

Memorandum

Date: October 27, 2009
Telephone: (916) 653-4677
File: 09-AFC-4

To: Commissioner James D Boyd, Presiding Member
Commissioner Karen Douglas, Associate Member

DOCKET	
09-AFC-4	
DATE	<u>10/27/09</u>
RECD.	<u>10/27/09</u>

From: California Energy Commission - Joseph Douglas
1516 Ninth Street Siting Project Manager
Sacramento, CA 95814-5512

Subject: **Oakley Generating Station Project (09-AFC-4)**
ISSUES IDENTIFICATION REPORT

Attached is staff's Issues Identification Report for the Oakley Generating Station Project. 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 November 9, 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 09-AFC-4

OAKLEY GENERATING STATION PROJECT

(09-AFC-4)

ISSUES IDENTIFICATION REPORT

CALIFORNIA ENERGY COMMISSION

Siting, Transmission and Environmental Protection Division

ISSUES IDENTIFICATION REPORT Oakley Generating Station Project

(09-AFC-4)

Table of Contents

PROJECT DESCRIPTION	3
POTENTIAL MAJOR ISSUES	4
AIR QUALITY	5
NOISE.....	6
TRANSMISSION SYSTEM DESIGN.....	6
SCHEDULING	7

ISSUES IDENTIFICATION REPORT

Energy Commission Staff Report

PURPOSE OF THE REPORT

This report has been prepared by the California Energy Commission staff to inform the Committee and all interested parties of the potential issues that have been identified in the case thus far. These issues have been identified as a result of our discussions with federal, state, and local agencies, and our review of the Oakley Generating Station (OGS)), formerly known as the Contra Costa Generating Station (CCGS) Application for Certification (AFC) and the AFC Supplement. The Issues Identification Report contains a project description, summary of potentially significant environmental and engineering issues, and a discussion of the proposed project schedule. The staff will continue to address the status of issues and progress towards their resolution in periodic status reports to the Committee.

PROJECT DESCRIPTION

The OGS facility is proposed for a 21.95-acre site in the City of Oakley, Contra Costa County, at 6000 Bridgehead Road, to the northeast of the intersection of State Highways 4 and 160. The site is designated as Utility Energy under the City of Oakley's General Plan. It is bounded to the west by the Pacific Gas & Electric (PG&E) Antioch Terminal, a large natural gas transmission hub, to the north by the DuPont property that is zoned Industrial, to the east by DuPont's titanium dioxide landfill area, and to the south by the Atchison, Topeka, and Santa Fe Railroad.

The OGS will be a natural gas-fired, combined-cycle electrical generating facility rated at a nominal generating capacity of 624 MW. Principal components of the project include:

- two General Electric Frame 7FA combustion turbine-generators (CTGs) with a nominal rating of 213-MW each, equipped with metallurgical enhancements to improve efficiency;
- a single condensing steam turbine generator (STG), fed by heat recovery steam generators attached to each CTG, producing a net 198-MW; and
- an air-cooled condenser to provide process cooling of the CTGs.

The emission reduction system will include a selective catalytic reduction unit to control oxides of nitrogen and an oxidation catalyst to control carbon monoxide and volatile organic compounds in the exhaust gas emissions. Particulate emissions will be controlled by the use of best combustion practices including the use of low-sulfur natural gas to fuel the CTGs and auxiliary boiler and high-efficiency CTG inlet air filtration. A new 2.4 mile-long, single-circuit, 230-kV transmission line will connect the project site with the PG&E Contra Costa Substation, routed within an existing PG&E right of way. Natural gas will be supplied by a new 140-foot long direct connection with the adjacent

PG&E Antioch natural gas terminal.

The OGS proposes to use potable water provided by the Diablo Water District for process and potable uses. Water access is proposed to be through an onsite tap from an existing 27-inch-diameter distribution pipeline that runs through the OGS site. Process and sanitary wastewater from the OGS will be discharged to the existing onsite Ironhouse Sanitary District sewer line.

The engineering and environmental details of the proposed project are contained in the AFC. The AFC is available on the Energy Commission Web Page for this project, libraries in Eureka, San Francisco, Fresno, Los Angeles, San Diego, the Energy Commission's Library, California State Library, and at the following local area libraries: Antioch Library; Pittsburg Library; Oakley Library.

Construction laydown and parking areas will be within existing site boundaries, on a 20-acre parcel east of the plant site. Construction access will generally be from Bridgehead Road. Large or heavy equipment, such as the turbines, generators, step-up transformers, and heat recovery steam generator modules will be delivered by rail to the existing rail siding located on the project site.

If approved, construction of the project would begin by April 2011 and would last for approximately 33 months. Pre-operational testing of the facility would begin by June of 2013 with full-scale commercial operation commencing by December, 2013. The new power plant is expected to cost approximately \$500 million.

POTENTIAL MAJOR ISSUES

This portion of the report contains a discussion of the 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; and
- Potential areas of noncompliance with applicable laws, ordinances, regulations or standards (LORS); and
- Areas of conflict or potential conflict between the parties; and
- Areas where resolution may be difficult or may affect the schedule.

The following table lists all the subject areas evaluated and notes Air Quality, Noise 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.

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 issues that the OGS proposal poses. The following discussion summarizes the potential issues, 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.

The table on the following page lists all the subject areas evaluated and notes that only Air Quality, Noise and Transmission System Design have currently identified potentially significant issues.

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

AIR QUALITY

Staff reviewed the application for the Oakley Generating Station (OGS), formerly known as the Contra Costa Generating Station (CCGS) and found potential air quality issues that could delay the Energy Commission review process. OGS would be located in the Bay Area Air Quality Management District (BAAQMD or Air District) where existing ozone and particulate matter concentrations exceed the ambient air quality standards. The potentially critical air quality issues that may affect the timing and outcome of the licensing process for the OGS include: 1) mitigating particulate matter impacts along with precursor sulfur dioxide impacts; and 2) the Air District's potential extended review period.

Mitigation of Particulate Matter and Precursor Sulfur Dioxide Impacts

The applicant proposes to provide offsets and mitigate for increased emissions of Nitrogen Oxide (NOx) and Volatile Organic Compounds (VOCs) and comply with BAAQMD rules and regulations by securing emission reduction credits (ERC). BAAQMD regulations do not require offsets for particulate matter or sulfur dioxide emissions because the facility would emit less than 100 tons of PM10 or SOx per year (BAAQMD Rule 2-6-212). However, if not mitigated any new particulate matter (PM10 and PM2.5) and particulate matter precursor emissions (such as SOx) from the project would contribute to existing concentrations of particulate matter that exceed the ambient air quality standards and would be considered by staff as significant impacts under the California Environmental Quality Act (CEQA). Because the project will also affect air

quality in the San Joaquin Valley Air Basin, the San Joaquin Valley Air Pollution Control District (SJVAPCD) may request, and the Energy Commission staff may require, additional specific mitigation for PM10/PM2.5 and SOx to ensure mitigation in the area impacted by OGS. A complete package of proposed mitigation, especially for PM10/PM2.5, has not yet been presented by the applicant. Ultimately, the BAAQMD, SJVAPCD, and the Energy Commission staff must agree on the sufficiency of offsets and mitigation proposed by the applicant to address potential direct and cumulative air quality emissions impacts.

Bay Area Air Quality Management District Potential Extended Review Period

Currently, the BAAQMD faces several issues that add to the complexity of environmental review of power plants, which are likely to result in an extended review period and delays in the Energy Commission review process. The issues are relating to the implementation of New Source Review (NSR) procedures for PM2.5 and the Air District's evaluation of climate change and greenhouse gas emissions (GHG). The PM2.5 attainment status of the Bay Area is changing with the final designation as nonattainment being announced on October 8, 2009, which may affect implementation of NSR provisions for PM2.5 and for PM2.5 precursors. Although the effective date of the PM2.5 nonattainment designation may occur in November, the procedure for new analyses of major sources remains unclear and may require a special consideration of how the source, or a combination of sources (including mobile sources) impact PM2.5 air quality and are mitigated. Regarding the evaluation of GHG, the Air District is emphasizing the thermal efficiency of power plants, which is a new aspect of its review involving an approach of technology comparison.

NOISE

The applicant states that project operational noise might cause an increase up to 8 dBA at the nearest sensitive receptor (measuring location M2 as shown in Figure 5.7-1 of the AFC). Staff considers an increase in background noise levels between 5 and 10 dBA to be adverse and possibly significant, depending on the particular circumstances of the case (including duration of noise, land use designation, and number of residences affected). The increase described by the applicant could cause a significant adverse impact that might require additional noise mitigation.

TRANSMISSION SYSTEM DESIGN

The California independent System Operator (California ISO) Phase I and Phase II Interconnection Studies are not available for staff to review at this time. The Phase 1 Study or a third party study provided by the applicant is required for staff to determine the potential need for downstream transmission facilities.

The Supplement in Response to the Data Adequacy Review, indicated that two separate interconnection requests have been submitted to the California ISO, one in September 11, 2007 and the other July 31, 2009. The first interconnection request was for a total of 520 MW, and the second for a total of 131 MW. The expected completion

dates of the Phase I Studies are July 28, 2009 and April 1, 2010, respectively. Both of these studies are required for staff's analysis of the proposed 624 MW OGS.

If the studies show the OGS would cause any transmission line overloads which might require transmission line reconductoring or other significant downstream upgrades, a general CEQA analysis will be required for the reconductoring as it is the downstream, indirect project impact. The environmental analysis of potential upgrades could cause a delay in the licensing process for the OGS.

PROJECT SCHEDULE

On the following page 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 BAAQMD filing of the Determination of Compliance; determinations by other local, state and federal agencies; and other factors not yet known. The BAAQMD will be required to provide a Preliminary Determination of Compliance (PDOC) and a Final Determination of Compliance (FDOC). Staff generally requires a PDOC from the air district prior to the publication of the Preliminary Staff Assessment and the FDOC is required before publication of the Final Staff Assessment.

STAFF'S PROPOSED SCHEDULE – Oakley Generating Station (09-AFC-4)

	ACTIVITY	DATE	Day
1	Applicant files Application for Certification (AFC)	6/30/09	
2	Commission's determination that AFC is complete	9/23/09	0
3	Staff files Issues Identification Report	10/26/09	26
4	Staff files data requests	11/5/09	35
5	Informational Hearing and Site Visit	11/9/09	39
6	Applicant provides data responses	12/7/09	68
7	Data response and issue resolution workshop	12/21/09	82
8	Staff files data request set 2 (if necessary)	12/29/09	90
9	Local, state and federal agency draft determinations AQMD files PDOC	12/30/09	91
10	Applicant provides data responses set 2	1/15/10	117
11	Staff files Preliminary Staff Assessment (PSA)	2/19/10	152
12	PSA workshop	3/11/10	172
13	Local, state and federal agency final determinations AQMD files FDOC	3/19/10	180
14	Staff files Final Staff Assessment (FSA)	4/19/10	211
15	FSA workshop	4/26/10	218
16	Prehearing Conference*	TBD	
17	Evidentiary hearings*	TBD	
18	Presiding Members Proposed Decision (PMPD)*	TBD	
19	Committee Hearing on PMPD*	TBD	
20	Close of public comment period on PMPD	TBD	
21	Addendum/Revised PMPD	TBD	
22	Energy Commission Decision*	TBD	

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

Note: The proposed Oakley Generating Station project, qualifies for the 12-month licensing process under Public Resources Code § 25540.6. The applicant and the Commission may mutually agree to extend the schedule as needed. Although the above schedule reflects the 12-month process, staff expects delays due to the heavy workload in the Siting, Transmission and Environmental Protection Division, the Governor's Executive Order on renewable projects and also due to three furlough days a month for the Commission and most other state agencies through June 2010.



**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 *OAKLEY GENERATING STATION***

**Docket No. 09-AFC-4
PROOF OF SERVICE
(Established 10/8/2009)**

APPLICANT

Greg Lamberg, Sr. Vice President
RADBACK ENERGY
145 Town & Country Drive, #107
Danville, CA 94526
Greg.Lamberg@Radback.com

APPLICANT'S CONSULTANTS

Douglas Davy
CH2M HILL
2485 Natomas Park Drive, Suite 600
Sacramento, CA 95833
ddavy@ch2m.com

COUNSEL FOR APPLICANT

Scott Galati
Galati & Blek, LLP
455 Capitol Mall, Suite 350
Sacramento, CA 95814
sgalati@gb-llp.com

INTERESTED AGENCIES

California ISO
e-recipient@caiso.com

INTERVENORS

ENERGY COMMISSION

JAMES D. BOYD
Vice Chair and Presiding Member
jboyd@energy.state.ca.us

KAREN DOUGLAS
Chair and Associate Member
kldougl@energy.state.ca.us

Paul Kramer
Hearing Officer
pkramer@energy.state.ca.us

Joseph Douglas
Siting Project Manager
jdouglas@energy.state.ca.us

Kevin Bell
Staff Counsel
Kbell@energy.state.ca.us

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

!

DECLARATION OF SERVICE

I, Maria Santourdjian, declare that on October 27, 2009, I served and filed copies of the attached, Issues Identification Report for Oakley Generating Station Project (09-AFC-4) dated October 27, 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: [\[http://www.energy.ca.gov/sitingcases/contracosta/index.html\]](http://www.energy.ca.gov/sitingcases/contracosta/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 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 Sacramento, California 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. 09-AFC-4
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 Signature in Dockets
Maria Santourdjian