

December 11, 2009

Dockets Unit California Energy Commission 1516 Ninth Street, MS 4 Sacramento, CA 95814

> RE: Hydrogen Energy California Project Application for Certification 08-AFC-8

On behalf of Hydrogen Energy International LLC, the applicant for the abovereferenced Hydrogen Energy California AFC, we are pleased to submit the enclosed document:

- One print copy of Responses to CEC Data Requests Set One (#1, 2, 6, and 19)
- 5 copies of a CD containing December 2009 Air Quality Modeling Files in response to Data Request #6

The Responses to Data Requests document has been provided electronically to the Dockets Unit and to all parties listed on the Proof of Service list.

URS Corporation

A. G. kas

Dale Shileikis Vice President, Environmental Services

Enclosures

CC: Rod Jones (w/o enclosure)

Responses to CEC Data Requests Set One (Nos. 1, 2, 6, and 19)

Revised Application for Certification (08-AFC-8) for HYDROGEN ENERGY CALIFORNIA Kern County, California Prepared for: Hydrogen Energy International LLC



Submitted to: California Energy Commission



Prepared by:

December 2009

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LIST OF ACRONYMS AND ABBREVIATIONS USED IN RESPONSES

AAQS	ambient air quality standards
AFC	Application for Certification
CO	carbon monoxide
CEC	California Energy Commission
HECA	Hydrogen Energy California
µg/m³	micrograms per cubic meter
NO ₂	nitrogen dioxide
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
SO ₂	sulfur dioxide
SJVAPCD	San Joaquin Valley Air Pollution Control District

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BACKGROUND

In order to evaluate the air quality impacts from this project the baseline conditions of the Project Site need to be understood.

DATA REQUEST

1. Please describe the types of activities that emit combustion and fugitive dust emissions on the site currently and the quantities of the criteria pollutant emissions that occur from those activities.

RESPONSE

To respond to this Data Request and also to Data Request Nos. 32 and 33, the Applicant completed and submitted a Public Records Request Form to the San Joaquin Valley Air Pollution Control District (SJVAPCD) on October 26, 2009, asking in part for any emissions information regarding the Port Organics facility that recently ceased operations on this site. In addition, that same request asked for information about any other sources that SJVAPCD had records about on the site, including agricultural emissions. A response was received from the SJVAPCD on December 2 and is being reviewed for completeness at this time. Therefore, the Applicant requests a further extension of 30 days for Data Request No. 1 to allow for receipt and review of any information forthcoming from SJVAPCD.

DATA REQUEST

2. Please describe whether those activities will be permanently discontinued from the entire project site when the project is completed and estimate the reductions from the current onsite baseline emissions.

RESPONSE

See response to Data Request 1. An extension of 30 days is requested for Data Request 2.

BACKGROUND

The construction fugitive dust emission calculations appear to be incomplete and do not use assumptions that appear relevant for the project site. The construction requirements at this site for this project are extensive and the site appears to have very fine soils, so the fugitive dust emission calculations should reflect the real construction needs and conditions for this project. Staff needs the applicant to revise these calculations to include all fugitive dust activities and include reasonable calculation assumptions, and then revise the construction PM₁₀ and PM_{2.5} modeling assessments.

DATA REQUEST

6. Please revise the construction PM₁₀ and PM_{2.5} emission modeling analysis to include these revised fugitive dust emission calculations.

RESPONSE

Fugitive dust emission calculations were updated in response to Set One Data Requests 3a, b, and c to include emissions from bulldozers, scrapers, and graders. Please note that the responses to Set One Data Requests 3a, b, and c were provided to the California Energy Commission (CEC) in a separate document in November 2009. These pieces of equipment would only be operating on site from Months 1 through 12, as shown in the table entitled "On-Site Construction Equipment Schedule," which was included in Appendix D of the Revised Application for Certification (AFC). This page is included again here as Attachment 6-1, unchanged for the reader's convenience. The updated emissions were included in a revised modeling analysis for particulate matter less than 10 microns in diameter (PM₁₀) and particulate matter less than 2.5 microns in diameter (PM_{2.5}), conducted for and discussed in this response.

In addition, criteria pollutant emissions from all equipment exhaust for Month 1 and the annual period of Months 1 through 12 were included in this revised modeling analysis to determine whether the equipment usage in the earlier portion of the construction affected the worst-case results from previous modeling. Another update included in this modeling, in response to Set One Data Request 7, is the increase of the D10R bulldozer horsepower to 500 horsepower and inclusion in the revised emissions calculations and modeling analysis. Please note that the response to Set One Data Request 7 was provided to the CEC in a separate document in November 2009. The equipment exhaust emissions for this period are included in Attachment 6-1, in the table entitled "HECA – Month 1 Exhaust Onsite."

The original modeling analyzed Months 17 through 28 as the worst-case year, with Month 21 as the worst-case month for short-term impacts. Modeling was re-run for Months 1 through 12 as the potential worst-case year and Month 1 as the potential worst-case month, due to the addition of the above three fugitive dust-generating sources (bulldozers, scrapers, and graders).

The results of the modeling are presented in Table 6-1. For comparison, the table also includes the modeling results for Month 21 short-term impacts and Months 17 through 28 annual impacts. Results, including background levels for carbon monoxide, nitrogen dioxide (NO₂), and sulfur dioxide, are below the most stringent ambient standards. For PM₁₀ and PM_{2.5}, the background levels by themselves already exceed ambient standards, as reflected by the nonattainment designation for these pollutants. The NO₂, PM₁₀, and PM_{2.5} results for Month 1, and the annual results for Months 1 through 12, are higher than those for the Months 17 through 28 period that was modeled for the Revised AFC. However, for the remaining pollutants, the worst-case period is still represented by Months 17 through 28. Copies of the modeling files are included on the CD entitled "HECA Air Quality Modeling Files," provided with this response.

		Maximum To Concentratio Backgrout	Most Stringent AAQS (µg/m³)					
Pollutant		Months 1 – 12			Months 17 – 28			
CO	1 hour ¹	4,095	4,155	23,000				
	8 hour	2,460	2,475	10,000				
NO ₂	1 hour ¹	336.4	229.4	339				
	Annual	43.3	40.3	57				
PM ₁₀	24 hour ¹	288.2	295.1	50				
	Annual	61.8	56.8	20				
PM _{2.5}	24 hour ¹	160.5	160.0	35				
	Annual	26.6	25.5	12				
SO ₂	1 hour ¹	340.7	340.9	655				
	3 hour ¹	195.1	195.2	1,300				
	24 hour ¹	81.4	81.4	105				
	Annual	26.7	26.7	80				
Notes:		·	·					
¹ The short-term impacts are from Month 1 for the annual period of Months 1 through 12.								
AAQS = aml	bient air quality star	ndards						

Table 6-1
Fugitive Dust Emissions Modeling Results

		and tank at a secold contained and
AAQS	=	amplent air quality standards
CO	=	carbon monoxide
µg/m ³	=	micrograms per cubic meter
NO ₂	=	nitrogen dioxide
PM_{10}	=	particulate matter less than 10 microns in diameter
PM _{2.5}	=	particulate matter less than 2.5 microns in diameter
SO ₂	=	sulfur dioxide
$\begin{array}{c} PM_{10}\\ PM_{10}\\ PM_{2.5}\\ SO_2 \end{array}$	= = = =	nitrogen dioxide particulate matter less than 10 microns in diamete particulate matter less than 2.5 microns in diamete sulfur dioxide

ATTACHMENT 6-1 EQUIPMENT USE AND EMISSIONS TABLES

On-Site Construction Equipment Schedule

Hydrogen Energy, Inc

HECA Project

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On Road Vehicles O
Concrete Pumper Track 20 0
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Service Truck - 1ton 0 1 2
Pile Driver Truck 12 0 0 1 3 3 3 2 0
Truck - Fuel/Lube O
Tackor Trucks 3b Wheel 0
Truck - Yack
Torcka - Starp Torka - Starp
Truck - Water 58 4 4 4 2 <th2< th=""> 2 <th2< th=""> <th2< th=""> <th< td=""></th<></th2<></th2<></th2<>
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Air Compressor 750 OFM 94 1 1 1 1 1 2
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Definition 20 3 3 3 2 <th< td=""></th<>
Concrete Hower Machine 20 0 0 0 0 0 2 2 2 2 2 2 0
Concerter vibration 30 1 2 3 3 3 3 3 3 2 2 1
Cranes - Mobile 35 ton 0 <t< td=""></t<>
on road total 409 12 13 13 14 14 14 14 13 13 12 12 11 11 11 10 10 9 9 9 9 9 9 8 8 8 8 8 8 8 8 8 8 8 8 8
off road total 1679 27 28 30 26 27 29 34 35 37 41 42 46 51 52 52 55 54 56 60 63 58 59 60 61 61 58 55 49 47 47 45 40 34 28 26 16 11 10 9 9 9 8 7
Project Total 2088 39 40 41 44 40 41 43 47 48 50 53 54 57 62 63 62 65 63 65 69 72 66 67 68 69 69 66 63 57 55 55 53 48 42 36 33 22 17 16 15 14 14 13 12
Schedule
Site Mobilization
Site Prep/Piling
Commissioning & Start-up max 72

 Notes: Preliminary and Confidential

 (1) These are approximate values

 (2) Misc. equip for off plot include preliminary estimates for work that may be performed outside of the plot (plot linears, facility upgrades, site interfaces, etc.

 (3).Month with most onsite equipment is represented by

5/21/2009

Hydrogen Energy California, Kern County Power Project Emission Factors For HECA Onsite Construction Equipment 12/2/2009

			Emission Factors (Ibs/hr)									
Equipment Description	EMFAC designation	Horsepower	со	CO2	CH₄	N ₂ O	NOx	PM ₁₀	PM _{2.5}	SOx	ROG ¹	CO ₂ e
On-Road Vehicles												
Concrete Pumper Truck	HHD-DSL		0.320	69.786	0.0013	0.001	0.694	0.043	0.039	0.001	0.151	70.16
Dump Truck	HHD-DSL		0.320	69.786	0.0013	0.001	0.694	0.043	0.039	0.001	0.151	70.16
Service Truck - 1 ton	HHD-DSL		0.320	69.786	0.0013	0.001	0.694	0.043	0.039	0.001	0.151	70.16
Pile Driver Truck	HHD-DSL		0.320	69.786	0.0013	0.001	0.694	0.043	0.039	0.001	0.151	70.16
Truck - Fuel/Lube	MHD-DSL		0.155	33,180	0.0002	0.001	0.279	0.017	0.015	3.09E-04	0.014	33.39
Tractor Truck 5th Wheel	HHD-DSL		0.320	69,786	0.0013	0.001	0.694	0.043	0.039	0.001	0.151	70.16
Trucks - Pickup 3/4 ton	MHD-DSL		0.155	33,180	0.0002	0.001	0.279	0.017	0.015	3.09E-04	0.014	33.39
Trucks - 3 ton	HHD-DSL		0.320	69,786	0.0013	0.001	0.694	0.043	0.039	0.001	0.151	70.16
Truck - Water	HHD-DSL		0.320	69,786	0.0013	0.001	0.694	0.043	0.039	0.001	0.151	70.16
Off Road Vehicles	Fuel Type											
Air Compressor 185 CFM	D	50	0.287	22.271	0.011	0.0006	0.242	0.027	0.0253	0.0003	0.1220	22.68
Air Compressor 750 CFM	D	120	0.338	46.950	0.010	0.0014	0.625	0.056	0.0518	0.0006	0.1066	47.57
Articulating Boom Platform	D	120	0.252	38.072	0.007	0.0014	0.472	0.037	0.0345	0.000	0.074	38.63
Bulldozer D10R	D	500	1.294	259.229	0.027	0.0056	2.874	0.116	0.1066	0.003	0.304	261.55
Bulldozer D4C	D	120	0.508	65 811	0.015	0.0014	0.952	0.086	0.0792	0.001	0 164	66.54
Concrete Trowel Machine	D	50	0.156	14 108	0.006	0.0006	0.002	0.015	0.0138	0.000	0.063	14 40
Concrete Vibrators	Electric	50	0.100		0.000	0.0000	0.111	0.010	0.0100	0.000	0.000	
Cranes - Mobile 35 ton	D	120	0.376	50 148	0.011	0.0014	0.690	0.063	0.0583	0.001	0 119	50 79
Cranes - Mobile 45 ton	D	175	0.491	80.345	0.012	0.0020	0.985	0.056	0.0519	0.001	0.128	81.20
Crane - Mobile 65 ton	D	175	0.491	80.345	0.012	0.0020	0.985	0.056	0.0519	0.001	0.128	81.20
Cranes 100 / 150 ton cap	D	250	0.366	112,159	0.012	0.0028	1.310	0.050	0.0461	0.001	0.131	113.28
Diesel Powered Welder	D	25	0.0685	11.2861	0.0024	0.0003	0.111	0.008	0.0074	0.0001	0.0268	11.42
Backhoe/loader	D	120	0.366	51.728	0.009	0.0014	0.607	0.055	0.0510	0.001	0.099	52.34
Earth Scraper	D	500	1.648	321.429	0.034	0.0056	3.607	0.146	0.1342	0.003	0.381	323.90
Loader	D	120	0.431	58.914	0.012	0.0014	0.766	0.070	0.0643	0.001	0.129	59.58
Motor Grader	D	120	0.552	74.965	0.015	0.0014	0.982	0.090	0.0827	0.001	0.166	75.70
Excavator - Trencher	D	120	0.490	64.895	0.014	0.0014	0.951	0.081	0.0742	0.001	0.159	65.62
Fired Heaters	D	25	0.055	13.217	0.002	0.0003	0.107	0.006	0.0055	0.0002	0.0167	13.34
Forklift	D	50	0.192	14.672	0.007	0.0006	0.157	0.018	0.0163	0.000	0.076	14.99
Fusion Welder	Electric	50										
Heavy Haul / Cranes	D	750	1.200	303.045	0.029	0.0084	3.235	0.124	0.1136	0.003	0.324	306.28
Light Plants	D	25	0.055	13.217	0.002	0.0003	0.107	0.006	0.0055	0.000	0.017	13.34
Portable Compaction Roller	D	120	0.422	58.989	0.012	0.0014	0.778	0.067	0.0618	0.001	0.128	59.65
Portable Compaction - Vibratory Plate	D	15	0.026	4.314	0.000	0.0002	0.032	0.002	0.0016	0.000	0.005	4.38
Portable Compaction - Vibratory Ram	D	50	0.156	14.108	0.006	0.0006	0.147	0.015	0.0138	0.000	0.063	14.40
Pumps	D	25	0.055	13.2173	0.0015	0.0003	0.107	0.006	0.0055	0.0002	0.017	13.34
Portable Power Generators	D	50	0.297	30.6230	0.0107	0.0006	0.311	0.030	0.0273	0.0004	0.118	31.02
Truck Crane - Greater than 300 ton	D	500	0.716	180.101	0.017	0.0056	1.877	0.073	0.0668	0.002	0.191	182.21
Truck Crane - Greater than 200 ton	D	250	0.366	112.159	0.012	0.0028	1.310	0.050	0.0461	0.001	0.131	113.28
Vibratory Roller 20 ton	D	175	0.630	108.146	0.014	0.0020	1.271	0.069	0.0632	0.001	0.156	109.05

Notes:

¹ Assuming ROGs are equivalent to VOCs

- Emission factors for on-road vehicles are based on results from Emfac Emissions Model 2007 Version 2.3 (HHDT-DSL=heavy heavy-duty trucks-diesel; MHD-DSL=medium heavy duty-diesel). EMFAC scenario year was 2010 and the selected area was Kern County. PM 10 values include break wear and tire wear.

Emission factors for off-road vehicles are based on the maximum emission factors from 2009 to 2012 of the South Coast Air Quality Management District (AQMD) data.
 PM_{2.5} emission factors were determined by multiplying PM₁₀ numbers by a "PM_{2.5} fraction of PM₁₀" value. Fractional values for PM_{2.5} were taken from the SCAQMD guidance:
 Final - Methodology to Calculate PM_{2.5} and PM_{2.5} Significance Thresholds, October 2006: Appendix A - Updated CEIDARS Table with PM_{2.5} Fractions.

On-Road Vehicles:

- $\text{PM}_{2.5}$ Fraction of $\text{PM}_{10},$ Brake wear: 0.429

- PM_{2.5} Fraction of PM₁₀, Diesel: 0.920

- PM2.5 Fraction of PM10, Tire wear: 0.250

Off-Road Vehicles:

- PM2.5 Fraction of PM10, Diesel: 0.920

- CH₄ and N₂O factors are derived from California Climate Action Registry General Reporting Protocol Version 3.0 (April 2008), Table C.5 for LDT, MHD, and HHD diesel fueled trucks in the San Joaquin Valley Air Basin (MHD =HHD). These emissions are in g/mile. On-road vehicles are limited to 10 mph, which is used to convert to lb/hr. (See GHG Reference Info tab)

- N₂O factors for of-road vehicles are derived from California Climate Action Registry General Reporting Protocol Version 3.0 (April 2008), Table C.5 (distillate fuel factors for the industrial sector) using the following to convert from kg/gallon to lb/hp-hour, and then multiplying by the rated horsepower rating: 1 gallon/137,000 Btu, 7,000 Btu/hp-hour, and 2.2046 lb/kg. CH₄ factors are from the SCAQMD data.

CO ₂ GWP (SAR, 1996) =	1
CH ₄ GWP (SAR, 1996) =	21
N ₂ O GWP (SAR, 1996) =	310

	Emissions Per Month (Ibs/month)											
MONTH E	quipment Description	# of Eq	со	CO2	CH₄	N ₂ O	NO ₂	PM₁₀	PM _{2.5}	SO ₂	ROG ¹	CO₂e
1 C	on-Road Vehicles											
С	Concrete Pumper Truck	0	0	0	0	0	0	0	0	0	0	0
D	Jump Truck	3	211	46059	1	1	458	28	26	0	100	46303
S	Service Truck - 1 ton	0	0	0	0	0	0	0	0	0	0	0
Р	le Driver Truck	0	0	0	0	0	0	0	0	0	0	0
Т	ruck - Fuel/Lube	0	0	0	0	0	0	0	0	0	0	0
Т	ractor Truck 5th Wheel	0	0	0	0	0	0	0	0	0	0	0
Т	rucks - Pickup 3/4 ton	5	170	36498	0	1	307	18	17	0	16	36728
Т	rucks - 3 ton	0	0	0	0	0	0	0	0	0	0	0
Т	ruck - Water	3	211	46059	1	1	458	28	26	0	100	46303
0	Off Road Vehicles											
A	ir Compressor 185 CFM	0	0	0	0	0	0	0	0	0	0	0
A	ir Compressor 750 CFM	1	74	10329	2	0	138	12	11	0	23	10466
A	rticulating Boom Platform	0	0	0	0	0	0	0	0	0	0	0
В	Sulldozer D10R	3	854	171091	18	4	1897	76	70	2	201	172624
В	Sulldozer D4C	3	335	43435	10	1	628	57	52	1	109	43917
С	Concrete Trowel Machine	0	0	0	0	0	0	0	0	0	0	0
С	Concrete Vibrators	0	0	0	0	0	0	0	0	0	0	0
С	Franes - Mobile 35 ton	0	0	0	0	0	0	0	0	0	0	0
С	Cranes - Mobile 45 ton	0	0	0	0	0	0	0	0	0	0	0
С	Crane - Mobile 65 ton	0	0	0	0	0	0	0	0	0	0	0
С	Cranes 100 / 150 ton cap	0	0	0	0	0	0	0	0	0	0	0
D	Diesel Powered Welder	0	0	0	0	0	0	0	0	0	0	0
В	ackhoe/loader	2	161	22760	4	1	267	24	22	0	44	23027
E	arth Scraper	7	2538	495000	53	9	5555	225	207	5	586	498800
L	oader	2	190	25922	5	1	337	31	28	0	57	26214
N	lotor Grader	2	243	32985	7	1	432	40	36	0	73	33308
E	xcavator - Trencher	0	0	0	0	0	0	0	0	0	0	0
F	ired Heaters	0	0	0	0	0	0	0	0	0	0	0
F	orklift	0	0	0	0	0	0	0	0	0	0	0
F	usion Welder	0	0	0	0	0	0	0	0	0	0	0
н	leavy Haul / Cranes	0	0	0	0	0	0	0	0	0	0	0
L	ight Plants	0	0	0	0	0	0	0	0	0	0	0
Р	Portable Compaction Roller	0	0	0	0	0	0	0	0	0	0	0
Р	Portable Compaction - Plate	0	0	0	0	0	0	0	0	0	0	0
Р	, Pumps	3	36	8723	1	0	71	4	4	0	11	8802
Р	Portable Power Generators	0	0	0	0	0	0	0	0	0	0	0
т	ruck Crane - Greater than 300 ton	0	0	0	0	0	0	0	0	0	0	0
Т	ruck Crane - Greater than 200 ton	0	0	0	0	0	0	0	0	0	0	0
V	ibratory Roller 20 ton	3	416	71376	9	1	839	45	42	1	103	71975
Ν	lisc equip for off plot construction	0	0	0	0	0	0	0	0	0.00	0	0
C	In Road Total	11	592.3	128615.3	2.0	2.2	1222.7	75.3	67.8	1.2	215.2	129333.6
C	Off Road Total	26	4847.4	881622.2	108.9	16.9	10163.1	514.3	473.2	9.0	1206.8	889132.7
Р	roject Total	37	5,439.7 ·	1,010,237.4	110.9	19.0	11,385.8	589.6	541.0	10.3	1,421.9	1,018,466.3

CH₄ and N₂O emission factors for onroad vehicles are from reference source 2: Table C.5, California Climate Action Registry General Reporting Protocol Version 3.0, April 2007

		MODEL INPUTS	<u>CO</u>	NO_2	PM_{10}	$PM_{2.5}$	SO_2	construction
$CO_2 GWP (SAR, 1996) =$	1	Max monthly value	5,439.7	11,385.8	589.64	541.02	10.25	days per month
$CH_4 GWP (SAR, 1996) =$	21	(lb/month)						22
N_2O GWP (SAR, 1996) =	310	Max daily value	247.3	517.5	26.8	24.6	0.5	construction
		(lb/day)						hours per day
Max 1-hour, 3-hour, 8-hour emission rate			0.67	1.40	2.68	2.46	1.26E-03	10
	(lb/hour)					p	ieces of equipment	
			0.030	0.028	5.25E-04	37		
		(lb/hour)						

BACKGROUND

Staff is aware that the applicant has removed the LMS100 peaking turbine from the project design and that The Applicant will be making other modifications to ensure operating $PM_{2.5}$ emissions, subject to Federal New Source Review, remain below 100 tons per year. Based on the initial emission estimates for the project, staff believes that it will not be easy to reduce $PM_{2.5}$ emissions below 100 tons per year. Staff has the following information requests/project design revisions for the applicant to consider while making these project modifications.

DATA REQUEST

19. Please revise the cooling tower operating data as needed to address the reduction in the maximum heat rejection load due to the removal of the LMS100 turbine.

RESPONSE

No reduction of the number of cooling tower cells is anticipated due to the elimination of the auxiliary gas turbine from the Project. Upcoming responses to Data Requests Nos. 126 through 132 will address the reduction of the maximum heat rejection load.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA 1516 NINTH STREET, SACRAMENTO, CA 95814 1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION FOR THE HYDROGEN ENERGY CALIFORNIA PROJECT

Docket No. 08-AFC-8

PROOF OF SERVICE LIST (Rev. 9/3/09)

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ENERGY COMMISSION

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DECLARATION OF SERVICE

I, <u>Dale Shileikis</u>, declare that on <u>December 11</u>, 2009, I served and filed copies of the attached <u>Responses to CEC Data Requests Set One (#1, 2, 6, and 19)</u>, dated <u>December</u> 2009. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

[www.energy.ca.gov/sitingcases/hydrogen_energy].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

X sent electronically to all email addresses on the Proof of Service list

by personal delivery or by depositing in the United States mail at ______ with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

X sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (*preferred method*);

OR

depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. <u>08-AFC-8</u> 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512

docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

1)a Altakas