CH2M HILL
2485 Natomas Park Drive
Suite 600
Sacramento, CA 95833-2937
Tel 916.920.0300
Fax 916.920.8463

CH2MHILL

DOCKET
09-AFC-4
DATE MAY 12 2010
RECD. MAY 12 2010

May 12, 2010

Ms. Felicia Miller
Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Subject: Oakley Generating Station Project (09-AFC-4)
Response to CEC Staff Data Requests # 68–73

Dear Ms. Miller:

Attached is one hard copy and one electronic copy on CD-ROM of the Contra Costa Generating Station LLC's response to California Energy Commission Staff Data Requests #68-73, dated March 18, 2010.

If you have any questions, please contact me at (916) 286-0278.

Sincerely,
CH2M HILL

Douglas M. Davy, Ph.D.
AFC Project Manager

Attachment
cc: POS List
Project File

APPLICATION FOR CERTIFICATION

Response to Data Requests 68–73

Oakley Generating Station

09-AFC-4

May 2010

Submitted by

RADBACK ENERGY

Submitted to

California Energy Commission

With Technical Assistance by

CH2MHILL

IS012010022315SAC

Supplemental Filing

Responses to CEC Staff Data Requests 68 through 73

In support of the

Application for Certification

for

Oakley Generating Station Project

Oakley, California

(09-AFC-04)

Submitted to the:

California Energy Commission

Submitted by:

RADBACK ENERGY

With Technical Assistance by:

CH2MHILL

Sacramento, California

May 2010

Contents

Introduction

Attached are Contra Costa Generating Station LLC's (CCGS's) responses to California Energy Commission (CEC) Staff data requests numbers 68 through 73 for the Oakley Generating Station (OGS) project (09-AFC-04). The CEC Staff served the data requests on March 18, 2010, as part of the discovery process for the OGS project.

The responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as CEC Staff presented them and are keyed to the Data Request numbers (68 through 73). New or revised graphics or tables are numbered in reference to the Data Request number. For example, the first table used in response to Data Request 70 would be numbered Table DR70-1. The first figure used in response to Data Request 68 would be Figure DR68-1, and so on.

Additional tables, figures, or documents submitted in response to a data request (supporting data, stand-alone documents such as plans, folding graphics, etc.) are found at the end of a discipline-specific section and are not sequentially page-numbered consistently with the remainder of the document, though they may have their own internal page numbering system.

Air Quality (68-73)

Baseline Nitrogen Deposition at Antioch Dunes National Wildlife Refuge

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.*

Response: The National Atmospheric Deposition Program (NADP) monitoring network is the only network providing a long-term monitoring record of nitrogen deposition across the United States. The NADP monitoring sites are predominantly located away from urban areas and point sources of air emissions and are collected on a weekly basis. In California, the NADP monitoring sites are mostly located within National Forest and National Park lands. The closest monitoring location to the OGS project site is in Davis, California, which is approximately 35 miles north of the OGS site.

An isopleth data map from the NADP, National Trends Network at the University of Illinois Urbana-Champaign (NADP, 2010) (Figure DR68-1), shows average wet nitrogen deposition rates in the western and southeastern United States of generally less than 3.0 kg/ha/yr, with higher rates of 5.0 to 7.0 kg/ha/yr in the midwestern and northeastern states. Wet nitrogen deposition is used as a proxy for total nitrogen deposition because dry deposition rates are generally low and monitoring techniques for dry deposition are less reliable. Interpolating this data to the vicinity of the Antioch Dunes National Wildlife Refuge (ADNWR), the baseline value would be less than 1.0 kilogram per hectare per year (kg/ha/yr) in 2008.

Direct data measurements from the NADP Davis monitoring station, in addition, show a 30-year average from January 1979 through December 2008 of 2.42 kg/ha/yr with a maximum annual average of 4.46 (1982) and a minimum annual average of 1.03 (1988), and decadal averages of 2.38 (1979 through 1988), 2.28 (1989 through 1998), and 2.50 (1999 through 2008). The value for 2008 was 2.24 kg/ha/yr. The 30-year average of 2.42 kg/ha/yr is the best available estimate of background nitrogen deposition for the OGS that is based on verifiable measurements.

Reference Cited

National Atmospheric Deposition Program (NADP). 2010. National Trends Network. University of Illinois, Urbana-Champaign. http://nadp.sws.uiuc.edu/. Accessed April 2010.

Nitrogen Deposition Isopleth Map

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.*

Response: Figure DR69-1, is an isopleth map that has been placed over a USGS 7.5-minute map of the ADNWR with North American Datum coordinates (NAD-27). Two deposition isopleths are displayed: (1) the red isopleths represent the OGS project by itself and (2) the blue isopleths are the modeled background nitrogen deposition isopleths without the OGS project. The modeled OGS project nitrogen deposition averages 0.083 kg/ha/yr, and the modeled background deposition rate averages 2.50 kg/ha/yr. Modeling methodologies used to develop the background and project level estimates are discussed below in the responses to Data Requests 70 and 71.

Cumulative Nitrogen Sources

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 NOx and NH_3 in tons per year for each source.*

Response: The sources used in the cumulative nitrogen deposition analysis and their characteristics are listed in Table DR70-1. Stack characteristics for annual averaging times were provided by Bay Area Air Quality Management District (BAAQMD) and included the information presented in *Responses to Data Request Set 3b: (#99-101), Application for Certification (08-AFC-03) for Marsh Landing Generating Station,* February 2010. Responses to Data Requests 22 through 26 will be provided to CEC when CCGS receives the list of cumulative sources that the BAAQMD provides for OGS.

Table DR70-1 includes sources within 2 miles of ADNWR (GWF Antioch, Silgan Containers, Marsh Landing, Gateway Generating Station) and more distant sources, including some beyond the standard 6-mile radius from ADNWR (GWF Bayshore, Ameresco KC, Keller Canyon Landfill) that is commonly used in cumulative air impact analyses, in order to determine the total modeled background of nitrogen deposition at the ADNWR.

Cumulative Impact Analysis of Nitrogen Deposition

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.*

Response: The nitrogen sources listed in Table DR70-1 were modeled to estimate the background deposition from these major sources at the ADNWR. It is important to note that this list of sources includes both existing and proposed projects (many of these sources are already represented in the existing background values). The AERMOD program, which was also used in the air quality permitting analysis to evaluate the project's air quality impacts, was used for this nitrogen deposition analysis.[1] AERMOD is a steady-state, mass-conserving, nonreactive (no chemistry) plume dispersion model.

1For deposition analyses, AERMOD non-default keyword options were DEPOS, included both dry and wet deposition (DDEP and WDEP), as well as dry and wet depletion (DRYDPLT and WETDPLT).

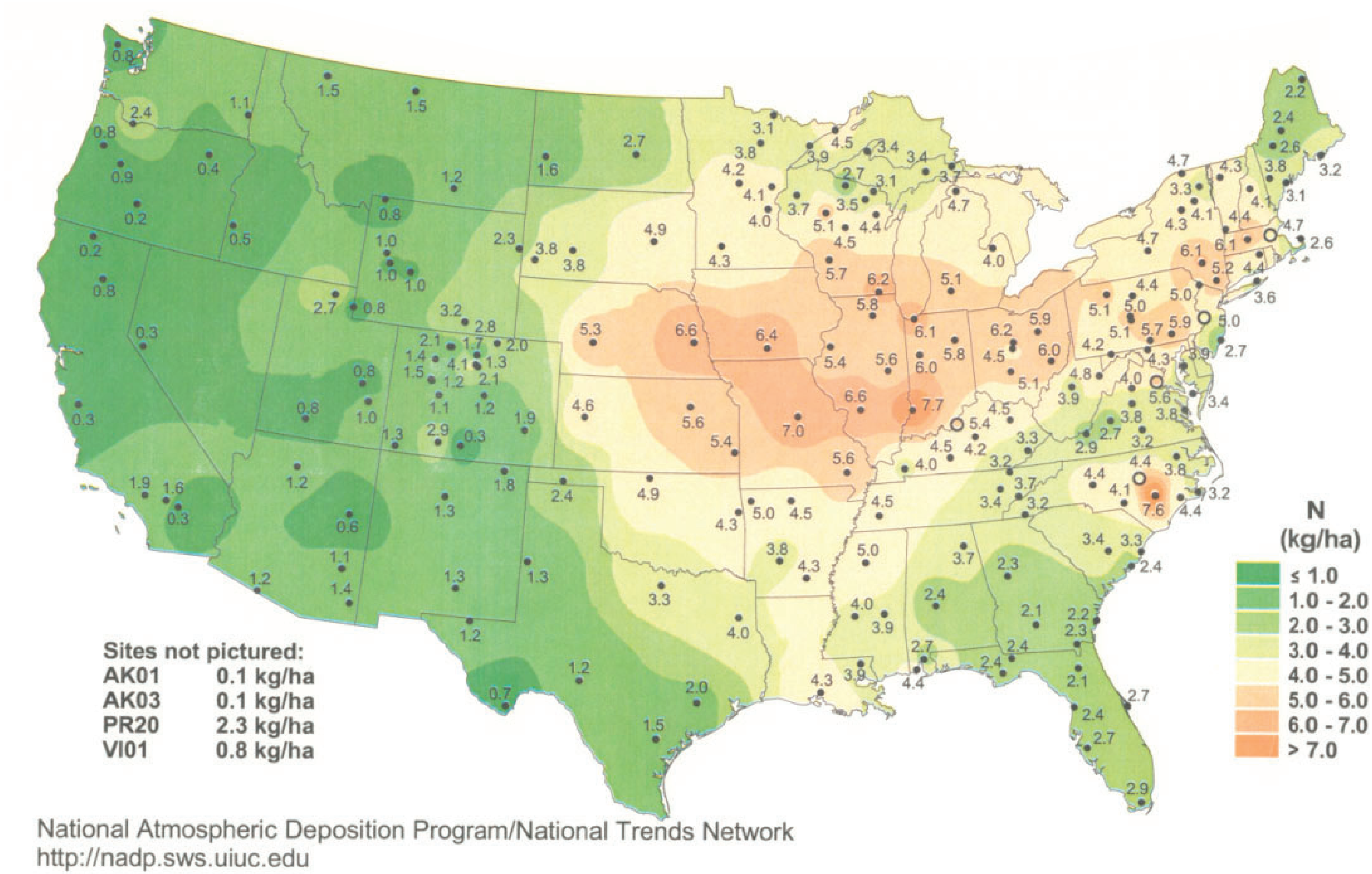
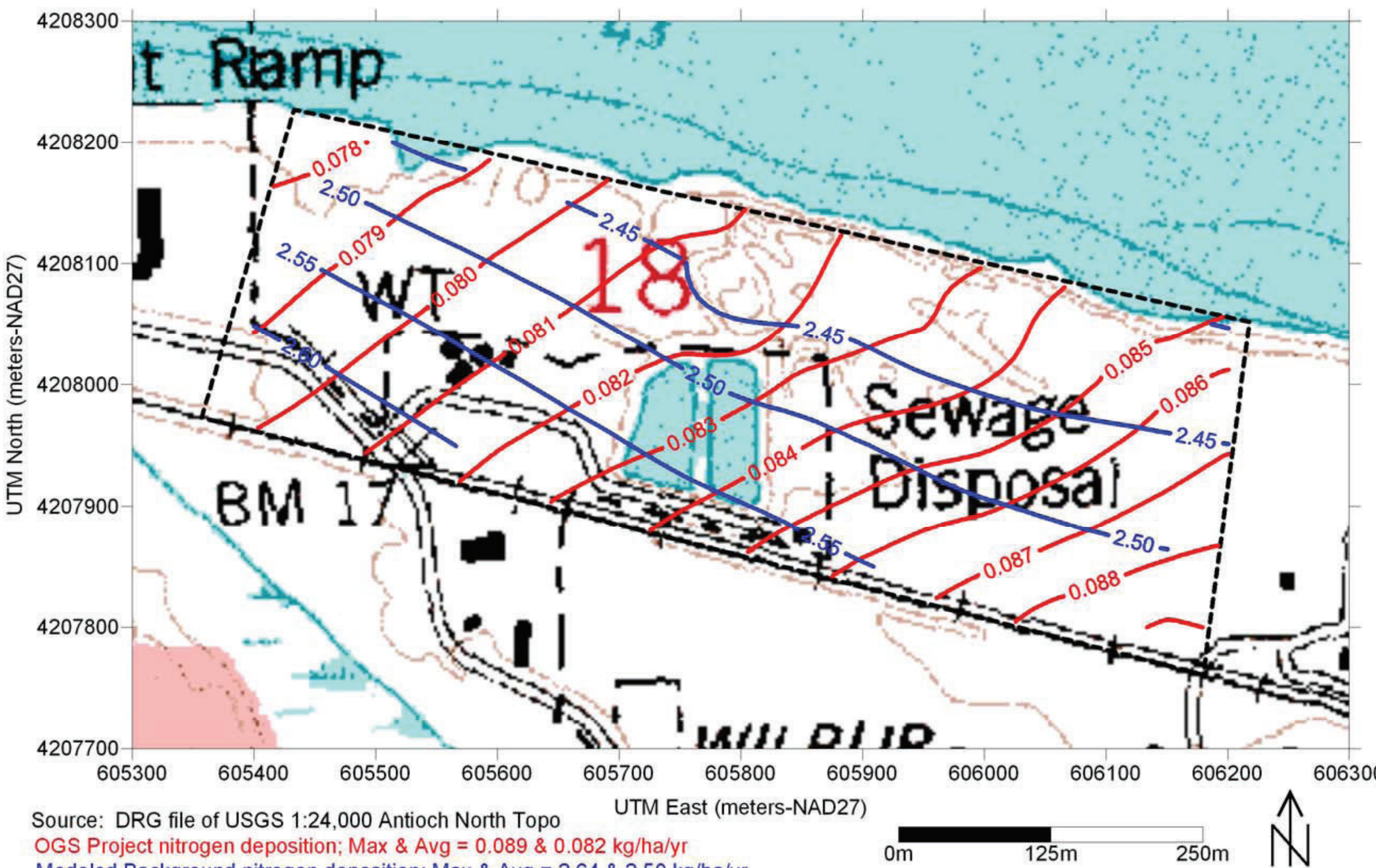


FIGURE DR68-1
INORGANIC NITROGEN WET DEPOSITION FROM NITRATE AND AMMONIUM, 2008
OAKLEY GENERATING STATION RESPONSE TO DATA REQUESTS
OAKLEY, CALIFORNIA



Source: DRG file of USGS 1:24,000 Antioch North Topo
OGS Project nitrogen deposition; Max & Avg = 0.089 & 0.082 kg/ha/yr
Modeled Background nitrogen deposition; Max & Avg = 2.64 & 2.50 kg/ha/yr

FIGURE DR69-1
NITROGEN DEPOSITION IN ANTIOCH DUNES NWR (KG/HA/HR), BACKGROUND AND OGS PROJECT
OAKLEY GENERATING STATION RESPONSE TO DATA REQUESTS
OAKLEY, CALIFORNIA

TABLE DR70-1
Source Characteristics for Cumulative Nitrogen Deposition Analysis

Source	Emission Rate (g/s)	Stack Height (m)	Stack Temperature (K)	Stack Velocity (m/s)	Stack Diameter (m)	Coordinate UTM-X (m)	Coordinate UTM-Y (m)	Stack Base Elevation (m)
Marsh Landing Generating Station - 1.1 miles								
Turbine 1	0.796	50.292	672.04	14.965	9.5504	608436.1	4208241	5.13
Turbine 2	0.796	50.292	672.04	14.965	9.5504	608478.7	4208242	4.11
Turbine 3	0.796	50.292	672.04	14.965	9.5504	608521.4	4208243	3.41
Turbine 4	0.796	50.292	672.04	14.965	9.5504	608564	4208244	3.14
Preheater 1	6.09E-04	7.93	486.33	15.27	0.2	608480.9	4208278	3.38
Preheater 2	6.09E-04	7.93	486.33	15.27	0.2	608485.8	4208278	3.3
Gateway Generating Station – 1.8 miles								
Turbine#1	3.647	59.44	355.22	19.92	5.11	608996	4208258	3.58
Turbine#2	3.647	59.44	355.22	19.92	5.11	608996	4208217	3.62
Contra Costa Power Plant – 1.6 miles								
NG Blr 9&10	0.697	137.16	411	28.7	5.7	608921.6	4208365	2.39
Pittsburg Power Plant – 5.3 miles								
NG Blr 5	0.739	137.16	403	32.64	4.18	597099.2	4210653	1.46
NG Blr 6	0.435	137.16	403	32.64	4.18	597070.2	4210660	1.35
NG Blr 7	0.099	137.16	398	25	6.1	596958.2	4210530	1.52
Willow Pass Generating Station – 5.3 miles								
Turbine 1	1.285	45.8724	434.98	13.054	6.5024	597186.9	4210541	2.03
Turbine 2	1.285	45.8724	434.98	13.054	6.5024	597282.3	4210514	2.67
Gas Heater	0.006	7.93	486.33	15.27	0.2	597005.3	4210470	1.74
Delta Energy Center – 2.4 miles								
Turbine 1	0.737	43.8917	349.8167	20.1	5.486	601406	4208272	5.94
Turbine 2	0.737	43.8917	349.8167	20.1	5.486	601406	4208316	5.35
Turbine 3	0.737	43.8917	349.8167	20.1	5.486	601405	4208355	4.82
Los Medanos Energy Center – 4.0 miles								
Turbine 1	0.767	53.3406	368.15	20.7	5.333	598935	4209683	2.93
Turbine 2	0.767	53.3406	368.15	20.7	5.333	598957	4209702	2.63
GWF Antioch – 0.6 miles								
Fluid.Bed#1/Coke	0.575	24.3843	427.5944	14.5	1.6	607077	4207815	21.71
Fluid.Bed#2/Coke	0.575	24.3843	427.5944	14.5	1.6	609214	4207760	4.23
GWF Baypoint – 10.3 miles								
Fluid.Bed/Coke	0.575	30.4804	427.5944	14.5	1.6	588878	4211119	3.61
GWF Pittsburg – 3.2 miles								
Fluid.Bed#1/Coke	0.575	30.4804	427.5944	14.5	1.6	599126	4209835	0
Fluid.Bed#2/Coke	0.575	30.4804	427.5944	14.5	1.6	600055	4208236	9.47
Silgan Containers Mfg Corp Thermal Oxidizer – 0.9 miles								
Stack#1	0.051	12.19	755.37	6.739	1.5	607617	4207618	10.52
Stack#2	0.007	14.63	673.15	4.46	0.91	607582	4207589	10.65
Ameresco KC – 7.4 miles								
Engine#1	0.136	10.668	740.37	40.686	0.508	593659.9	4206581	128
Engine#2	0.136	10.668	740.37	40.686	0.508	593661.8	4206585	126.94
Flare	0.019	9.144	1144.26	4.573	1.524	593676.1	4206587	124.31
Keller Canyon Landfill – 7.4 miles								
Flare#1	0.167	12.192	1033.15	6.758	3.048	593650.9	4206607	124.25
Flare#2	0.175	13.0058	1033.15	6.485	3.1813	593633.4	4206615	122.26

AERMOD is a conservative model that is designed to overestimate impacts and this conservatism was expanded on for this analysis by including the following additional conservative assumptions with regards to nitrogen formation and deposition:

- 100 percent conversion of oxides of nitrogen (NOx) and ammonia (NH_3) into atmospherically derived nitrogen (ADN) within the turbine stack(s) rather than allowing the conversion of NOx and NH_3 to occur over distance and time within the atmosphere, which would be more realistic.
- Depositional rates and parameters based upon nitric acid (HNO_3) which, of all the depositional species, has the most affinity for impacts to soils and vegetation and tendency to "stick" to what it is deposited on.
- Maximum settling velocities to produce maximum, or conservatively estimated, deposition rates.
- Maximum potential emissions for the OGS facility, rather than likely actual emissions based on previous equipment performance, in the calculation of nitrogen deposition.
- Nitrogen immediately deposits in surrounding lands after leaving the stack.

Also to enable conservative results (overestimates), modeling assumptions regarding the complex chemistry that occurs to produce nitrogen from NOx, ammonia, and other pollutants were not used in this modeling analysis. For example, it was assumed that the pollutants leaving the stack(s) would already be in the form of depositional nitrogen (nitrate and ammonium ions). To do this, the emissions of NOx and ammonia were adjusted for the molecular weight of nitrogen and then summed for each individual source. Thus, all impacts would represent 100 percent conversion of combustion emissions into depositional nitrogen, which would not be the case in reality. This assumption leads to a very conservative estimation of nitrogen deposition, because areas with the highest nitrogen emissions do not necessarily experience the greatest deposition effects, which usually occur farther from a nitrogen source.

In addition to the cumulative sources identified in the response to Data Request #70, the OGS sources were included with the regional emissions inventory to calculate the total (background plus project) effects. Stack characteristics for the OGS project sources modeled are shown in Table DR71-1.

TABLE DR71-1
Stack Characteristics for OGS Project Sources Modeled

Source	Emission Rate (g/s)	Stack Height (m)	Stack Temperature (K)	Stack Velocity (m/s)	Stack Diameter (m)	Coordinate UTM-X (m)	Coordinate UTM-Y (m)	Stack Base Elevation (m)
N-Turbine	1.867	47.396	361.4	22.04	5.5992	610176.8	4207415	6.0
S-Turbine	1.867	47.396	361.4	22.04	5.5992	610176.8	4207374	6.0
Firepump	4.61E-04	4.877	714.26	32.22	0.2032	609993.6	4207506	6.0
Aux.Blr	7.41E-04	15.24	416.48	15.08	0.762	610150.9	4207445	6.0

The AERMOD model calculates atmospheric deposition of nitrogen by calculating the wet and dry fluxes of total nitrogen. This deposition is accomplished by using a resistance model for the dry deposition part, and by assigning particle phase washout coefficients for the wet removal process from rainout. As discussed below, depositional parameters are input into the model in order to calculate the deposition of nitrogen. Again, depositional parameters were based on nitric acid, which is consistent with the conservative modeling assumptions that overestimate the amounts of nitrogen deposition from the proposed project. Nitric acid tends to deposit more readily than most other compounds.

No chemical conversion (which takes place over distance and time) was allowed to occur. In reality, the nitrate aerosol cannot be considered a stable product, such as sulfate typically is. Also, unlike sulfate, the ambient concentration of atmospherically derived nitrogen is limited by the availability of ammonia, which is preferentially scavenged by sulfate. Because of the preferential scavenging of ammonia by sulfate, the available ammonia in the atmosphere is often computed as total ammonia minus sulfate. These effects were not included in the analysis.

The assumption that atmospherically derived nitrogen forms instantaneously in stack and immediately begins to deposit in the surrounding areas leads to an estimation of nitrogen deposition that is unrealistically high, and would likely be several orders of magnitude higher than the actual process itself. This is especially true in the immediate area(s) surrounding the project site.

The other assumptions listed above, along with those inherent in AERMOD, add to the conservative nature of the modeling analysis. All these factors were combined into one modeling study to produce much higher impacts than would be modeled using less conservative assumptions. The goal of the analysis was to combine many conservative assumptions into one modeling analysis in order to overestimate the potential impact from operation of the OGS project.

In order to model gaseous deposition, the model requires land use characteristics and gas deposition resistance terms based on five seasonal categories. The seasonal categories are input into AERMOD on a month-by-month basis, corresponding to each summer, fall, winter, and spring seasons, based on BAAQMD defaults for AERMET processing, as follows:

- Late autumn/winter without snow = November, December, and January
- Transitional spring = February and March
- Midsummer = April, May, June, and July
- Autumn = August, September, and October

Additionally, land use data is input based on wind direction. As described below, rangeland (land use category 3) was used for all wind directions. Also for this analysis, it was assumed that the deposition parameters would be based on gaseous nitric acid. Nitric acid was chosen to represent total nitrogen deposition because nitric acid has the greatest potential to cause depositional effects.

For both wet and dry deposition, AERMOD requires the following additional inputs:

- The molecular diffusivity (D_a) for the pollutant being modeled [0.1628 square centimeters per second (cm^2/s)]

- The diffusivity in water (D_w) for the pollutant being modeled [2.98E-5 cm^2/s]
- The cuticular resistance to uptake by lipids for individual leaves (rcl) for the pollutant [1.0E+5 seconds per centimeter (s/cm)]
- The Henry's Law constant for the pollutant [8.0E-8 Pascal-cubic meters per mole (Pa-m^3/mol)]

In addition to the above inputs, the dry and wet deposition algorithm also requires surface roughness length (cm), friction velocity (meters per second), Monin-Obukhov length (meters), surface pressure, precipitation type, and precipitation rate. For AERMOD, the meteorology used in this analysis was the same meteorological data set that was provided by BAAQMD and used for the air quality permit application. This data set includes these precipitation and surface pressure data and was reprocessed by re-executing Stage 3 of AERMET for the OGS surface characteristics (surface roughness, friction velocity, and Monin-Obukhov length).

The ADNWR critical habitat area was assigned a land use best described as rangeland (AERMOD land use category 3) to model deposition, including the surface roughness length, leaf-area index, and plant-growth state. The ADNWR was modeled using a 50-meter-spaced Cartesian receptor grid, generated with AERMAP using the same DEM files and other inputs that were used for the OGS air emissions modeling analysis.

Results of the wet and dry nitrogen deposition modeling are summed by AERMOD to produce annual deposition rates in units of grams per square meter (g/m^2) for the entire 5-year meteorological period modeled, which are converted to kilograms per hectare per year (kg/ha/yr) for presentation in this report. As the critical habitats cover a variety of elevations and distances, the maximum and average deposition rates calculated for all receptors modeled in the ADNWR area were used for comparison to threshold levels. Nitrogen deposition rates for the OGS project alone were modeled as 0.08290 (average) and 0.08912 (maximum) kg/ha/yr, based on the worst-case annual NOx and ammonia emissions.

Mitigation of Nitrogen Deposition Impacts

72. *Please describe mitigation (e.g., compensation funds) to decrease cumulative nitrogen deposition impacts to less than significant levels for the ADNWR.*

Response: A level of 5 kg/ha/yr for nitrogen deposition sources located near sensitive habitats having nutrient-poor soils was used by the Energy Commission Staff in their analysis of the Eastshore Energy Center (06-AFC-6) in western Alameda County (CEC, 2007) as a screening-level criterion for impact assessment; that is, a level above which additional examination and analysis of a project's effects would be warranted. In this analysis, Staff cited research by Dr. Stuart Weiss conducted in the South San Francisco Bay Area indicating that intensified annual grass invasions can occur in areas with nitrogen deposition levels of 11 to 20 kg/ha/yr, with limited invasions at levels of 4 to 5 kg/ha/yr.

The U.S. Fish and Wildlife Service (USFWS) also adopted a 5 kg/ha/yr screening level in their January 2010 Technical Assessment (USFWS, 2010) of the potential effects of nitrogen deposition from the Russell City Energy Center (RCEC) on sensitive habitats. The RCEC is a proposed natural-gas-fired, combined-cycle power plant located in Hayward, Alameda County. This document notes generally declining levels of nitrogen deposition in the southern Bay Area and states:

> "A nitrogen deposition rate of 5 kg/ha/yr is a commonly used screening level for identifying potential impacts to nutrient poor soils and the native plant communities associated with them. Invasion of annual grasses in South San Francisco Bay Area serpentine soils have been documented to be most intensified at nitrogen deposition ranges of 5 to 11 kg/ha/yr."

As stated in the response to Data Request #71, the modeled rates of nitrogen deposition within the ADNWR from all of the current and foreseeable future cumulative sources except for the OGS (i.e., representative of background nitrogen deposition rates) are 2.502 (average) and 2.641 (maximum) kg/ha/yr. The modeled nitrogen deposition rates from the OGS project alone are 0.083 (average) and 0.089 (maximum) kg/ha/yr, respectively. The rates of nitrogen deposition from all of these sources combined (cumulative sources plus OGS) would be 2.585 (average) and 2.730 (maximum) kg/ha/yr, respectively (Table DR72-1).

TABLE DR72-1
Nitrogen Deposition Rates, kg/ha/yr, Calculated Using AERMOD

Source	Average	Maximum
Existing background plus planned new sources	2.502	2.641
Oakley Generating Station	0.083	0.089
Existing background plus OGS	**2.585**	**2.730**

The OGS, combined with the modeled background rates of nitrogen deposition would thus represent only small increase over projected future background levels and a total (project plus cumulative) level of deposition that is considerably less than the significance screening level of 5 kg/ha/yr. It should also be noted that the OGS will fully offset most of its nitrogen emissions with emission reduction credits for NOx, and will in this way contribute to the ongoing regional reduction of nitrogen deposition rates. This will help to alleviate the effects of nitrogen deposition on sensitive species at ADNWR.

Furthermore, the level of nitrogen deposition from OGS emissions on plant-available nitrogen would actually be less than the calculated amount because of the conservative nature of the modeling and also because the deposition will be distributed in small amounts during the year and not all of the nitrogen added to the soil during each deposition event will be available for plant use because of losses associated with soil processes under various conditions of temperature and rainfall.

As indicated previously, nitrogen deposition that would result from the OGS, as calculated very conservatively using the AERMOD model, would result in a very small increase in existing levels of deposition that do not, themselves, reach a screening level of 5 kg/ha/yr. The OGS project, therefore, would not individually or cumulatively cause a significant and adverse impact to sensitive habitats and species at the ADNWR and mitigation is not warranted or proposed.

References Cited

U.S. Fish and Wildlife Service (USFWS). 2010. Technical Assessment: Listed Species and Nitrogen Deposition from the Russell City Energy Center. By Thomas C. Maurer, Chief, Investigations and Prevention Branch, Sacramento Fish and Wildlife Office, Sacramento, CA. January 11.

California Energy Commission (CEC). 2007. Final Staff Assessment, City of Hayward Eastshore Energy Center Application for Certification (06-AFC-6). November.

Informal Consultation with USFWS

73. *Please provide a report of conversation after consulting the USFWS regarding the nitrogen deposition issue at the ADNWR.*

Response: Screening level modeling conservatively shows that potential effects of nitrogen deposition from the OGS would not reach a level of significance, either individually or cumulatively. Informal consultation with the USFWS is therefore not warranted regarding the potential effects of OGS nitrogen deposition on the ADNWR.

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

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

***ROBERT B. WEISENMILLER**
Commissioner and Associate Member
rweisenm@energy.state.ca.us

Kourtney Vaccaro
Hearing Officer
KVaccaro@energy.state,ca.us

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

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

***Jennifer Jannings**
Public Adviser
publicadviser@energy.state.ca.us

*indicates change

DECLARATION OF SERVICE

I, Mary Finn, declare that on May 12, 2010, I served and filed copies of the attached Response to CEC Staff Data Requests # 68–73 for the Oakley Generating Station Project (09-AFC-4). 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].** 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:

(C*heck all that Apply*)

For service to all other parties:

__x__ 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:

__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.

Mary Finn