well as the revised background values, and analysis comments. As a result of these revisions, several tables in the AFC/District ATC application have changed. These tables are included herein:

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Table 4.7-17 Air quality Summary for Most Recent 4 Years (Revised 3-26-12)

Pollutant	Site	Averaging Time	2008	2009	2010	2011	Background	Comments	
							Value, ug/m3		
Ozone, ppm	El Cajon	1 Hr	0.107	0.098	0.102	0.105			
	Del Mar		0.097	0.097	0.085	0.091			
	Escondido		0.116	0.093	0.105	0.098			
	Alpine		0.139	0.119	0.105	0.114			
	Overland		0.1	0.105	0.1	0.097	210 ug/m3	high value most recent 3 years	
Ozone, ppm	El Cajon	8 Hr	0.093	0.082	0.078	0.086			
	Del Mar		0.078	0.084	0.072	0.074			
	Escondido		0.098	0.08	0.084	0.089			
	Alpine		0.109	0.097	0.088	0.093			
	Overland		0.093	0.082	0.073	0.086	168.6 ug/m3	high value most recent 3 years	
PM10, ug/m3	El Cajon	24 Hr State	40	55	41	-			
	Escondido		82	73	42	-			
	Overland		41	50	33	-	50 ug/m3	3 yr data high	
PM10, ug/m3	El Cajon	24 Hr Fed	40	46	36	41			
	Escondido		45	47	35	31			
	Overland		39	41	32	37	41 ug/m3	high 2nd high most recent 3 years	
PM10, ug/m3	El Cajon	Annual AM	27	25	21	-			
	Escondido		25	25	21	-			
	Overland		24	25	19	-	25 ug/m3	3 yr data high	
PM2.5, ug/m3	El Cajon	24 Hr Fed	30	23	23	22			
	Escondido		28	25	22	22			
	Overland		22	22	16	16	18.8 ug/m3	3 yr avg of 98th percentiles	
PM2.5, ug/m3	El Cajon	Annual AM State	14.9	12.2	10.8	-			
	Escondido		12.4	-	-	-			
	Overland		11.4	10.5	8.7	9	10.5 ug/m3	high value most recent 3 years	
PM2.5, ug/m3	El Cajon	Annual AM Fed	13.3	12.1	10.8				
	Escondido			13.4	12.2	-			
	Overland		11.4	10.5	8.7	9	10.5 ug/m3	high value most recent 3 years	
CO, ppm	Escondido	8 Hr	2.81	3.24	2.46	2	3600 ug/m3	high value most recent 3 years	
CO, ppm	Escondido	1 Hr	6	4	4	4	4600 ug/m3	high value most recent 3 years	

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CO, ppm	Escondido	8 Hr Fed	-	3	2	2	3333 ug/m3	high 2nd high most recent 3 years	
CO, ppm	Escondido	1 Hr Fed	-	4	4	3	4600 ug/m3	high 2nd high most recent 3 years	
NO2, ppm	El Cajon	1 Hr State	0.063	0.054	0.058	-			
	Overland		0.077	0.06	0.073	0.073	137.5 ug/m3	3 yr data high	
	Escondido		0.081	0.073	0.064	-			
	Alpine		0.047	0.056	0.052	-			
NO2, ppm	El Cajon	1 Hr Fed	0.055	0.048	0.047	0.044			
	Overland		0.06	0.055	0.056	0.051	101.5 ug/m3	recent 3yr avg of 98th percentiles	
	Escondido		0.071	0.057	0.053	0.049			
	Alpine		0.037	0.036	0.037	0.03			
NO2, ppm	El Cajon	Annual AM	0.016	0.014	0.013	-			
	Overland		0.014	0.014	0.013	-	26.4 ug/m3	3 yr data high	
	Escondido		0.018	0.016	0.014	-			
	Alpine		0.008	0.008	0.007	-			
SO2, ppm	Beardsley	Annual AM	0.003	0.001	0	-	3.4 ug/m3	3 yr data high	
	Beardsley	24 Hr	0.007	0.006	0.002	0.003	15.8 ug/m3	high value most recent 3 years	
	Beardsley	24 Hr Fed	0.007	0.005	0.002	0.002	13.1 ug/m3	high 2nd high most recent 3 years	
	Beardsley	1 Hr	-	0.021	0.008	0.008	55 ug/m3	high value most recent 3 years	

References:

CARB-ADAM website, data for year 2008-2010, March 2012.

EPA-AIRS database website, data for years 2008-2011, March 2012.

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Table 4.7-18 Estimated Background Air Quality Values (Revised 3-26-12)

Pollutant and Averaging Time	Background Value
Ozone – 1 Hour	210 µg/m^3
Ozone – 8 Hour	168.6 µg/m^3
PM_{10} – 24 Hour	50 µg/m^3
PM_{10} – 24 Hour Fed	41 µg/m^3
PM_{10} – Annual	25 µg/m3
$PM_{2.5}$ – 24 Hour Fed	18.8 µg/m^3
$PM_{2.5}$ – Annual Fed	10.5 µg/m^3
$PM_{2.5}$ – Annual State	10.5 µg/m^3
CO – 1 Hour State	4600 µg/m^3
CO – 8 Hour State	3600 µg/m^3
CO – 1 Hour Fed	4600 µg/m^3
CO – 8 Hour Fed	3333 µg/m^3
NO_2 – 1 Hour (based on 98th percentile data analysis) Federal	101.5 µg/m^3
NO_2 – 1 Hour (based on 1st high data analysis) State	137.5 µg/m^3
NO_2 – Annual	26.4 µg/m^3
SO_2 – 1 hr	55 µg/m^3
SO_2 – 24 Hour State	15.8 µg/m^3
SO_2 – 24 Hour Fed	13.1 µg/m^3
SO_2 – Annual	3.4 µg/m^3

Table 4.7-21 Air Quality Impact Summary for Normal Operating Conditions (Revised 3-26-12)

Pollutant	Avg. Period	Maximum Concentration (µg/m^3)	Background (µg/m^3)	Total (µg/m^3)	Class II Significance Level (µg/m^3)	Ambient Air Quality CAAQS/NAAQS	
						(µg/m^3)	(µg/m^3)
NO_2[a]	1-hour Federal	132.4	(included by AERMOD)	132.4	7.5	-	188
	1-hour State	265.3	(included by AERMOD)	265.3	-	339	-
	Annual	0.91	26.4	27.3	1	57	100
PM_{10}	24-hour	21.9 (3.77)*	50	71.9	5	50	150
	Annual	0.74	25.0	25.7	1	20	-
$PM_{2.5}$	24-hour	18.3 (3.77)*	18.8	37.1 (22.6)*	1.2	-	35
	Annual	0.74	10.5	11.2	0.3	12	15.0
CO	1-hour	261.2	4600	4861.2	2000	23,000	40,000
	8-hour	58.4	3600	3658	500	10,000	10,000

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Pollutant	Avg. Period	Maximum Concentration (µg/m^3)	Background (µg/m^3)	Total (µg/m^3)	Class II Significance Level (µg/m^3)	Ambient Air Quality CAAQS/NAAQS	
						(µg/m^3)	(µg/m^3)
SO_2	1-hour	18.5	55	73.5	7.8	655	196
	24-hour	3.0	15.8	18.8	5	105	365
	Annual	0.13	3.4	3.5	1	-	80

Notes

[a] Ambient Ratio Method (ARM) used for annual NO_2 impacts with 75 percent ratio and Ozone Limiting Method (OLM) used for 1-hour NO_2 impacts, with Kearny Mesa NO_2 background included in the modeling results (USEPA-default 2008–2010 hourly-seasonal background used for 1-hour federal NAAQS and SDAPCD-provided 2003–2005 hourly NO_2 concurrent with meteorological data used for 1-hour state CAAQS. The 1-hour SIL is an interim value.

*The maximum modeled 24-hour PM_{10} and $PM_{2.5}$ impact locations were remodeled with CTSCREEN.

Table 4.7-24 Startup and Shutdown Modeling Results (Revised 3-26-12)

Pollutant	Avg. Period	Maximum Concentration (µg/ m^3)	Background (µg/ m^3)	Total (µg/ m^3)	Class II Significance Level (µg/ m^3)	Ambient Air Quality CAAQS/NAAQS	
						(µg/ m^3)	(µg/ m^3)
NO_2[a]	1-hour Federal	180.2	(included by AERMOD)	180.2	7.5	-	188
	1-hour State	229.8	(included by AERMOD)	229.8	-	339	-
CO	1-hour	1363	4600	5963	2000	23,000	40,000
	8-hour	95.7	3600	3696	500	10,000	10,000
SO_2	1-hour	24.6	55	79.6	7.8	655	196

Notes:

[a] Ozone Limiting Method (OLM) used for 1-hour NO_2 impacts, with Kearny Mesa NO_2 background included in the modeling results (USEPA-default 2008–2010 hourly-seasonal background used for 1-hour federal NAAQS and SDAPCD-provided 2003–2005 hourly NO_2 concurrent with meteorological data used for 1-hour state CAAQS.

The revisions to the background values also affect portions of the air quality impact analysis text as follows;

Revisions dated 3-26-12.

Section 4.7.5.9, Commissioning Impacts Analysis, page 4.7-37: the two paragraphs in the middle of the page are amended to read as follows:

NO_x emissions can be conservatively estimated to be 35.44 lb/hr per engine with three engines operating at 100 percent load. The maximum 1-hour federal NO_2 impact during commissioning was conservatively calculated to be 160.14 µg/m.^{3} The maximum 1-hour state NO_2 impact during commissioning is 242.89 µg/m^3. CO emissions can be conservatively estimated to be 46.74 lb/hr per engine with three engines operating at 100 percent load.

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The maximum 1-hour and 8-hour CO impacts during commissioning were calculated to be 1,347.8 , µg/m^3 and 373.7 µg/m^3, respectively. With the maximum background 1-hour and 8-hour CO concentration of 4,600 µg/m^3 and 3,600 µg/m^3 the maximum total impacts would be 5,947.8 µg/m^3 and 3,973.7 µg/m^3, respectively. These impacts are each below the state and federal standards for CO.

Section 4.7.5.11 Significant Impact Levels, NAAQS Compliance Determination, page 4.7-42, the paragraph in the middle of the page should be amended to read as follows:

It should be noted that initial modeling analysis using AERMOD estimated Project impacts of 18.3 ug/m^3 (3-year average of the first highest 24-hour impacts), which, when combined with the 24-hour $PM_{2.5}$ background of 18.8 ug/m^3, would indicate an exceedance of the standard of 35 ug/m^3. All locations where AERMOD predicted possible NAAQS exceedances were plotted as shown in Appendix F.2, Figure F.2-12. This included all locations where the maximum modeled $PM_{2.5}$ impact equaled or exceeded 16.2 ug/m^3 (3-year average of the first highest 24-hour impacts), which is the concentration that, when added to the background concentration of 18.8 ug/m^3, would indicate a possible exceedance of the NAAQS of 35 ug/m^3. As can be seen in Appendix F.2, Figure F.2-12, these impacts occurred along the flanks of the north and south peaks of Fortuna Mountain. To more accurately predict the Project's actual impacts in this complex terrain, a more detailed modeling assessment was conducted using CTSCREEN, which is an EPA-approved preferred model for modeling analyses in complex terrain. *See* 40 CFR Part 51, App. W, Guideline on Air Quality Models, § 4.2.1.2. According to EPA's Modeling Guideline, "CTSCREEN can be used to obtain conservative, yet realistic, worst-case estimates for receptors located on terrain above stack height." *Id*. The results from the CTSCREEN analyses described below show that maximum 24-hour $PM_{2.5}$ impacts in these complex terrain areas are significantly less than initially estimated by AERMOD and will not cause exceedances of the 24-hour $PM_{2.5}$ NAAQS.

Section 4.7.5.11, Significant Impact Levels, NAAQS Compliance Determination, page 4.7-43, the paragraph in the middle of the page should be amended to read as follows:

CTSCREEN Results

CTSCREEN digitized terrain inputs were used to model the Project impacts at locations where AERMOD predicted possible exceedances of the 24-hour $PM_{2.5}$ NAAQS maximum impacts, i.e., where the maximum concentration predicted by AERMOD equaled or exceeded 16.2 ug/m^3 (35 – 18.8 ug/m^3). As indicated above, all these locations occurred along the flanks of the north and south peaks of Fortuna Mountain. The results from the CTSCREEN analyses described above show that maximum 24-hour $PM_{2.5}$ impacts of 3.77 ug/m^3 in these complex terrain areas are much less than initially estimated by AERMOD, as shown in Table 4.7-21. Thus, the Project by itself will not cause exceedances of the 24-hour $PM_{2.5}$ NAAQS.

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Table F.1-11 Commisioning Emissions Estimates (Revised 3-21-12)

Pollutant	*100% Load ppmvd*	*90% Load ppmvd*	*75% Load ppmvd*	*50% Load ppmvd*	*Reference*
Nox	120	120	110	100	Note 1
CO	260	260	300	400	Note 1
VOC	110	110	140	170	Note 1
SOx	nd	nd	nd	nd	Note 2, and see Table F.1-1
	mg/m3	mg/m3	mg/m3	mg/m3	
PM10/2.5	25	25	30	40	Note 1
	1	*1*	*1.2*	*1.6*	*PM10/2.5 Load Mult Factors applied to 20V34SG-C2 PM steady state emissions rates, from Table F.1-1 (100% load case).*

Notes:

1. ppmvd and mg/Nm3 at 15% O2, per Wartsila document DAAB714309 (East Shore Project, 06-AFC-6)
2. SOx includes combustion plus lube oil addition (burn-off in cyclinder chamber), calculated based on fuel use at load

Data:	Load %	mmbtu/hr				
	50	40.09	APCD STP F:	68	at 1 atm	Calc 1
	75	60.135	molar vol:	385.3	dscf/lb-mol	385300000
	90	72.162	Mol Wts			
	100	80.18	Nox	46		
			CO	28		
			VOC	16	as CH4	
Ref O2%:	15		EPA Fd	8710	dscf/mmbtu at 68 F at 0% O2	
Ambt O2%:	20.9		EPA Fd	30854	dscf/mmbtu at 68 F at 15% O2	

Notes:

1. assumes load and heat rates are closely related.

Calculated Commissioning Emissions Values for 20V34SG-C2 rated at 80.18 mmbtu/hr (uncontrolled).

Load %	*mmbtu/hr*	*DSCFH*	*lbs/hr Nox*	*CO*	*VOC*	*SO2*	*PM10/2.5*
50	40.09	1236940	14.77	35.96	8.73	0.128	2.206
75	60.135	1855409	24.37	40.45	10.79	0.192	1.655
90	72.162	2226491	31.90	42.07	10.17	0.230	1.379
100	80.18	2473879	35.44	46.74	11.30	0.256	1.379

Worst Case Hourly Commissioning Emissions Estimates

Pollutant	*# Engines*	*Per Engine lbs/hr*	*All Engines lbs/hr*
Nox	3	35.44	106.32
CO	3	46.74	140.22
VOC	3	11.3	33.90
SOx	3	0.256	0.77
PM10/2.5	3	2.206	6.62

1. assumes maximum of 3 engines in commissioning in any 1 hour

Commissioning Period Estimated Emissions

Phase:

1. 4 days at 4 hrs/day, initial load testing per engine:	16	expected hrs per engine at less than 50% load, uncontrolled
2. 2 days at 4 hrs/day, low load checkout per engine:	8	expected hrs per engine at less than 50% load, uncontrolled
3. 20 days at 8 hrs/day, initial tuning per engine:	160	expected hrs per engine at approx 75% load, uncontrolled
4. 20 days at 10 hrs/day, final tuning per engine:	200	expected hrs per engine at approx 75% load, controlled (SCR and CO catalysts installed and operating)
5. Total uncontrolled hours per engine at less than 50% load:	24	
6. Total uncontrolled hours per engine at ~ 75% load:	160	
7. Total controlled hours per engine at ~ 75% load:	200	emissions factors from Table F.1-1, 75% load case

Total Uncontrolled Engine Emissions During Commissioning		Nox	CO	VOC	SOx	PM10/2.5
(assuming 50% load emissions rates)	lbs	354	863	210	3	53
	tons	0.18	0.43	0.10	0.002	0.03

Total Uncontrolled Engine Emissions During Commissioning		Nox	CO	VOC	SOx	PM10/2.5
(assuming 75% load emissions rates)	lbs	3899	6472	1726	31	265
	tons	1.95	3.24	0.86	0.02	0.13

Total Controlled Engine Emissions During Commissioning		Nox	CO	VOC	SOx	PM10/2.5
(assuming 75% load emissions rates)	lbs	222	296	308.2	51.2	274.4
	tons	0.11	0.15	0.15	0.03	0.14

Total Estimated Commissioning Period Emissions, tons/engine:	2.24	3.82	1.12	0.04	0.30
Total, all engines:	24.61	41.97	12.34	0.47	3.26

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA
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APPLICATION FOR CERTIFICATION
FOR THE *QUAIL BRUSH GENERATION PROJECT*

DOCKET NO. 11-AFC-3

PROOF OF SERVICE
(Revised 3/22/2012)

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Public Adviser's Office
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publicadviser@energy.state.ca.us

*indicates change

DECLARATION OF SERVICE

I, Constance Farmer, declare that on April 3, 2012, I served and filed a copy of the Minor Changes to the Quail Brush Power Project Air Quality Emissions and Impact Analysis. This document is accompanied by the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/quailbrush/index.html].

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit or Chief Counsel, as appropriate, in the following manner:

(Check all that Apply)
For service to all other parties:

☒ Served electronically to all e-mail addresses on the Proof of Service list;

☐ Served by delivering on this date, either personally, or for mailing with the U.S. Postal Service with first- class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "e-mail preferred."

AND

For filing with the Docket Unit at the Energy Commission:

☒ by sending an electronic copy to the e-mail address below (preferred method); ***OR***

☐ by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT
Attn: Docket No. 11-AFC-3
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512 docket@energy.state.ca.us

OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

☐ Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission
Michael J. Levy, Chief Counsel
1516 Ninth Street MS-14
Sacramento, CA 95814
mlevy@energy.state.ca.us

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Constance C. Farmer

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

TO: *All Parties* *Date:* March 22, 2012

RE: ***QUAIL BRUSH GENERATION PROJECT***
Docket No. 11-AFC-3
Newly revised Proof of Service List

Energy Commission regulations (Cal. Code Regs., tit. 20, § 1210) require, in addition to any electronic service, that a paper copy be served in person or by first class mail except where a party requests to receive an electronic copy when one is available. Individuals and groups on the Proof of Service list who prefer to receive filings by e-mail and do not require a paper copy shall inform the Hearing Adviser assigned to the proceeding.

The Proof of Service list for this matter will delineate those individuals and groups and it is sufficient to serve those individuals with an e-mailed copy only. Those not so delineated must be served with a paper copy in addition to any e-mailed copy that the filing party chooses to provide. Signatures may be indicated on the electronic copy by **"*Original Signed By*"** or similar words.

Unless otherwise specified in a regulation, all materials filed with the Commission must also be filed with the Docket Unit. (Cal. Code Regs., tit. 20, § 1209(d).) Some regulations require filing with the Commission's Chief Counsel instead of the Docket Unit. For example, Section 1720 requires a petition for reconsideration to be filed with the Chief Counsel and served on the parties. Service on the attorney representing Commission staff does not satisfy this requirement. This Proof of Service form is not appropriate for use when filing a document with the Chief Counsel under Title 20, sections 1231 (Complaint and Request for Investigation) or 2506 (Petition for Inspection or Copying of Confidential Records). The Public Advisor can answer any questions related to filing under these sections.

New addition(s) to the Proof of Service are indicated in **bold font** and marked with an asterisk (*). Additionally, if two or more persons are listed on a Proof of Service List with a single address, only one physical copy of a document need be mailed to the address.

Use this newly revised list for all future filings and submittals. This Proof of Service List will also be available on the Commission's Project Web Site at:

[http://www.energy.ca.gov/sitingcases/quailbrush/index.html]

Please review the information and contact me at rmavalos@energy.state.ca.us or (916) 654-3893, if you would like to be removed from the Proof of Service or if there are any changes to your contact information.

RoseMary Avalos
Hearing Adviser's Office