LATHAM & WATKINS LLP

650 Town Center Drive, 20th Floor
Costa Mesa, California 92626-1925
Tel: +1.714.540.1235 Fax: +1.714.755.8290
www.lw.com

FIRM / AFFILIATE OFFICES

Abu Dhabi	Moscow
Barcelona	Munich
Beijing	New Jersey
Brussels	New York
Chicago	Orange County
Doha	Paris
Dubai	Riyadh
Frankfurt	Rome
Hamburg	San Diego
Hong Kong	San Francisco
Houston	Shanghai
London	Silicon Valley
Los Angeles	Singapore
Madrid	Tokyo
Milan	Washington, D.C.

File No. 030137-0012

DOCKET
07-AFC-3
DATE MAY 03 2010
RECD. MAY 03 2010

May 3, 2010

VIA FEDEX

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 07-AFC-3
1516 Ninth Street, MS-4
Sacramento, California 95814-5512

Re: CPV Sentinel Energy Project: Docket No. 07-AFC-3

Dear Sir/Madam:

Pursuant to California Code of Regulations, title 20, sections 1209, 1209.5, and 1210, enclosed herewith for filing please find Applicant's Comments on the Final Staff Assessment Air Quality Addendum.

Please note that the enclosed submittal was filed today via electronic mail to your attention and to all parties on the attached proof of service list.

Very truly yours,

Paul E. Kihm
Senior Paralegal

Enclosure

cc: CEC 07-AFC-3 Proof of Service List (w/encl., via e-mail and U.S. Mail)
Michael J. Carroll, Esq. (w/ encl.)

Michael J. Carroll
LATHAM & WATKINS LLP
650 Town Center Drive, Suite 2000
Costa Mesa, CA 92626
(714) 540-1235
Counsel to Applicant

STATE OF CALIFORNIA
ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of: APPLICATION FOR CERTIFICATION, FOR THE CPV SENTINEL ENERGY PROJECT, BY CPV SENTINEL, LLC	Docket No. 07-AFC-3 APPLICANT'S COMMENTS ON THE FINAL STAFF ASSESSMENT AIR QUALITY ADDENDUM

On behalf of CPV Sentinel, LLC (Applicant) for the CPV Sentinel Energy Project (07-AFC-03), and consistent with the Committee's April 29, 2010 Order requiring that all rebuttal testimony be filed by May 6, 2010, we provide the following comments on the Final Staff Assessment Air Quality Addendum dated April 15, 2010.

A. GENERAL COMMENTS

1. General Comment No. 1

At page 1-1, the FSA Addendum indicates that "applicant has secured the necessary ERCs." Elsewhere in the FSA Addendum, the terms "ERCs," "emission reduction credits" and "emission offsets" are used somewhat interchangeably. As a point of clarification, and as set forth in Appendix N of the South Coast Air Quality Management District's (SCAQMD) March 2, 2010 Addendum to the Determination of Compliance, the emission offset proposal for the Project includes a number of types of emission offsets, including but not limited to, what are typically referred to as emission reduction credits, or ERCs.

While the terms "emission reduction credits" and "ERCs" are frequently used, as they sometimes are in the FSA Addendum, to refer to emission offsets generally, in SCAQMD jargon, the terms "emission reduction credits" and "ERCs" refer specifically to emission reduction credits created and traded by private parties on the open market pursuant to SCAQMD Rule 1309. As explained at page 2 of Appendix N, the Project will utilize ERCs created pursuant to Rule 1309 to satisfy its offset obligation for emissions of VOCs. As explained at page 3 of Appendix N, as a NOx RECLAIM facility, the Project will utilize NOx RECLAIM

Trading Credits, or RTCs, to satisfy its offset obligation for emissions of NOx. As explained at pages 3 and 4 of Appendix N, the Project will obtain offsets for both PM10 and SOx emissions from the SCAQMD's internal bank pursuant to AB 1318. Finally, as explained at page 3 of Appendix N, the Project is not required to provide offsets for emissions of CO and PM2.5.

Elsewhere in the FSA Addendum, CEC Staff makes clear the precise nature of the emission offsets to be utilized by the project (See e.g., Air Quality Table 16 at page 2.1-37). Applicant offers this clarification only to eliminate any perceived inconsistency between the more general discussion in the Executive Summary and the more specific discussion elsewhere in the FSA Addendum.

2. General Comment No. 2

The FSA Addendum at page 2.1-46 indicates that the Applicant "has purchased these [PM10 and SOx] offsets from the SCAQMD's internal emission credit accounts pursuant to AB 1318." To clarify, the Applicant has not yet paid the mitigation fees required pursuant to Health & Safety Code Section 40440-14(e).

3. General Comment No. 3

The FSA Addendum at page 2.1-47 includes a discussion of the methodology for calculating the require amount of emission offsets. For purposes of clarification, the methodology utilized by SCAQMD in this case varies depending upon the pollutant in question. In the case of VOC emissions, the calculation methodology is as set forth in SCAQMD Rule 1306. In the case of NOx emissions, the calculation methodology is set forth in SCAQMD Rule 2005. In the case of PM10 and SOx emissions, the calculation methodology is set forth in Appendix N of the SCAQMD's March 2, 2010 Addendum to the Determination of Compliance.

4. General Comment No. 4

In addition to the plans identified and summarized in the FSA Addendum beginning at page 2.1-49, the Final PM10 Redesignation Request and Maintenance Plan for the Coachella Valley adopted by the SCAQMD on January 8, 2010, which is referenced elsewhere in the FSA Addendum, is also relevant. According to this plan, the Coachella Valley, which is within the Salton Sea Air Basin and includes the Project site, has not violated the federal PM10 standard since 1998.

5. General Comment No. 5

At page 2.1-63, the FSA Addendum identifies SCAQMD Rule 1303(b)(2) and Rule 2005(b)(2) as applicable LORS related to emission offsets. As discussed elsewhere in the FSA Addendum and Appendix N of the SCAQMD's March 2, 2010 Addendum to the Determination of Compliance, AB 1318, including California Health & Safety Code Section 40440.14, and the source-specific revision to the state implementation plan proposed for adoption by the SCAQMD Board, are also applicable LORS pursuant to which PM10 and SOx offset obligations will be satisfied.

6. General Comment No. 6

There appears to be a typographical error at page 2.1-52 of the FSA Addendum. The date of adoption of the Final 2003 Air Quality Management Plan was August 1, 2003.

7. General Comment No. 7

The first sentence of the last paragraph at page 2.1-39 states that the AB 1318 Tracking System consists of the EPA-approved tracking system in place prior to the passage of Rule 1315. This statement is not correct, although the remainder of the sentence is correct.

B. PROPOSED REVISIONS

1. Proposed Revision No. 1 – Pages 2.1-19—2.1-20

The Applicant proposes the following revisions to the final paragraph on page 2.1-19 and Table 7 to match the Applicant's data:

> The applicant anticipates six distinct commissioning phases (CPV 2007a), with a total of approximately ~~200~~ 150 hours of operation per turbine without full emissions controls, and a further 300 hours per turbine of commissioning tuning under full emissions control. **AIR QUALITY Table 7** presents the predicted maximum short term emissions of NOx, CO, and VOC. PM10 and SO2 emissions are not included here since they are proportional to fuel use, and fuel use (and thus PM10 and SO2 emissions) during commissioning is equal to or lower than during full load operations.

2. Proposed Revision No. 2 – Table 8 (Page 2.1-21)

The Applicant proposes the following revisions to Table 8 to match the Applicant's data:

AIR QUALITY Table 8
Equipment Maximum Short-Term Emissions Rates
(pounds per hour [lb/hr], except as noted)

Process Description	NOx	SO2	CO	VOC	PM10
CTG Startup (per turbine) (25 minute startup, **lb/~~1 hr~~ event**)	24.86	0.17	16.89	4.26	2.08
CTG Full Load (per turbine)	7.95	0.63	7.74	2.21	5.00
CTG Shutdown (per turbine) (10 minute shutdown, **lb/~~1 hr~~ event**)	6.0	0.02	35.0	3.0	0.86
Fire Pump Engine	2.54	0.001	0.31	0.05	0.07
Cooling Towers (all 8 cells)	0	0	0	0	0.79

3. Proposed Revision No. 3 – Page 2.1-32

The Applicant proposes the following revisions to page 2.1-32, second to last paragraph, because NOx BACT for the Project is 2.5 parts per million.

> Initial commissioning starts with a Full-Speed, No-Load test. This test runs the turbine at approximately 20 percent of its maximum heat input rate. Components tested include the ignition system, synchronization with the electric generator, and the turbine overspeed safety system. Part Load testing runs the turbines at approximately 60 percent of the maximum heat input rating. During this test, the turbine will be tuned. Full Load testing runs the turbines to their maximum heat input rate. This testing entails further tuning of the turbine. Full Load with partial SCR testing runs the turbines at 100 percent of their maximum heat input rate and operates the SCR ammonia injection grid for the first time at less than maximum injection rate. Finally, Full Load with full SCR testing runs the turbines at their maximum heat input rate and operates the SCR ammonia inject grid at its full capacity. It is during this test that the SCR system will be completely tuned and operated at design levels (i.e., NOx control at 2.5~~0~~ ppm).

4. Proposed Revision No. 4 – Page 2.1-32

The Applicant proposes the following revisions to page 2.1-32, last paragraph, to match Applicant's data.

> There is little experience to draw from regarding the initial commissioning of the GE LMS100 turbines. The applicant is estimating that it will need approximately ~~394~~ 150 hours of actual turbine operation per turbine train for commissioning purposes. ~~The applicant plans to Commission all five turbine trains at approximately the same time.~~ The applicant estimates that the maximum NOx emission rate (~~175~~ 80 lbs/hr for one turbine) ~~is most likely to occur during the water injection commissioning phase when the water injection will be 50 percent effective and the turbine train will be at 50 percent load. The~~ and the maximum CO emission rate (~~255~~ 198 lbs/hr) will most likely occur during Load Step 10 of the dynamic commissioning when the water injection is 100 percent effective and the turbine train is at 100 percent load (SCR and oxidation catalyst are not yet commissioned).

5. Proposed Revision No. 5 – Condition of Certification AQ-1 (Pages 2.1-83 and 2.1-84)

The Applicant proposes the following revisions to AQ-1, second through third paragraphs, to match the Determination of Compliance:

...

The project owner shall calculate the emission limit(s) by using the monthly fuel use data and the following emission factors: PM10: ~~6.97 lb/mmscf~~5.0 lb/hr, VOC: 2.189 lb/mmscf & SOx: ~~0.71~~0.69 lb/mmscf.

Compliance with the CO emission limit shall be verified through valid CEMS data.

The project owner shall calculate the emission limit(s) for CO for the purpose of determining compliance with the monthly emission limit in the absence of valid CEMS data by using the following emission factor(s):

A. During the commissioning period and prior to CO catalyst installation: 38.48 lb/mmscf.

B. After installation of the CO catalysis but prior to CO CEMS certification testing: ~~18.73~~14.38 lb/mmscf the emission rate shall be recalculated in accordance with Condition AQ-10 if the approved CEMS certification test resulted in emission concentration higher than ~~6~~4 ppmv.

C. After CO CEMS certification testing: ~~18.73~~14.38 lb/mmscf After CO CEMS certification test is approved by the AQMD, the emissions monitored by the CEMS and calculated in accordance with Condition AQ-10 shall be used to calculated emissions.

...

6. Proposed Revision No. 6 – Condition of Certification AQ-3 (Page 2.1-85)

The Applicant proposes the following revisions to COC AQ-3, second paragraph, to match the Determination of Compliance:

AQ-3 The 2.5 ppm NOx emission limit, the 2.0- ppm VOC limit and the 4.0 ppm CO emission limit shall not apply during turbine commissioning, start-up and shutdown. The commissioning period shall not exceed 150 operating hours per

turbine from the initial start-up. Following commissioning, start-ups shall not exceed 25 minutes and shutdowns shall not exceed 10 minutes. Written records of commissioning, start-ups and shutdowns shall be kept and made available to SCAQMD and submitted to the CPM for approval. Emissions of NOx shall not exceed 29.~~52~~54 lbs/hr for any hour in which a startup occurs. Units 1 through 8 shall be limited to a maximum of 300 startups per year;

The 19 lb/mmscf NOx emission limit(s) shall only apply during interim reporting period during initial turbine commissioning and the ~~12.40~~12.26 lbs/mmscf shall apply only during the interim reporting period after the initial turbine commissioning period, to report RECLAIM emissions. The interim period shall not exceed 12 months from the initial start-up date.

...

7. Proposed Revision No. 7 – Condition of Certification AQ-4 (Page 2.1-86)

The Applicant proposes the following revisions to COC AQ-4 to match add in the missing NOx ppm value:

> **AQ-4** Each combustion turbine stack shall have the following emission limitations.
>
> - 2.5 PPM NOx emission averaged over 60 minutes at 15 percent oxygen, dry basis.
> - 4.0 ppm CO emission averaged over 60 minutes at 15 percent oxygen, dry basis.
> - 2.0 ppm VOC emission averaged over 60 minutes at 15 percent oxygen, dry basis.
> - 5.0 ppm NH3 emission averaged over 60 minutes at 15 percent oxygen, dry basis.

8. Proposed Revision No. 8 – Condition of Certification AQ-6 (Pages 2.1-86, 87)

The Applicant proposes the following revisions to COC AQ-6, first paragraph, to match the Determination of Compliance:

> **AQ-6** The project owner shall limit the fuel usage during a commissioning period from each turbine to no more than 301 mmscf of pipeline quality natural gas per month. After the completion of commissioning, units 1 through 8 shall limit ~~AIR QUALITY 2.1 87 April 2010~~ the fuel usage from each turbine to no more than ~~418~~ 425 mmcf in any one noncommissioning

calendar month and ~~2,411~~ 2,455 mmcf in any one noncommissioning year.

...

9. Proposed Revision No. 9 – Condition of Certification AQ-7 (Pages 2.1-87, 88)

This condition specifies that emissions of PM_{10} measured during source testing should be expressed in grains per dscf of fuel. This condition appears to be intended to ensure compliance with District Rule 409, which limits PM emissions to 0.1 gr/dscf of exhaust gas flow, not per dscf of natural gas fuel flow. Applicant proposes changing the condition to make it consistent with the underlying requirement.

10. Proposed Revision No. 10 – Condition of Certification AQ-11 (Pages 2.1-90-92)

This condition requires that hourly ammonia slip be calculated and reported differently for CEC and SCAQMD. This may result in unnecessary duplicative effort and confusion. Applicant proposes using the SCAQMD method as the sole approach for calculating ammonia slip, and modifying the condition accordingly.

DATED: May 3, 2010

Respectfully submitted,

Michael J. Carroll
of LATHAM & WATKINS LLP
Counsel to Applicant

STATE OF CALIFORNIA
ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:	)	Docket No. 07-AFC-3
	)	
Application for Certification,	)	**PROOF OF SERVICE**
for the CPV SENTINEL ENERGY PROJECT	)	
	)	(March 24, 2010]
	)	
	)	

APPLICANT

Mark Turner
Project Manager
CPV Sentinel, LLC
55 Second Street, Suite 525
San Francisco, California 94105
mturner@cpv.com

Dale Shileikis
Vice President
URS Corporation
221 Main Street, Suite 600
San Francisco, CA 94105-1917
dale_shileikis@urscorp.com

INTERESTED AGENCIES

California ISO
E-mail preferred
e-recipient@caiso.com

Mohsen Nazemi
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, California 91765-4178
mnazemi@aqmd.gov

INTERVENORS

Angela Johnson Meszaros
CA Communities Against Toxics
1107 Fair Oaks Avenue, #246
South Pasadena, CA 91030
Angela@CleanAirMatters.net

Shana Lazerow
Communities for a Better Environment
1440 Broadway, Suite 701
Oakland, California 94612
slazerow@cbecal.org

ENERGY COMMISSION

James D. Boyd
Vice Chair and Presiding Member
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Sacramento, California 95814-5512
jboyd@energy.state.ca.us

Kenneth Celli
Hearing Officer
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Sacramento, California 95814-5512
kcelli@energy.state.ca.us

John Kessler
Project Manager
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Sacramento, California 95814-5512
jkessler@energy.state.ca.us

Caryn Holmes
Staff Counsel
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Sacramento, California 95814-5512
cholmes@energy.state.ca.us

Jennifer Jennings
Public Adviser
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Sacramento, California 95814-5512
Publicadviser@energy.state.ca.us

CPV SENTINEL ENERGY PROJECT
CEC Docket No. 07-AFC-3

DECLARATION OF SERVICE

I, Paul Kihm, declare that on May 3, 2010, I served and filed copies of the attached:

APPLICANT'S COMMENTS ON THE FINAL STAFF ASSESSMENT AIR QUALITY ADDENDUM

to all parties identified on the Proof of Service List above in the following manner:

California Energy Commission Docket Unit

☒ Transmission by depositing one original paper copy with FedEx overnight mail delivery service at Costa Mesa, California, with delivery fees thereon fully prepaid and addressed to the following:

CALIFORNIA ENERGY COMMISSION
Attn: DOCKET NO. 07-AFC-3
1516 Ninth Street, MS-4
Sacramento, California 95814-5512
docket@energy.state.ca.us

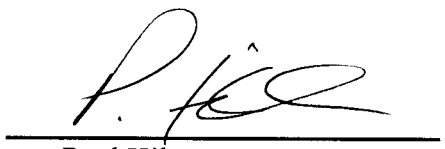
For Service to All Other Parties

☒ Transmission via electronic mail to all email addresses on the Proof of Service list; and

☒ by depositing one paper copy with the United States Postal Service via first-class mail at Costa Mesa, California, with postage fees thereon fully prepaid and addressed as provided on the Proof of Service list to those addresses **NOT** marked "email preferred."

I further declare that transmission via U.S. Mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 3, 2010, at Costa Mesa, California.



Paul Kihm