From:

Memorandum

Date: March 4, 2009
Telephone: (916) 654-3911
File 08-AFC-11

To: Commissioner Jeffrey D. Byron, Presiding Member

Commissioner Arthur H. Rosenfeld, Associate Member

California Energy Commission - Rod Jones

1516 Ninth Street Siting Project Manager

Sacramento, CA 95814-5512

Subject: CPV VACA STATION (08-AFC-11)

ISSUES IDENTIFICATION REPORT (Revised)

 DOCKET

 08-AFC-11

 DATE
 MAR 04 2009

 RECD.
 MAR 04 2009

Attached is staff's Issues Identification Report for the CPV Vaca Station project (08-AFC-11). This report serves as a preliminary scoping document that identifies issues that Energy Commission staff believes will require careful attention and consideration. Energy Commission staff will present the issues report at the Informational Hearing and Site Visit to be held on March 12, 2009.

This report also provides a proposed schedule pursuant to the 12-month Application for Certification (AFC) process, with a footnote discussion of staff's current workload.

Attachment

cc:

Proof of Service List Docket 08-AFC-11

CPV VACA STATION

(08-AFC-11)

ISSUES IDENTIFICATION REPORT (REVISED)

CALIFORNIA ENERGY COMMISSION

Siting, Transmission and Environmental Protection Division

ISSUES IDENTIFICATION REPORT CPV VACA STATION

(08-AFC-11)

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ISSUES IDENTIFICATION REPORT

California Energy Commission Staff

PURPOSE OF THE REPORT

This report has been prepared by the California Energy Commission staff to inform the Committee and all interested parties of a potential issue that has been identified in the case thus far. This issue has been identified as a result of our discussions with federal, state, and local agencies, and our review of the CPV Vaca Station Project Application for Certification (AFC) and the AFC Supplement Docket Number 08-AFC-11. The Issues Identification Report contains a project description, summary of potentially significant engineering issue, and a discussion of the proposed project schedule. The staff will address the status of issues and progress towards their resolution in periodic status reports to the Committee.

PROJECT DESCRIPTION

On November 18, 2008, CPV Vacaville, LLC submitted an AFC to the California Energy Commission to construct and operate an electrical generating plant in the city of Vacaville, Solano County, California. The CPV Vaca Station (CPVVS) would be a natural gas-fired, combined-cycle nominal 660-megawatt (MW) power generation facility.

The proposed project would be located on a 24-acre portion of a larger 143-acre parcel owned by the city of Vacaville, located at the intersection of Lewis and Fry roads in a rural area within the city limits. On the northwest border of the site is the city of Vacaville's Easterly Wastewater Treatment Plant (EWTP), and to the east, west, and south is agricultural land. The project would include two combustion turbine-generators (CTGs - either General Electric Frame 7FA, or Siemens SGT6 5000), a single condensing steam turbine generator (STG), a dearating surface condenser, a 12-cell mechanical draft cooling tower, and associated support equipment, heat recovery steam generators (HRSGs), emission reduction system with a selective catalytic reduction (SCR) unit to control NO_x stack emissions and an oxidation catalyst to control carbon monoxide and volatile organic compound emissions, and a 1,000-kilowatt (kW), dieselfired emergency generator. The proposed power plant would use reclaimed secondary-treated wastewater (1,185 million gallons per year) from the EWTP, and it would also use a small amount of the local municipal drinking water for plant personnel potable water uses.

If approved, construction of the project would begin in the spring of 2011 and would last for 30 months. Pre-operational testing of the power plant would begin in the fall of 2012 with full-scale commercial operation commencing by spring 2013.

POTENTIAL MAJOR ISSUES

This portion of the report contains a discussion of potential issues the Energy Commission staff has identified to date. The Committee should be aware that this report might not include all of the significant issues that may arise during the case. Discovery is not yet complete, and other parties have not had an opportunity to identify their concerns. The identification of the potential issues contained in this report is based on comments of other government agencies and on our judgment of whether any of the following circumstances could occur:

- Potential significant impacts which may be difficult to mitigate;
- Potential areas of noncompliance with applicable laws, ordinances, regulations or standards (LORS);
- Areas of conflict or potential between the parties;
- Areas where resolution may be difficult or may affect the schedule.

The following table lists all the subject areas evaluated and notes Air Quality and Transmission System Design as areas where potentially significant issues have been identified. Identification of an area as having no potential issues does not mean that an issue will not arise related to the subject area during the course of the AFC process. For example, soils and water resources are still awaiting review by Energy Commission contract staff, and there could be issues identified.

Major	DRs	Subject Area	Major	DRs	Subject Area
Issue			Issues		
Yes	Yes	Air Quality	No	No	Project Overview
No	No	Alternatives	No	No	Public Health
No	Yes	Biological	No	No	Reliability
		Resources			
No	Yes	Cultural Resources	No	No	Socioeconomics
No	No	Efficiency	TBD	TBD	Soils and Water Resources
No	No	Facility Design	No	Yes	Traffic and Transportation
No	No	Geologic Hazards	No	No	Trans. Line Safety and Nuisance
No	No	Hazardous	Yes	Yes	Transmission System Design
		Materials Handling			
No	No	Land Use	No	No	Visual Resources
No	No	Noise	No	Yes	Waste Management
No	No	Paleontological	No	No	Worker Safety
		Resources			

Note: DR= Data Request

TBD = To Be Determined

This report does not limit the scope of staff's analysis throughout this proceeding, but it acts to aid in the analysis of the potentially significant issue that the CPVV proposal poses. The following discussion summarizes the potential issue, identifies the parties needed to resolve the issues, and where applicable suggests a process for achieving resolution. At this time, staff does not see these potential issues as non-resolvable.

AIR QUALITY

Staff reviewed the application for the CPV Vaca Station project and found potential air quality issues that could delay the Energy Commission review process. The CPV Vaca Station project would be located in the Yolo/Solano Air Quality Management District (YSAQMD or Air District) where existing ozone and particulate matter concentrations exceed the ambient air quality standards.

Emission Reduction Credits

It is not clear that the applicant's proposed mitigation, which includes emission reduction credits (ERCs) as offsets, would satisfy YSAQMD requirements or result in all nonattainment pollutant and their precursor emissions being offset at a minimum one-to-one basis. The applicant's mitigation proposal involves an ERC package that is only tentatively defined. AFC Table 5.1-32 shows that there are not enough credits in the YSAQMD for the proposed CPV Vaca Station, without relying on inter-pollutant trading. After the applicant files an ERC and mitigation proposal, the YSAQMD will need to conduct a case-specific analysis of the ERCs and any trading schemes. Until the ERC package is clearly defined, delays are likely. Additionally, it is Energy Commission staff's long-standing position that mitigation of all nonattainment pollutant and precursor emissions be of sufficient quantity to achieve a one-to-one offset. Without proper offset mitigation for proposed ozone, particulate matter, and precursor emissions, the project could contribute substantially to existing violations of the state and federal ambient air quality standards. Staff is addressing the issue through data requests to the applicant.

Best Available Control Technology

The duration and emissions of power plant startups could be substantially reduced by selecting a power plant configuration that incorporates certain "Rapid Response" features (as mentioned in AFC Appendix 5.1E.2). Other cases before the Energy Commission (e.g., El Segundo and Marsh Landing) are proposing use of technologies capable of startups well under one hour. Staff views these proposals favorably, especially because they can reduce the need for mitigation and offsets, which are a separate issue for this project. The AFC concludes that "Rapid Response" design innovations are not yet demonstrated or achieved in practice, which are criteria for being selected as Best Available Control Technology (BACT). It is within the jurisdiction of the YSAQMD and the U.S. Environmental Protection Agency to define the BACT for this project. Disagreement between the air management agencies and the applicant could delay the review process. Staff is developing data requests to investigate possible design options that are demonstrated at minimizing startup durations and emissions.

TRANSMISSION SYSTEM DESIGN

The California ISO (CAISO) and Pacific Gas and Electric (PG&E) had initiated an Interconnection Feasibility Study (IFS) for the CPVVS project. However, as a result of the CAISO's Generator Interconnection Process Reform (GIPR) activities, the CPVVS project was placed in the "transition cluster" and, as a result, work ceased on the IFS. In order for the project to proceed through the California Energy Commission's (CEC)

AFC process a "third party" System Impact Study (SIS) was allowed and has been prepared by the applicant's consultant Navigant Consulting Inc. (NCI). The SIS identifies:

- the transmission system impacts caused solely by the addition of the proposed project;
- the system reinforcements necessary to mitigate the adverse impacts of the proposed project under various system conditions, and
- preliminary cost estimates for the above system reinforcements.

In reviewing the preliminary SIS, staff determined that the study concluded that the CPVVS project could potentially cause several transmission line overloads which would require reconductoring as mitigation. Reconductoring is a downstream, indirect project impact that would require a general California Environmental Quality Act analysis. The SIS indicates that there may be other mitigation for the identified overloads. The environmental analysis of potential downstream transmission upgrades could cause a delay in the licensing process for the CPV Vaca Station. If reconductoring is the only acceptable mitigation then the applicant will need to provide a general environmental analysis sufficient to meet the CEQA requirements for indirect project impacts for each line reconductoring.

On February 24, 2009, staff held a teleconference call with CPV and its consultant NCI regarding the SIS. A Record of Conversation was prepared, and staff and the applicant are working on a summary that will include the details of the study revisions. Staff is also preparing Transmission System Design data requests.

SCHEDULING

Following is staff's proposed 12-month schedule for the key events of the project. Meeting the proposed schedule will depend on: the applicant's timely response to staff's data requests; the timing of the Yolo-Solano Air Quality Management District's (YSAQMD) filing of the Determination of Compliance; determinations by other local, state and federal agencies; and other factors not yet known. The YSAQMD will be required to provide a Preliminary Determination of Compliance (PDOC) and a Final Determination of Compliance (FDOC). Prior to the publication of the Preliminary Staff Assessment (PSA) staff normally requires a PDOC from the air district, and the FDOC is required before publication of the Final Staff Assessment.

STAFF'S PROPOSED SCHEDULE - CPV VAC STATION (08-AFC-11)

	<u>ACTIVITY</u>	<u>DATE</u>
1	Applicant files Application for Certification (AFC)	11/18/08
2	Commission's determination that AFC is complete	1/28/09
3	Staff files Issue Identification Report	3/4/09
4	Staff files data requests	3/5/09
5	Informational Hearing and Site Visit	3/12/09
6	Applicant provides data responses	4/5/09
7	Local, state and federal agency draft determinations	4/20/09
8	Data response and issue resolution workshop**	4/22/09
9	Staff and applicant each file Status Report 1	4/27/09
10	Staff Receives Preliminary Determination of Compliance (PDOC)	5/09
11	Staff and applicant each file Status Report 2	5/25/09
12	Staff files Preliminary Staff Assessment (PSA)	6/15/09
13	Local, state and federal agency final determinations	6/30/09
14	PSA workshop	7/6/09
15	Staff and applicant each file Status Report 3	7/13/09
16	Staff files Final Staff Assessment (FSA)	8/13/09
17	Prehearing Conference*	TBD
18	Evidentiary hearings*	TBD
19	Committee files proposed decision*	TBD
20	Hearing on the proposed decision*	TBD
21	Committee files revised proposed decision*	TBD
22	Commission Decision*	12/28/09

^{*} The assigned Committee will determine this part of the schedule.

Please Note: Under the Warren Act – Public Resources Code, the standard licensing process for an Application for Certification is twelve months. However, the Siting ,Transmission and Environmental Protection Division (STEP) currently has 26 projects in-house which is about four times the historical workload, and may make achieving the 12-month schedule problematic. In addition, STEP is a participant in the state's furlough program, which is expected to terminate in early 2010.

Energy Commission staff will do its best to review the CPV Vaca Station project in as timely a manner as possible.

^{**} Estimated date; depends on parties' availability.



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 CPV VACA STATION BY THE CPV VACAVILLE, L.L.C.

Docket No. 08-AFC-11

PROOF OF SERVICE

(Established 2/18/2009)

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DECLARATION OF SERVICE

I, <u>April Albright</u>, declare that on <u>March 4, 2009</u>, I served and filed copies of the attached <u>CPV Vaca Station (08-AFC-11) Issues Identification Report (Revised)</u>. 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:

[http://www.energy.ca.gov/sitingcases/vacastation/index.html]. The document has 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 se	ervice 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 <u>Sacramento California</u> 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 fil	ling with the Energy Commission:
<u>√</u>	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-11 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.

Original signed by	
April Albright	