



DOCKET

08-AFC-8

DATE JUL 27 2010

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July 27, 2010

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 HECA LLC, the applicant for the above-referenced Hydrogen Energy California AFC, we are pleased to submit the enclosed document:

One print copy of *Applicant Comments on the Preliminary Determination of Compliance (PDOC) for the Hydrogen Energy California Project*, submitted to the San Joaquin Valley Air Pollution Control District (SJVAPCD) on July 26, 2010.

This document is being submitted to Dockets electronically, and one printed copy is provided. One print copy is also being sent to each party on the Proof of Service list not marked "email preferred."

The enclosed document is being submitted to the CEC for docketing.

URS Corporation

Alison Drury
Project Manager/Senior Environmental
Planner

Enclosures

CC: Rod Jones (w/o enclosure)

July 26, 2010

Mr. David Warner
Director of Permit Services
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308

Subject: **Comments on the Preliminary Determination of Compliance (PDOC) for Hydrogen Energy California LLC (08-AFC-8) SJVAPCD Project Number: S-1093741**


Dear Mr. Warner:

Thank you for the opportunity to provide comments on the PDOC for the Hydrogen Energy California (HECA) Project.

We respectfully submit the enclosed comments for your consideration.

Please contact Gregory Skannal, HECA, at (562)276-1511 or Julie Mitchell, URS, at (619)243-2833 if you have any questions or need additional information.

Sincerely,

for 

Gregory D. Skannal
Manager, HSSE
Hydrogen Energy California LLC

Attachment: Comments on PDOC

cc: Homero Ramirez, SJVAPCD
Leonard Scandura, SJVAPCD
Shaheerah Kelly, EPA Region 9
Rod Jones and Dockets, California Energy Commission
Julie Mitchell, URS Corporation



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APPLICANT COMMENTS on the Preliminary Determination of Compliance

FOR THE

**HYDROGEN ENERGY CALIFORNIA (HECA)
PROJECT (08-AFC-8)**

**San Joaquin Valley Air Pollution Control District
Project Number S-1093741**

Kern County, CA

Prepared for:

Hydrogen Energy California LLC

Prepared by:

URS

1615 Murray Canyon Road, Suite 1000
San Diego, CA 92108

July 2010

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
Global Comments				
1	Global	Throughout the evaluation and conditions.		As a general matter, the best available control technology (BACT) determinations for NO _x , CO, and VOC emissions from the combustion turbine generator are unclear as a result of including discussion of “target levels” for these pollutants throughout the Compliance Evaluation and proposed permit conditions in the Authorities to Construct. Given the importance of the BACT determinations to the overall evaluation of the Project, Applicant believes that it is important to eliminate the existing lack of clarity. Applicant believes that the Determination of Compliance must include specific determinations of current BACT levels. To avoid confusion, Applicant recommends that discussion of the target levels not be included in these documents, or if they are to be included, that clearer distinctions be made between the BACT levels and the target levels.
2	Global	As identified below		General comment: It takes more time to conduct a relative accuracy test of the CEMS than the turbine spends in startup mode; thus, this test cannot be conducted. This testing requirement will also likely conflict with internal Exclusion Zone requirements. Please consider changing condition.
3	63	Proposed Rule 1080 Conditions, fifth bullet		Same comment as #2.
4	65	Proposed Rule 1081 Conditions, second bullet		Same comment as #2.
5	90	Combined Cycle, second paragraph		Same comment as #2.

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
6	97	Last bullet		Same comment as #2.
7	140	Section 6.2, first bullet		Same comment as #2.
8	Global	As identified below		General Comment: To avoid confusion, Applicant recommends that discussion of the target levels not be included in these documents; or, if they are to be included, that clearer distinctions be made between the BACT levels and the target levels. Every reference to turbine emissions needs to include the BACT level.
9	Global	As identified below		Insert before all text: "Emission rates (BACT level) from the combustion turbine generator, except during startup and shutdown periods, shall not exceed any of the following: NO _x (as NO ₂) – 42.0 lb/hr and 4.0 ppmvd of NO _x at 15 percent O ₂ (3-hour rolling average) (except during startup/shutdown); VOC (as methane) – 7.3 lb/hr and 1.0 ppmvd of VOC at 15 percent O ₂ when firing on hydrogen-rich fuel exclusively and 2.0 ppmvd at 15 percent O ₂ when firing on fuel containing natural gas; CO – 32.0 lb/hr and 3.0 ppmvd of CO @ 15 percent O ₂ when firing on hydrogen-rich fuel exclusively and 5.0 ppmvd-CO @ 15 percent O ₂ when firing on fuel containing natural gas; PM ₁₀ – 19.8 lb/hr; or SO _x (as SO ₂) – 6.8 lb/hr. The hourly rolling averages for NO _x (as NO ₂) emission limits indicated above. All other pollutant emission limits are 3-hour rolling averages." On the first line after "Emission rates," add "(target level)" although per comment #1 and 8, removal of the target emission rates should be considered.
10	84	S-7616-9-0, first bullet		Same comment as #9.
11	96	First bullet		Same comment as #9.
12	138	Section 5.1, first bullet		Same comment as #9.

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
13	138	Section 5.2, first bullet		Same comment as #9.
General Comments				
14	1	First paragraph	6, 7	Change “an exhaust stream” to “a stream.”
15	1	Second paragraph	5	Change “248 to 251” to “240 to 300.”
16	1	Fifth paragraph	1	Change “Hydrogen Energy (HECA)” to “Hydrogen Energy California (HECA).”
17	1	Fifth paragraph	4, 5	Please clarify what is meant by “...submitted to the CEC contingent upon SJVAPCD approval of the project.” What is the contingency?
18	4	Fourth paragraph	3	Change “form” to “from.”
19	5	Heat Recovery Steam Generator, second paragraph	7	Delete “off-base.”
20	5	Steam Turbine Generator, first paragraph	1	Revised comment: Change “...is a 160 MW...” to “...is an approximately 200-MW...”
21	6	Heat Rejection System, second paragraph	Last	Delete “the auxiliary CTG.”
22	6	Feedstock Handling System, first paragraph	4	Add after the last sentence, “Alternatively, an equivalent system can be proposed for approval by the Executive Officer.”
23	6	Feedstock Handling System, first paragraph below the list	9	After “baghouses,” add “or an equivalent system approved by the SJVAPCD.”

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
24	6	Feedstock Handling System, last paragraph	Last	After “baghouses,” add “or an equivalent system.”
25	13	Flares, second paragraph	3	Change “two of the flares will” to “the three flares may.”
26	14	Sulfur Recovery Unit Flare	8	Change “caustic scrubber” to “caustic scrubber or equivalent technology.”
27	14	Rectisol Acid Gas Removal Flare	4	Change “header is used only in” to “header is primarily used in.”
28	14	Cooling Towers, first paragraph	3	Change “16-celled” to “13-celled.”
29	14	Cooling Towers, first paragraph	4	Change “a 4-celled mechanical draft cooling tower for both the air separation unit and the gasification block” to “two 4-celled mechanical draft cooling towers one for the air separation unit and one for the gasification block.”
30	20	Table	5, 6, 17, 18	Delete the rows of Temperature (F), Temperature (K), Stability class, and Wind speed; these parameters were not used in the revised air quality modeling analysis for this source.
31	22	S-7616-6-0		General comment: The maximum emergency design heat input for the SRU flare is approximately 500 million Btu/hr.
32	26	Table		Change Total Number of Hot Starts from “10” to “20.”
33	26	Table		Change Total Number of Shutdowns from “20” to “30.”
34	26	Table		Change Duct Burner Operation (hr) from “8,272” to “8,257.”
35	27	Gasifiers, first paragraph	4	Change “1 to 2 days” to “1 to 3 days.”

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
36	29	Sulfur Recovery System, first paragraph	4, 5	Change “2 by 50 percent SRUs, 1 by 100 percent TGTU, and 1 by 100 percent thermal oxidizer.” to “two parallel trains of SRUs, and 1 by 100 percent thermal oxidizer. Each SRU train represents about 50 to 70 percent of the peak plant requirements.”
37	30	Table		Delete the rows of “Temp, F” and “Temp, K”; these parameters were not used in the revised air quality modeling analysis for this source.
38	31	First table		Delete the rows of “Stability Class” and “Wind speed”; these parameters were not used in the revised air quality modeling analysis for this source.
39	36	First table		Change “Upper” to “BACT.”
40	36	Third table		Change “Upper” to “BACT.”
41	38	Table	Column PM ₁₀	Row 1: change “23.0” to “18.0.” Rows 4 through 14, and 16 through 17: change “36.0” to “19.8.”
42	40	Third bullet	1, 2	Change “for a total of 1,200 hours of normal operation per year” to “for 1,200 hours per year per heater, for a combined total of 3,600 hours of normal operation per year for all three heaters.”
43	40	Table	CO	Change “0.035” to “0.35.”
44	49	Second table		Change “Upper” to “BACT.”
45	49	Fourth table (Maximum Commissioning Hourly Emissions – @ Worst Case for Hydrogen-Rich Gas Firing)		Change Emission Rates of PM ₁₀ from “36.0” to “19.8.”

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
46	50	First table (Target Limits)	PM ₁₀	Change Assumed Hours at 100% Load from "20" to "24." Change Daily PE2 from "472.0" to "475.2."
47	50	Second table (Upper Limits)	PM ₁₀	Change "Upper Limits" to "BACT Limits." Change Cold Startup from "64.0" to "57.0." Change Hot Startup from "23.0" to "19.0." Change Assumed Hours at 100% Load from "20" to "24." Change Daily PE2 from "483.0" to "475.2."
48	51	First table (Target Limits)	PM ₁₀	Change Cold Startup from "640" to "570." Change Hot Startup from "460" to "380." Change Annual PE2 from "164,739" to "164,589."
49	51	Second table (Upper Limits)	PM ₁₀	Change "Upper Limits" to "BACT Limits." Change Cold Startup from "640" to "570." Change Hot Startup from "460" to "380." Change Annual PE2 from "164,739" to "164,589."
50	51	Notes below second table		Change "8,272 hr/yr" to "8,257 hr/yr." Change equation to "= 8,322 – (10(3) + 20(1) + 30(0.5))."
51	53	First table (Daily)	CO	EF2: Change "0.035" to "0.35." Daily PE2: Change "30.2" to "302.4."
52	53	Second table (Annual)	CO	EF2: Change "0.035" to "0.35." Annual PE2: Change "2,268" to "22,680."
53	53	Third table (PE for S-7616-2-0)		General comment: Please identify the fugitive emission streams associated with this source. It was assumed that streams 1-8 were associated so that the emissions could be verified.

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
54	53	Third table	CO	PE gasifiers column: Change CO from "30.2" to "302.4." PE total (lb/day): Change CO from "62.7" to "334.9." PE gasifiers (lb/yr): Change CO from "2,268" to "22,680." PE total (lb/yr): Change CO from "14,739" to "35,151."
55	57	Third line below second table		PE2 SO _x : Change "8,760 hr/day" to "8,760 hr/yr."
56	57	Sixth line below second table		PE2 SO _x : Change "300 hr/day" to "300 hr/yr." Change "6.1 lb-SO _x /day" to 6.1 lb-SO _x /yr."
57	58	Table	CO	General comment: Please identify the fugitive emission streams associated with this source. It was assumed that streams 9-13 were associated so that the emissions could be verified. PE fugitives (lb/day): Change CO from "34.2" to "0.2."
58	58	Table	VOC	PE fugitives (lb/day): Change VOC from "0.2" to "34.2."
59	61	Table		Change "Upper" to "BACT." S-7616-2-0: Change CO from "14,739" to "35,151." S-7616-9-0, Target: Change PM ₁₀ from "164,739" to "164,589." S-7616-9-0, Upper: Change PM ₁₀ from "164,739" to "164,589." Post Project, Target: Change PM ₁₀ from "223,201" to "223,051." Post Project, Upper: Change PM ₁₀ from "223,201" to "223,051." Post Project, Target: Change CO from "744,365" to "764,777." Post Project, Upper: Change CO from "793,907" to "814,319."

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
60	62	Table		Change "Upper" to "BACT." Post Project, Target: Change PM ₁₀ from "223,201" to "223,051." Post Project, Upper: Change PM ₁₀ from "223,201" to "223,051." Post Project, Target: Change PM _{2.5} from "198,650" to "198,500." Post Project, Upper: Change PM _{2.5} from "198,650" to "198,500." Post Project, Target: Change CO from "744,365" to "764,777." Post Project, Upper: Change CO from "793,907" to "814,319."
61	69	S-7616-14-0 and -15-0	2	Change "diesel-fried" to "diesel-fired."
62	69	S-7616-16-0	2	Change "diesel-fried" to "diesel-fired."
63	71	S-7616-9-0, NO _x (max)	1	Change "(max)" to "(BACT)."
64	71	S-7616-9-0, SO _x	1	(SO _x): Change "natural with no" to "natural gas with no."
65	71	S-7616-9-0, SO _x	2	(SO _x): Change "0.0003 lb-SO _x /MMBtu" to "0.003 lb-SO _x /MMBtu."
66	71	S-7616-9-0, CO (max)	1	Change "(max)" to "(BACT)."
67	71	S-7616-9-0, VOC (max)	1	Change "(max)" to "(BACT)."
68	72	S-7616-9-0, PM ₁₀	2	(PM ₁₀): Change "regulated gas" to "regulated natural gas."
69	72	S-7616-9-0, PM ₁₀	3	(PM ₁₀): Change "0.0003 lb-SO _x /MMBtu" to "0.003 lb-SO _x /MMBtu."
70	75	Table		Post Project: Change PM ₁₀ from "223,201" to "223,051." Post Project: Change CO from "793,907" to "814,319."
71	77	SO _x Offsets Required, S-7616-16-0		Change "2 lb" to "1 lb."

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
72	78	Second table		Each of the four quarters: Change PM ₁₀ ERCs required “72,733” to “72,677.” Each of the four quarters: Change Total ERCs required “80,705” to “80,649.”
73	79	SSPE2 (PM ₁₀)		Change “223,201” to “223,051.”
74	79	(PM ₁₀) Offsets Required (lb/yr)		Change “[(223,201 -23-23-1-29,200+0) × DOR] = 193,954 × DOR” to “[(223,051 -23-23-1-29,200+0) × DOR]” = 193,804 × DOR.”
75	79	(PM ₁₀) Quarterly emissions to be offset		Change “48,489” to “48,451.”
76	79	Paragraph below (PM ₁₀) Quarterly emissions to be offset	4	Change “The applicant propose” to “The Applicant proposes.”
77	79	(SO _x) Offsets Required (lb/yr)		Change “ 193,954 × 1.5 = 290,931 lb-PM ₁₀ /year” to “ 193,804 × 1.5 = 290,706 lb-PM ₁₀ /year.”
78	79	(SO _x) Quarterly emissions to be offset		Change “72,733” to “72,677.”
79	79	Table		Change PM ₁₀ ERCs required “72,733” to “72,677.” Change Total ERCs required “80,705” to “80,649.”
80	81	CO Offsets Required, first paragraph	2	Change “793,201” to “814,319.”

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
81	82	Proposed Rule 2201 (offset) Conditions, third bullet (PM ₁₀)	3, 4	Change first, second, third, and fourth quarters from “48,489” to “48,451.”
82	82	Proposed Rule 2201 (offset) Conditions, fourth bullet (VOC)	3, 4	Change first, second, third, and fourth quarters from “31,817” to “24,474.”
83	82	Proposed Rule 2201 (offset) Conditions, fifth bullet (ERC)	6,7	Applicant seeks clarification regarding this language. Change “Demonstration” to “Determination.”
84	83	Table		SPPE2: Change PM ₁₀ from “223,201” to “223,051.” SPPE2: Change CO from “793,907” to “814,319.”
85	84	Table		SPPE2 and SSIPE (lb/yr): Change PM ₁₀ from “223,201” to “223,051.” SPPE2 and SSIPE (lb/yr): Change CO from “793,907” to “814,319.”
86	84	S-7616-9-0, second bullet	3	Change PM ₁₀ “472.0” to “475.2.”
87	85	First bullet		Change “upper level” to “BACT level.” Change NO _x “910.5” to “1,320.” Change VOC “1,026.3” to “1,061.4.” Change CO “6,058.2” to “6,183.0.” Change PM ₁₀ “472.0” to “475.2.”
88	87	S-7616-2-0, first bullet	3	Change CO “0.035” to “0.35.”
89	87	S-7616-2-0, fifth bullet	2	Delete “VOC.”

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
90	87	S-7616-3-0, second bullet		Change "Emissions from the flare shall not" to "Emissions from the flare, during non-emergency operations other than from pilot and sweep gas combustion, shall not." Change "PM ₁₀ : 0.0 lb/MMBtu" to "PM ₁₀ : negligible (<0.0004) lb/MMBtu." Change "VOC: 0.0 lb/MMBtu" to "VOC: negligible (< 0.0004) lb/MMBtu."
91	88	First bullet		Change "The sulfur content of the gas flared shall be limited to 0 ppmv, except during combustion turbine generator washes, which will be limited to no more than 5 ppmv" to "The sulfur content of the gas flared shall be limited to no more than 5 ppmv."
92	88	S-7616-6-0, second bullet	2	PM ₁₀ : Change "0.03" to "0.003."
93	88	S-7616-7-0, second bullet	1	PM ₁₀ : Change "0.03" to "0.003."
94	89	Third bullet	2	Delete "VOC."
95	96	Second paragraph	1	Change "limit" to "limited."
96	96	NO _x (max)	1	Change "max" to "BACT."
97	101	Last paragraph	5	Change "PEC" to "HECA."
98	114	Combined-Cycle Combustion Turbine Generator (S-7616-9-0)	2	Change "5% opacity" to "20% opacity."
99	114	Proposed Rule 4101 Conditions, second bullet	3	Change "5% opacity" to "20% opacity."
100	115	Table		Change "S-7616-1-0 through -8-0 and -10-0 through -16-0" to "S-7616-1-0 through -8-0 and -11-0 through -16-0."

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
101	121	First bullet	3	PM ₁₀ : Change "0.0076" to "0.005."
102	126	Rule 4311 – Flares, Section 5.0, first paragraph	3	Change "will be applicable to that flare" to "will not be applicable to that flare."
103	126	Rule 4311 – Flares, Section 5.0, third paragraph	1	Change "S-7616-3-0 and -6-0" to "S-7616-3-0, -6-0 and -7-0."
104	127	Fourth paragraph	1	General comment: The flare gas pressure is less than 5 psig for the Rectisol flare, although the Rectisol flare is exempt from requirement of Section 5.6 due to Section 5.1 (emergency only use).
105	127	40 CFR 60.18, first bullet	3	Change "Ringelmann 1/4 or 5% opacity" to "Ringelmann 1 or 20% opacity."
106	128	Third bullet	1	Change "40 CFR 60.16" to "40 CFR 60.18."
107	128	Fourth bullet	1	Change "40 CFR 60.16" to "40 CFR 60.18."
108	128	Fifth bullet	1	Change "40 CFR 60.16" to "40 CFR 60.18."
109	129	First bullet	1	Change "40 CFR 60.16" to "40 CFR 60.18."
110	129	Second bullet	1	Change "40 CFR 60.16" to "40 CFR 60.18."
111	129	Third bullet	1	Change "40 CFR 60.16" to "40 CFR 60.18."
112	130	Section 6.1, first paragraph	4	Change "S-7616-3" to "S-7616-6."
113	131	Second paragraph, Section 6.1.3	3	Change "S-7616-7" to "S-7616-3, -6 and -7."

Applicant Comments on PDOC Evaluation				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
114	133	Section 6.5, second paragraph	2	Change "S-7616-3" to "S-7616-3, -6 and -7." General comment: The maximum emergency design heat input for the SRU flare is approximately 500 million Btu/hr.
115	133	Section 6.6, first paragraph	5	Change "S-7616-3" to "S-7616-3, -6 and -7."
116	133	Section 6.7, first paragraph	6	Change "S-7616-3" to "S-7616-3, -6 and -7."
117	134	Section 6.8, first paragraph	5	Change "S-7616-3" to "S-7616-3, -6 and -7."
118	134	Section 6.9, sixth paragraph	1	Change "S-7616-3" to "S-7616-3, -6 and -7."
119	138	Section 5.1, second paragraph	1	Change "5 ppmv" to "4 ppmv."
120	154	Table, Permit number S-7616-4-0		Fee schedule: Change "3020-01-G" to "3020-01-F." Fee description: Change "1300 hp electric motor hp" to "400 hp electric motor hp." Annual fee: Change "\$815" to "\$607."

APPENDIX A (CONDITIONS)

Applicant Comments on PDOC Conditions on Permit S-7616-1-0 (Solids Handling and Storage)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	2	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
3	3	Change "Demonstration of Compliance" to "Determination of Compliance."
4	8	Change "the following dust collectors" to "the following dust collectors or equivalent control system."
5	9	Change "Truck receiving operation shall be fully enclosed when trucks are in unloading position and spray nozzles shall" to "Truck offloading station shall include spray nozzles that shall."
6	10	Change "and shall vent only to dust collectors" to "and shall vent only to dust collectors or equivalent control system."
7	11	Delete "in excess of 0% opacity." Change "and shall vent only to dust collectors" to "and shall vent only to dust collectors or equivalent control system."
8	12	Change "dust collector shall" to "dust collector or equivalent control system shall." Delete "in excess of 0% opacity."
9	13	Change "dust collector" to "dust collector or equivalent control system."
10	14	Change "dust collectors shall be checked" to "dust collectors shall be checked or equivalent control system inspected."
11	15	Change "dust collector" to "dust collector or equivalent control system."
12	17	Change "dust collector" to "dust collector or equivalent control system."

Applicant Comments on PDOC Conditions on Permit S-7616-1-0 (Solids Handling and Storage)		
Applicant Comment Number	Condition #	Applicant Comment
13	25	Change "Records of dust collector filter maintenance" to "Records of dust control device maintenance."
14	Add	The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment [District Rule 220 1].
15	Add	The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters [District Rule 2201].
16	Add	Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct [District Rule 2201].
17	Add	No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment [District Rule 2201].

Applicant Comments on PDOC Conditions on Permit S-7616-2-0 (Gasification System)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	3	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
3	5	Change VOC ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "31,817" to "24,474."
4	6	Change "Demonstration of Compliance" to "Determination of Compliance."
5	10	Change "Gasifiers shall" to Gasifier Refractory Heaters shall."
6	13	Change CO from "0.035" to "0.35."
7	15	Change "emissions shall" to "emissions at the gasifier refractory heater vent stack shall."
8	16	Change "This unit shall" to "The gasifier refractory heaters vent shall."
9	22	Remove "VOC."

Applicant Comments on PDOC Conditions on Permit S-7616-3-0 (Gasification Flare)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	3	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
3	5	Change VOC ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "31,817" to "24,474."
4	6	Change "Demonstration of Compliance" to "Determination of Compliance."
5	12	Change condition to state "Emissions from the flare, during non-emergency operations other than from pilot and sweep gas combustion, shall not exceed any of the following (based on total gas combusted): PM ₁₀ : negligible (< 0.0004) lb/MMBtu; NO _x (as NO ₂): 0.068 lb/MMBtu; VOC: negligible (< 0.0004) lb/MMBtu; or CO: 0.37 lb/MMBtu when flaring shifted gas and CO: 2.0 lb/MMBtu when flaring unshifted gas [District Rule 2201]."
6	13	Change "113.9 lb/day." to "113.9 lb/day during non-emergency operations."
7	14	Change "shall be limited to 0 ppmv, except during combustion turbine generator washes, which will be limited to no more than 5 ppmv." to "shall be limited to no more than 5 ppmv."
8	16	Change "Ringelmann ¼ or 5% opacity" to "Ringelmann 1 or 20% opacity."
9	22	Change this entire Condition to "Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. The requirements of this section shall not apply to Coanda effect flares [District Rule 4311, 5.6]."
10	27	Change "their discovery" to "its discovery."

Applicant Comments on PDOC Conditions on Permit S-7616-3-0 (Gasification Flare)		
Applicant Comment Number	Condition #	Applicant Comment
11	NA	Add the following condition: "Records of the duration of flare operation, amount of gas burned, and the nature of the emergency situation for flare used during an emergency situation shall be made readily available to the APCO, ARB, and EPA upon request for a minimum of 5 years [District Rule 4311, Section 6.1]."

Applicant Comments on PDOC Conditions on Permit S-7616-4-0 (Cooling Tower for Gasification Area)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	2	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
3	3	Change "Demonstration of Compliance" to "Determination of Compliance."

Applicant Comments on PDOC Conditions on Permit S-7616-5-0 (Sulfur Recovery System)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	3	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
3	5	Change VOC ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "31,817" to "24,474."
4	6	Change "Demonstration of Compliance" to "Determination of Compliance."
5	9	Change "Sulfur recovery unit shall include" to "The Sulfur Recovery Unit shall consist of two identical trains. Each train shall be designed with..."
6	9	After "oxygen preheater" add "(optional)."
7	9	Change "combustion air blower" to "combustion air blower(s)."
8	10	Change "Tail gas treating unit shall include" to "The Tail Gas Treating Unit shall be designed to include."
9	10	After "tail gas trim heater" add "(optional)."
10	10	Change "TGTU rich amine pump" to "TGTU-rich amine pumps."
11	14	Change "180 short tons/day" to "210 long tons/day."
12	15	Change "fuel feed" to "fuel feed gas or nitrogen purge operation feed." After "exceed" add "10 ppmv at 15% O ₂ (Moving 3-hour average)."
13	17	After "natural" add "gas."
14	18	After "offgas" add "when feeding the TGTU incinerator."

Applicant Comments on PDOC Conditions on Permit S-7616-5-0 (Sulfur Recovery System)		
Applicant Comment Number	Condition #	Applicant Comment
15	22	Change "SOx (as SOx)" to "SO _x (as SO ₂)." Change "0.0204 MMBtu/hr" to "0.0204 lb/MMBtu."
16	23	Change "During such periods TGTU tail gas shall be directed to the amine system." to "During such periods, SRU tail gas shall be directed to the TGTU."
17	25	In the 2 nd line, change "SRU tail is greater than 0.5%" to "SRU tail gas is greater than zero %." Last line, change "36 hours" to "72 hours."
18	30	Delete "VOC."
19	31	Change "sulfur, tail gas treatment unit process, and tail gas treatment unit amine." to "sulfur recovery unit and tail gas treatment unit."
20	42	Delete 2 nd "0.1 grain/dscf."
21	43	Change "zero percent" to "3 percent."
22	Add	The permittee shall obtain written District approval for the use of any equivalent equipment not specifically approved by this Authority to Construct. Approval of the equivalent equipment shall be made only after the District's determination that the submitted design and performance of the proposed alternate equipment is equivalent to the specifically authorized equipment [District Rule 220 1].
23	Add	The permittee's request for approval of equivalent equipment shall include the make, model, manufacturer's maximum rating, manufacturer's guaranteed emission rates, equipment drawing(s), and operational characteristics/parameters [District Rule 2201].
24	Add	Alternate equipment shall be of the same class and category of source as the equipment authorized by the Authority to Construct [District Rule 2201].

Applicant Comments on PDOC Conditions on Permit S-7616-5-0 (Sulfur Recovery System)		
Applicant Comment Number	Condition #	Applicant Comment
25	Add	No emission factor and no emission shall be greater for the alternate equipment than for the proposed equipment. No changes in the hours of operation, operating rate, throughput, or firing rate may be authorized for any alternate equipment [District Rule 2201].

Applicant Comments on PDOC Conditions on Permit S-7616-6-0 (SRU Flare)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	Equipment Description	Change "Sulfur Recovery Unit" to "Sulfur Recovery and Gasification Units." General comment: The maximum emergency design heat input for the SRU flare is approximately 500 million Btu/hr.
3	General comment	Consider consolidating Conditions 17, 18, 19, 29, and 39.
4	3	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
5	5	Change VOC ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "31,817" to "24,474."
6	6	Change "Demonstration of Compliance" to "Determination of Compliance."
7	12	Change PM ₁₀ from "0.03" to "0.003."
8	14	Change "Ringelmann ¼ or 5%" to "Ringelmann 1 or 20%."
9	19	Change "infrared sensor, or an equivalent device" to "infrared sensor, acoustic monitor, or an equivalent device."
10	20	Change condition to: "Open flares (air-assisted, steam-assisted, or non-assisted) in which the flare gas pressure is less than 5 psig shall be operated in such a manner that meets the provisions of 40 CFR 60.18. The requirements of this section shall not apply to Coanda effect flares."
11	31	Change "40 CFR 60.16" to "40 CFR 60.18."
12	32	Change "40 CFR 60.16" to "40 CFR 60.18."
13	33	Change "40 CFR 60.16" to "40 CFR 60.18."

Applicant Comments on PDOC Conditions on Permit S-7616-6-0 (SRU Flare)		
Applicant Comment Number	Condition #	Applicant Comment
14	34	Change "40 CFR 60.16" to "40 CFR 60.18."
15	35	Change "40 CFR 60.16" to "40 CFR 60.18."
16	36	Change "40 CFR 60.16" to "40 CFR 60.18."
17	NA	Add the following condition: "Records of the duration of flare operation, amount of gas burned, and the nature of the emergency situation for flare used during an emergency situation shall be made readily available to the APCO, ARB, and EPA upon request for a minimum of 5 years [District Rule 4311, Section 6.1]."
18	NA	Add the following condition: "Effective on and after July 1, 2011, pursuant to Rule 4311 Section 6.6, the operator shall monitor vent gas composition using one of the methods pursuant to Section 6.6.1 through Section 6.6.5 as appropriate [District Rule 4311, Section 6.6]."
19	NA	Add the following condition: "Effective on and after July 1, 2011, the operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices [District Rule 4311, Section 6.7]."
20	NA	Add the following condition: "Effective on and after July 1, 2011, if the flare is equipped with a water seal, the operator shall monitor and record the water level and pressure of the water seal that services each flare daily [District Rule 4311, Section 6.8]."
21	NA	Add the following condition: "Effective on and after July 1, 2011, periods of flare monitoring system in operation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating [District Rule 4311, Section 6.9]."

Applicant Comments on PDOC Conditions on Permit S-7616-6-0 (SRU Flare)		
Applicant Comment Number	Condition #	Applicant Comment
22	NA	Add the following condition: "Effective on and after July 1, 2011, during periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices [District Rule 4311, Section 6.9]."
23	NA	Add the following condition: "Effective on and after July 1, 2011, operator shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure [District Rule 4311, Section 6.9]."
24	NA	Add the following condition: "Effective on and after July 1, 2011, all in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages [District Rule 4311, Section 6.9]."

Applicant Comments on PDOC Conditions on Permit S-7616-7-0 (Rectisol Elevated Flare)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	3	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
3	5	Change VOC ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "31,817" to "24,474."
4	6	Change "Demonstration of Compliance" to "Determination of Compliance."
5	10	Change "This flare shall be operated solely for emergency situations." to "This flare shall be operated solely for startup, shutdown, and emergency situations."
6	11	Change PM ₁₀ from "0.03" to "0.003."
7		Add the following condition: "A flame shall be present at all times when combustible gases are vented through this flare [District Rules 2201 and 4311, 5.2]."
8	NA	Add the following condition: "Effective on and after July 1, 2011, pursuant to Rule 4311 Section 6.6, the operator shall monitor vent gas composition using one the methods pursuant to Section 6.6.1 through Section 6.6.5 as appropriate [District Rule 4311, Section 6.6]."
9	NA	Add the following condition: "Effective on and after July 1, 2011, the operator shall monitor the volumetric flows of purge and pilot gases with flow measuring devices [District Rule 4311, Section 6.7]."
10	NA	Add the following condition: "Effective on and after July 1, 2011, if the flare is equipped with a water seal, the operator shall monitor and record the water level and pressure of the water seal that services each flare daily [District Rule 4311, Section 6.8]."

Applicant Comments on PDOC Conditions on Permit S-7616-7-0 (Rectisol Elevated Flare)		
Applicant Comment Number	Condition #	Applicant Comment
11	NA	Add the following condition: "Effective on and after July 1, 2011, periods of flare monitoring system in operation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Periods of inoperation of monitoring equipment shall not exceed 14 days per any 18-consecutive-month period. Periods of flare monitoring system inoperation do not include the periods when the system feeding the flare is not operating [District Rule 4311, Section 6.9]."
12	NA	Add the following condition: "Effective on and after July 1, 2011, during periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 6.6, operators responsible for monitoring shall take one sample within 30 minutes of the commencement of flaring, from the flare header or from an alternate location at which samples are representative of vent gas composition and have samples analyzed pursuant to Section 6.3.4. During periods of inoperation of flow monitors required by Section 5.10, flow shall be calculated using good engineering practices [District Rule 4311, Section 6.9]."
13	NA	Add the following condition: "Effective on and after July 1, 2011, operator shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure [District Rule 4311, Section 6.9]."
14	NA	Add the following condition: "Effective on and after July 1, 2011, all in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages [District Rule 4311, Section 6.9]."

Applicant Comments on PDOC Conditions on Permit S-7616-8-0 (CO2 Recovery and Venting System)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	2	Change VOC ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "31,817" to "24,474."
3	3	Change "Demonstration of Compliance" to "Determination of Compliance."
4	7	Change "when transportation" to "when compression and transportation."
5	7	Change "unavailable due to upset" to "unavailable or CO ₂ delivery is interrupted due to plant upset."

Applicant Comments on PDOC Conditions on Permit S-7616-9-0 (CTG-HRSG-SCR-STG)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	3	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
3	5	Change VOC ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "31,817" to "24,474."
4	6	Change "Demonstration of Compliance" to "Determination of Compliance."
5	11	After "operation" add "on both natural gas and hydrogen-rich fuel."
6	11	General comment: As described in the ATC and as will be described in the Commissioning Plan required by Condition 16, there will be two CTG commissioning periods. First, the CTG/HRSG will be commissioned on natural gas; then, while the CTG/HRSG is operating on natural gas, the gasifiers and balance-of-plant units will be commissioned. Finally, the CTG/HRSG will be commissioned on hydrogen-rich fuel.
7	14	After "50%" add "(with SCR catalyst temperature within the manufacturers recommended operation range)."
8	21	General comment: Fresh air blower not needed for combined cycle.
9	24	Please remove this condition.
10	28	Change "5%" to "20%."

Applicant Comments on PDOC Conditions on Permit S-7616-9-0 (CTG-HRSG-SCR-STG)		
Applicant Comment Number	Condition #	Applicant Comment
11	30	<p>Insert before all text “Emission rates [BACT level] from the combustion turbine generator, except during startup and shutdown periods, shall not exceed any of the following: NO_x (as NO₂) – 42.0 lb/hr and 4.0 ppmvd-NO_x @ 15% O₂ (3-hour rolling average), (except during startup/shutdown); VOC (as methane) – 7.3 lb/hr and 1.0 ppmvd-VOC @ 15% O₂ when firing on hydrogen-rich fuel exclusively and 2.0 ppmvd @ 15% O₂ when firing on fuel containing natural gas; CO – 32.0 lb/hr and 3.0 ppmvd-CO @ 15% O₂ when firing on hydrogen-rich fuel exclusively and 5.0 ppmvd-CO @ 15% O₂ when firing on fuel containing natural gas; PM₁₀ – 19.8 lb/hr; or SO_x (as SO₂) – 6.8 lb/hr. The hourly rolling averages for NO_x (as NO₂) emission limits indicated above. All other pollutant emission limits are 3-hour rolling averages.”</p> <p>On the first line after “Emission rates,” add “(target level)”, although per global comments #1 and #8, removal of the target emission rates should be considered.</p>
12	34	Change “its operating temperature and pressure, including the time required by the unit’s emission control system to reach full operations.” to “compliance with non-startup/shutdown emission limits.”
13	37	<p>Change “upper level” to “BACT level”. Move BACT emission limits to start of condition. Consider removal of the target emission rates.</p> <p>Change BACT level NO_x from “910.5” to “1,320.0.”</p> <p>Change BACT level VOC from “1,026.3” to “1,061.4.”</p> <p>Change BACT level CO from “6,058.2” to “6,183.0.”</p> <p>Change target and BACT level PM₁₀ from “472.2” to “475.2.”</p>
14	38	Change “upper level” to “BACT level.” Move BACT emission limits to start of condition. Consider removal of the target emission rates.

Applicant Comments on PDOC Conditions on Permit S-7616-9-0 (CTG-HRSG-SCR-STG)		
Applicant Comment Number	Condition #	Applicant Comment
15	42	General comment: It takes more time to conduct a relative accuracy test of the CEMS than the turbine spends in startup mode; thus, this test cannot be conducted. This testing requirement will also likely conflict with internal Exclusion Zone requirements. Please consider changing condition.
16	46	Change "The sulfur content of each fuel source" to "The sulfur content of natural gas fuel source." Change "1.0 gr/100 scf" to "0.75 gr/100 scf."
17	49	Change: "Fuel sulfur" to "Unregulated natural gas sulfur."
18	53	General comment: It takes more time to conduct a relative accuracy test of the CEMS than the turbine spends in startup mode; thus, this test can not be conducted. This testing requirement will also likely conflict with internal Exclusion Zone requirements. Please consider changing condition.
19	81	In the 4 th line, after "natural" add "gas" and add "anticipated" before "vendor."

Permit S-7616-10-0 [SJVAPCD revoked for auxiliary turbine]

Applicant Comments on PDOC Conditions on Permit S-7616-11-0 (Cooling Tower for the ASU)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	2	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
3	3	Change "Demonstration of Compliance" to "Determination of Compliance."

Applicant Comments on PDOC Conditions on Permit S-7616-12-0 (Cooling Tower for the Power Block)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	2	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
3	3	Change "Demonstration of Compliance" to "Determination of Compliance."

Applicant Comments on PDOC Conditions on Permit S-7616-13-0 (Aux Boiler)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."
2	3	Change PM ₁₀ ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "48,489" to "48,451."
3	5	Change VOC ERCs 1 st , 2 nd , 3 rd , and 4 th quarters from "31,817" to "24,474."
4	6	Change "Demonstration of Compliance" to "Determination of Compliance."
5	18	Change PM ₁₀ from "0.0076" to "0.005."
6	Add	Add Condition: "Annual fuel input for Aux Boiler will not exceed 311,000 MMBTU/yr."

Applicant Comments on PDOC Conditions on Permit S-7616-14-0 (Emergency IC Engine #1)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."

Applicant Comments on PDOC Conditions on Permit S-7616-15-0 (Emergency IC Engine #2)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."

Applicant Comments on PDOC Conditions on Permit S-7616-16-0 (Emergency IC Engine Firewater)		
Applicant Comment Number	Condition #	Applicant Comment
1	Location	Change "Tupman, CA" to "Kern County, CA."

APPENDIX B (BACT GUIDELINES)

1. Missing BACT Guideline for CO₂ Vent.
2. Missing BACT Guideline for combustion turbine generator fired on hydrogen-rich syngas and natural gas.
3. Missing BACT Guideline 8.3.10 for PM₁₀ emissions from cooling towers.

APPENDIX C (TOP DOWN BACT ANALYSES)

Applicant Comments on PDOC Appendix C (Top Down BACT Analyses)				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
1	C-5	Combustion Turbine Generator (S-7619-9)		As a general matter, the BACT determinations for NO _x , CO, and VOC emissions from the combustion turbine generator are unclear as a result of including discussion of “target levels” for these pollutants. To avoid confusion, Applicant recommends that discussion of the target levels not be included in the BACT analysis, or if they are to be included, that clearer distinctions be made between the BACT levels and the target levels.
2	App. C-7	Paragraph a. 1)	2	Change “0.0003 lb” to “0.003 lb.”
3	App. C-7	Paragraph e.	2, 5	Change “0.0003 lb” to “0.003 lb.”
4	App. C-8	Paragraph a. 1)	3	Change “0.0003 lb” to “0.003 lb.”
5	App. C-8	Paragraph e.	3, 6	Change “0.0003 lb” to “0.003 lb.”

Applicant Comments on PDOC Appendix C (Top Down BACT Analyses)				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
6	App. C-9	Paragraph e.		<p>Add after paragraph:</p> <p>“Note, however, that in a meeting between the District and the Applicant, the Applicant expressed concern about being subject to CO emissions limits below 5 ppmvd-CO for the CTG when firing on fuel containing natural gas, which may appear to be cost-effective and technologically feasible on paper, but is unproven in a real-world application. As was explained in more detail earlier, because the proposed CTG will be primarily fired on hydrogen-rich syngas fuel, the combustion technology to allow hydrogen-rich fuel and natural-gas firing is unproven at levels lower than 5 ppmvd when firing on fuel containing natural gas on a consistent basis.</p> <p>“Due to the technology's unproven performance, the Applicant requests some flexibility regarding the CO emission limits. Thus, the ATC for the CTG will be issued with an upper absolute limit along with a lower targeted limit that is deemed cost effective and technologically feasible in theory. During an initial trial period (possibly lasting 24 months), the District will determine whether the lower targeted limit can be satisfied by examining source testing results and operating history. If, however, the lower targeted value is demonstrated unachievable, CO emissions in excess of the lower targeted limit (but less than the upper limit) will not constitute a violation, but the permittee will be required to submit a report containing all monitoring and source test information that will be analyzed to determine the final BACT limit for CO that can be constantly achieved. The permittee will then be required to submit an Authority to Construct application to revise the limits and to provide any necessary additional emissions offsets.”</p>

Applicant Comments on PDOC Appendix C (Top Down BACT Analyses)				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
7	App. C-10	Paragraph e.		<p>Add after paragraph:</p> <p>“Note, however, that in a meeting between the District and the Applicant, the Applicant expressed concern about being subject to VOC emissions limits below 2 ppmvd-VOC for the CTG when firing on fuel containing natural gas, which may appear to be cost effective and technologically feasible on paper, but is unproven in a real-world application. As was explained in more detail earlier, because the proposed CTG will be primarily fired on hydrogen-rich syngas fuel, the combustion technology to allow hydrogen-rich fuel and natural-gas firing is unproven at levels lower than 2 ppmvd when firing on fuel containing natural gas on a consistent basis.”</p> <p>“Due to the technology's unproven performance, the Applicant requests some flexibility regarding the VOC emission limits. Thus, the ATC for the CTG will be issued with an upper absolute limit, along with a lower targeted limit that is deemed cost effective and technologically feasible in theory. During an initial trial period (possibly lasting 24 months), the District will determine whether the lower targeted limit can be satisfied by examining source testing results and operating history. If, however, the lower targeted value is demonstrated unachievable, VOC emissions in excess of the lower targeted limit (but less than the upper limit) will not constitute a violation, but the permittee will be required to submit a report containing all monitoring and source test information that will be analyzed to determine the final BACT limit for VOC that can be constantly achieved. The permittee will then be required to submit an Authority to Construct application to revise the limits and to provide any necessary additional emissions offsets.”</p>
8	App. C-13	Paragraph 1.a.1), second paragraph		Change “aslso” to “also.”

Applicant Comments on PDOC Appendix C (Top Down BACT Analyses)				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
9	App. C-20	Top Down BACT Analysis for Flares	1	Specifies "S-7616-3-0 and -6-0." This should also include the Rectisol flare (S-7616-7-0).
10	App. C-21	Second paragraph	3	Change "caustic scrubber" to "caustic scrubber or equivalent technology."

APPENDIX D (PROCESS FLOW DIAGRAMS) – no comments

APPENDIX E (FUGITIVE EMISSION CALCULATIONS) – REMOVE ALL CONFIDENTIAL DATA

APPENDIX F (APPENDIX S APPLICABILITY DETERMINATION) – no comments

APPENDIX G (COMPLIANCE CERTIFICATION) – no comments

APPENDIX H (Health Risk Assessment and Ambient Air Quality Analysis)

Applicant Comments on PDOC Appendix H (Health Risk Assessment and Ambient Air Quality Analysis)				
Applicant Comment Number	PDOC Page #	Text Location	Line	Applicant Comment
1	1	Unit # 1-0 through 13-0		Shouldn't there be a condition for Unit 9-0 regarding the T-BACT requirement?
2	3	1 st paragraph	1,2	Remove reference to "wire drawing machine" and insert correct reference.
3	3	2 nd paragraph	2	Change "conditions listed on page 1 of this report must be included for this proposed unit" to "conditions listed on pages 1-2 of this report must be included for these proposed units."
4		Source Pathway – Source Input Table		Most, but not all, source locations do not match the locations provided in the HECA modeling.
5		Source Pathway – Source Input Table	Volume sources	Older source parameters were used for all volume sources (those were provided in April 2010; revised parameters were provided in May 2010).
6		AAQA Emissions Table		SO _x 1-, 3-, and 24-hour emission rates lower than annual emission rate.

APPENDIX I (HAZARDOUS AIR POLLUTANT SUMMARY) – no comments



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
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APPLICATION FOR CERTIFICATION
FOR THE *HYDROGEN ENERGY*
CALIFORNIA PROJECT

Docket No. 08-AFC-8

PROOF OF SERVICE LIST
(Rev. 6/22/10)

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DECLARATION OF SERVICE

I, Alison Drury, declare that on July 27, , 2010, I served and filed copies of the attached Applicant Comments on the Preliminary Determination of Compliance (PDOC) for the Hydrogen Energy California Project, dated July 26,, 2010. 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:

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

 by personal delivery or by depositing in the United States mail at San Francisco 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:

 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. 08-AFC-8
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.