

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



3/18/2010

Mr. Greg Lamberg Senior Vice President
RADBACK ENERGY
145 Town and Country Drive, Suite 107
Danville, CA 94526

DOCKET
09-AFC-4

DATE 03/18/10

RECD. 03/18/10

RE: OAKLEY GENERATION STATION PROJECT (09-AFC-4)
DATA REQUEST SET 1B (#s 68-73)

Dear Mr. Lamberg:

Pursuant to Title 20, California Code of Regulations, Section 1716, the California Energy Commission staff seeks the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

This set of data requests, numbers 68 through 73, is being made in the area of: biological resources

If you are unable to provide the specific information requested, need additional time, or object to providing requested/specific information, please send a written notice to both of the committee members overseeing the application process, and to me, within 20 days of receipt of this letter. If you are unable to respond within this time or are choosing to object to providing information, this notification must contain the reason(s) for not providing the information, and the grounds for any objections, or the need for additional time (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions, please call me at (916) 653-4677 or email me at jdouglas@energy.state.ca.us.

Sincerely,

Joseph Douglas
Project Manager

PROOF OF SERVICE (REVISED 2/4/10) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 3/18/10

MS

BACKGROUND

Emissions from the proposed Oakley Generating Station (OGS), namely nitrogen oxides (NO_x) and ammonia (NH₃), would result in nitrogen deposition from the atmosphere to the biosphere. Excessive nitrogen deposition can act as a fertilizer and promote the growth of non-native vegetation. The increased dominance and growth of invasive annual grasses is especially prevalent in low-biomass vegetation communities that are naturally nitrogen-limited, such as sand dunes. The Antioch Dunes National Wildlife Refuge (NWR), which is approximately 1.6 miles west of the OGS site, comprises 67 acres of sand dunes that support the last known natural populations of the federally endangered Lange's metalmark butterfly, federally and state-endangered Antioch Dunes evening primrose, and federally and state-endangered Contra Costa wallflower. Major threats to these species include invasion of non-native vegetation and wildfire, which is exacerbated by the presence of non-native vegetation. Antioch Dunes evening primrose, Contra Costa wallflower, and naked buckwheat, the larval host plant of Lange's metalmark butterfly, require open sandy substrate for survival. Invasive non-native vegetation, which is enhanced by atmospheric nitrogen deposition, affects these species by outcompeting them for space, sunlight, moisture, and nutrients.

Nitrogen deposition and the resultant potential impacts to state and federally listed species at the Antioch Dunes NWR, is of concern to the Energy Commission, United States Fish and Wildlife Service (USFWS), and California Department of Fish and Game. According to Section 5.2.2.3.1 on Combustion Turbine Emissions in the Application for Certification, the applicant estimates nitrogen deposition on the Antioch Dunes NWR from the OGS to be approximately 0.0613 kilograms per hectare per year (kg/ha/yr), but failed to specify if this amount is total wet and/or dry nitrogen deposition or how this amount was assessed. To assess impacts to nitrogen-sensitive biological resources, staff requires additional information on nitrogen deposition.

DATA REQUESTS

68. Please quantify the existing baseline total nitrogen deposition rate in the vicinity of OGS in kg/ha/yr. The analysis should specify the amount of total nitrogen deposition in kg/ha/yr at the Antioch Dunes National Wildlife Refuge (ADNWR) for wet and dry nitrogen deposition. Please provide the complete citation for references used in determining this number.
69. Provide an isopleth graphic over USGS 7.5-minute maps (or equally detailed map) of the direct nitrogen deposition rates caused by the project that graphically depicts the results.
70. Air Quality data requests 22 through 26 submitted in January 2010 asked for Cumulative Modeling Analysis for OGS. Data responses for these data requests have not yet been received by staff. Data request number 25 specifically asks that a list of sources to be considered in the cumulative air quality impact analysis be provided. For purposes of biological resources, please provide a table with the sources within a 6-mile radius of the OGS project site which includes cumulative sources of nitrogen emissions for NO_x and NH₃ in tons per year for each source.
71. Please provide the cumulative impact analysis of nitrogen deposition values in kg/ha/yr. Provide an isopleth graphic over USGS 7.5-minute maps (or equally detailed map) of the direct nitrogen deposition values in the cumulative analysis and specify the cumulative nitrogen deposition rate in kg/ha/yr at the ADNWR.

72. Please describe mitigation (e.g., compensation funds) to decrease cumulative nitrogen deposition impacts to less than significant levels for the ADNWR.
73. Please provide a report of conversation after consulting the USFWS regarding the nitrogen deposition issue at the ADNWR. The USFWS point of contact is Ryan Olah (<Ryan_Olah@fws.gov>) out of the Sacramento office.



**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
(Revised 2/4/2010)**

APPLICANT

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DECLARATION OF SERVICE

I, Maria Santourdjian, declare that on March 18, 2010, I served and filed copies of the attached Data Request Set 1B (#68-73). 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:

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

 x 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:

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

OR

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

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 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.

Originally Signed by
Maria Santourdjian