



500 Capitol Mall, Suite 1600  
Sacramento, California 95814  
main 916 447 0700  
fax 916.447.4781  
www.stoel.com

August 1, 2011

MELISSA A. FOSTER  
Direct (916) 319-4673  
mafoster@stoel.com

**BY HAND DELIVERY AND U.S. MAIL**

Mr. Eric Solorio, Siting Project Manager  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

<b>DOCKET</b>	
<b>11-AFC-1</b>	
DATE	AUG 01 2011
RECD.	AUG 01 2011

**Re: Pio Pico Energy Center Project (11-AFC-01)  
Supplemental Responses to Staff's Data Requests, Set 1 (#29 and 30)**

Dear Mr. Solorio:

On Friday, July 15, 2001, Applicant Pio Pico Energy Center LLC submitted responses to Staff's data requests, set one (#1-59) for the Pio Pico Energy Center Project. Therein, Applicant explained that it needed time to finalize responses to requests BIO-29 and BIO-30. Enclosed herein please find Applicant's supplemental responses to data requests BIO-29 and BIO-30, as well as related air quality modeling files contained on a disc.

Paper and electronic copies of these responses, including the related air quality modeling files will be served to all the parties. In addition, for your convenience, we have sent this data to Mr. Birdsall at Aspen.

Should you have any questions regarding this submittal, please do not hesitate to contact me.

Respectfully submitted,

A handwritten signature in blue ink that reads "Melissa A. Foster".

Melissa A. Foster

MAF:kjh

Enclosures

cc: See Proof of Service List

**PIO PICO ENERGY CENTER  
APPLICATION FOR CERTIFICATION  
SUPPLEMENTAL RESPONSES TO CEC DATA REQUESTS  
11-AFC-01**

---

**Technical Area: Biological Resources**

**BACKGROUND**

Page 5.6-20 of the AFC describes air emissions as an operational impact associated with the project. The project's anticipated NO<sub>x</sub> emissions may contribute to the ongoing (cumulative) degradation of endangered species habitat located near the project site. NO<sub>x</sub> emissions are a concern of USFWS and CDFG, and staff will be pursuing the issue with those agencies, and share information with the applicant as it becomes available.

**Data Request BIO-29:** Please also provide a cumulative impact analysis of the nitrogen deposition values in kg/ha/yr. Provide an isopleths graphic over USGS 7.5-minute maps of the direct nitrogen deposition values in the cumulative analysis and specify the cumulative nitrogen deposition rate in kg/ha/yr at any affected special status habitat, vegetation type, or critical habitat. The geographical extent of the cumulative nitrogen deposition mapping should be directed by the results, i.e. extend geographically to where the deposition is considered below any stated threshold of significance.

**Response:** The requested isopleth graphic is shown in Figure DR-BIO-29.1 and includes the cumulative nitrogen deposition, with the project contribution. Figure DR-Bio 29.2 shows the cumulative background nitrogen deposition but does not include the project contribution. As shown on the aforementioned figures, the facility contributes a very small amount of nitrogen deposition (less than 6% to the regional nitrogen deposition rate). Furthermore, the proposed threshold for significance for cumulative impacts in sensitive areas (5 kg/ha/yr) is exceeded by the existing regional background, which is estimated to be 11.56 kg/ha/yr (Tonneson et. al. 2007).

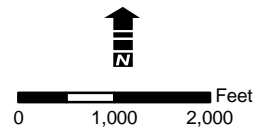
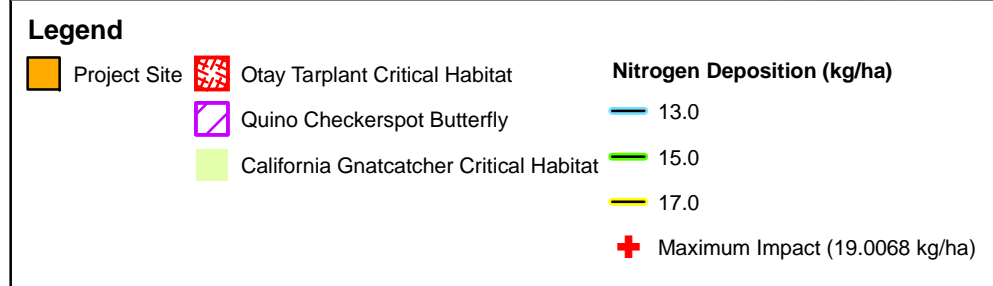
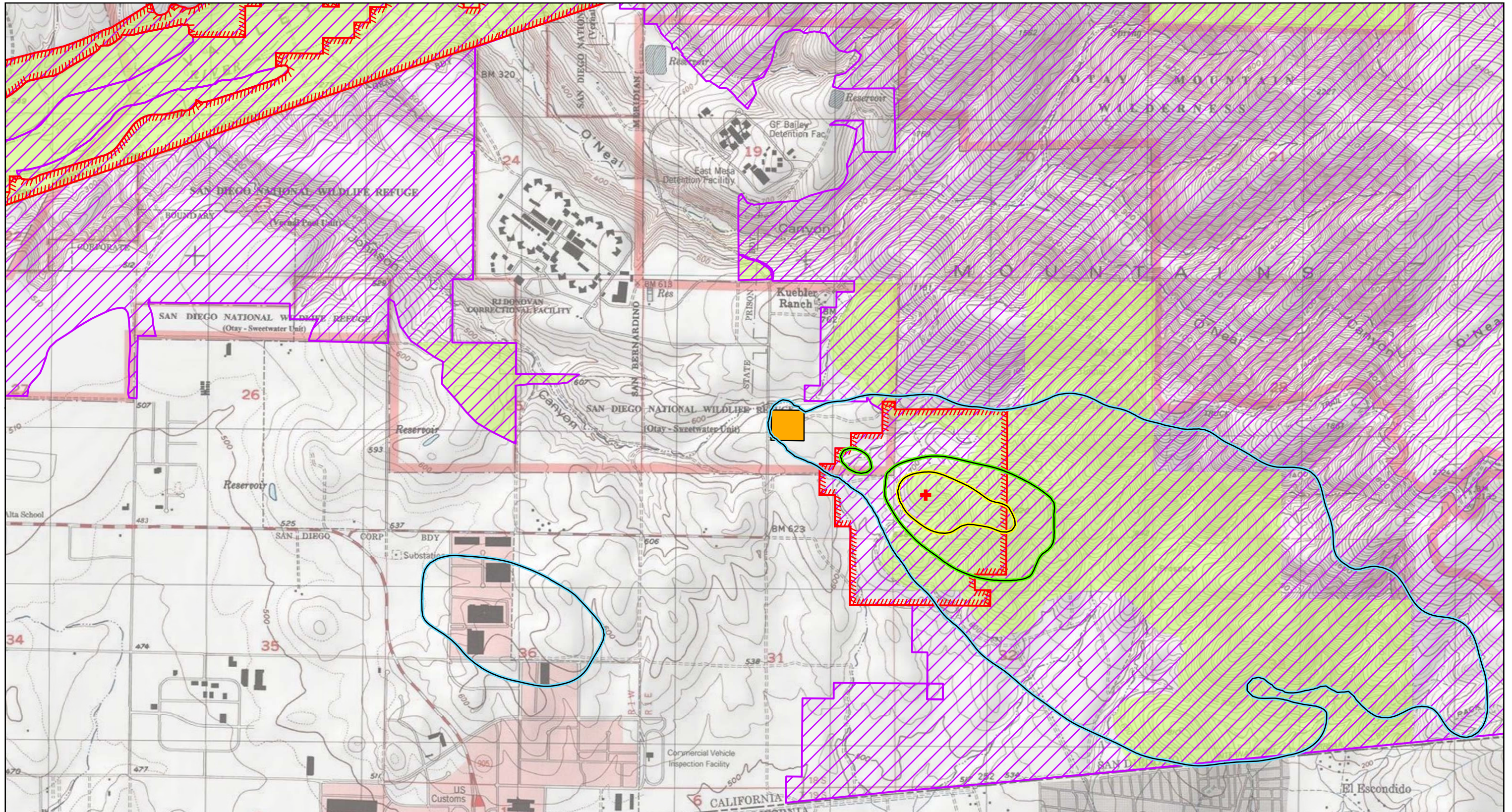
**PIO PICO ENERGY CENTER  
APPLICATION FOR CERTIFICATION  
SUPPLEMENTAL RESPONSES TO CEC DATA REQUESTS  
11-AFC-01**

---

**Technical Area: Biological Resources**

**Data Request BIO-30:** Please describe potential mitigation to decrease cumulative nitrogen deposition impacts to less than significant levels for any affected resources, particularly Quino checkerspot critical habitat, special status vegetation types, or other special status habitat. Levels of significance should be determined using the references cited in data request 12, or as otherwise specified and agreed-upon by the California Energy Commission, CDFG, and USFWS.

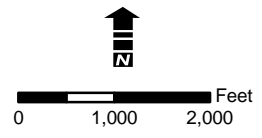
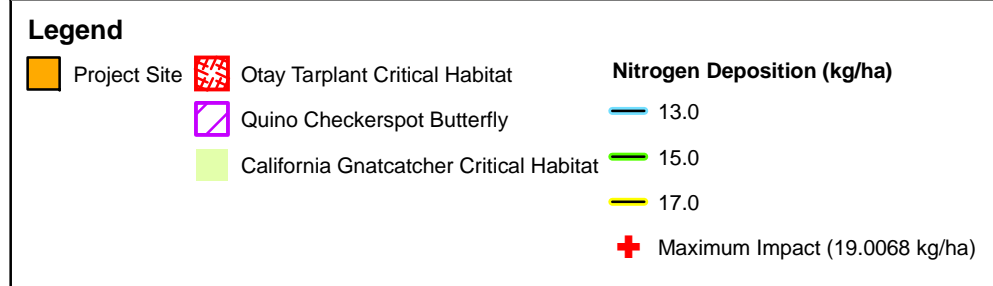
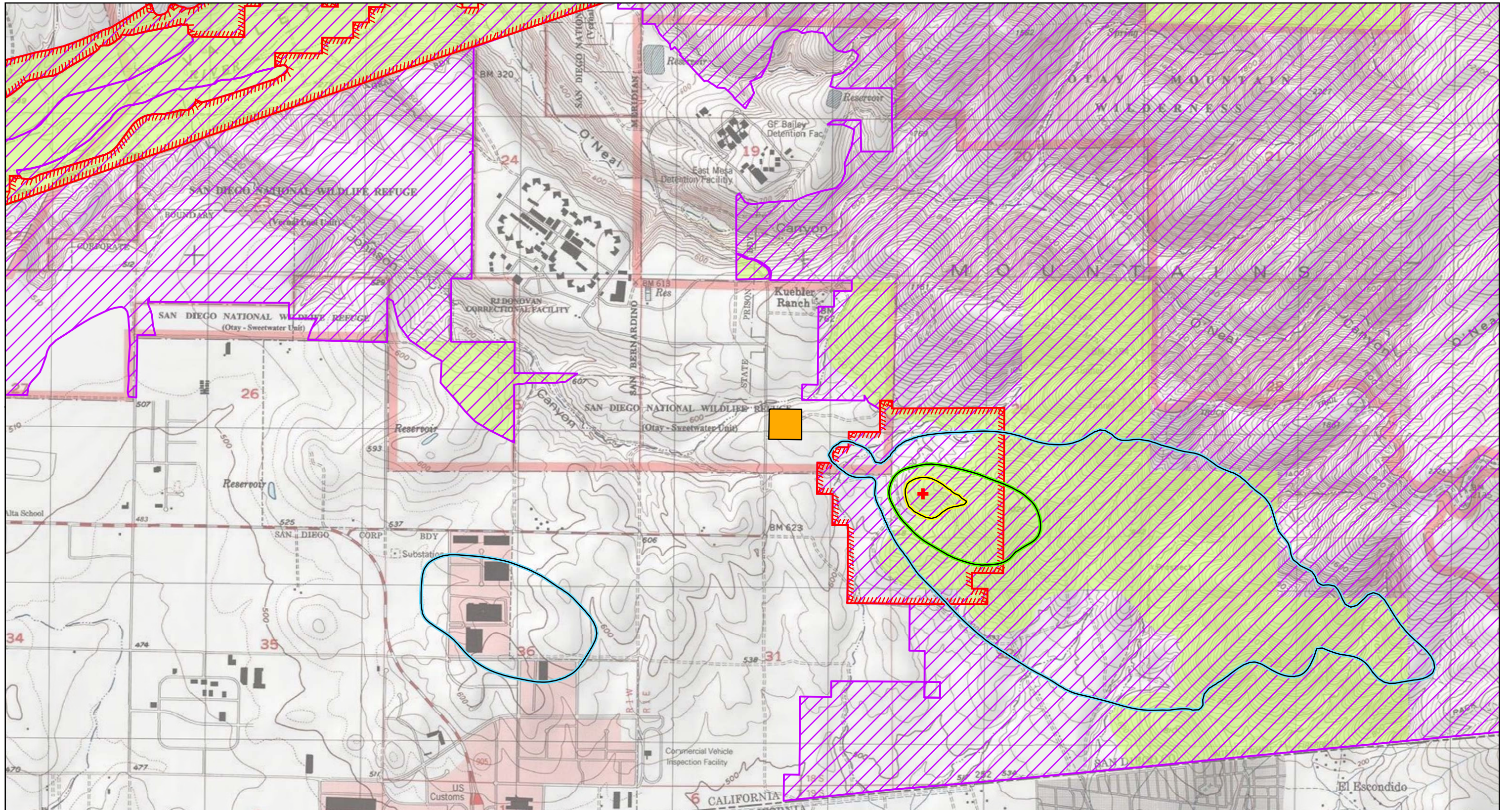
**Response:** Nitrogen compounds from the facility will contribute small (less than 6% to the regional nitrogen deposition rate) concentrations to the regional background. To mitigate for the small indirect impacts to native vegetation and quino checkerspot butterfly habitat, the project owner shall provide funds for quino checkerspot butterfly research and habitat management that would include periodic weeding of non-native plants. To calculate the funds necessary for the endowment, applicant assumed that: 1) weeding in the area would cost approximately \$1,000/acre; and 2) the 50-acre habitat area would be weeded every four years. The cost would be \$50,000 (\$1,000/acre x 50 acres). Consistent with this funding approach, the project owner will make a single payment in the amount of \$50,000 to an existing endowment or create a new one prior to the start of commissioning. With implementation of this mitigation, the project will have no significant adverse impacts on biological resources (e.g. Quino checkerspot butterfly, critical habitats, and native vegetation types).



**FIGURE DR-BIO 29.1**  
 CUMULATIVE NITROGEN DEPOSITION,  
 INCLUDING PROJECT CONTRIBUTION  
 (UNITS OF KG/HA/YR)

PIO PICO  
 ENERGY CENTER

PROJECT NO.: 29874827  
 DATE: JULY 2011



**FIGURE DR-BIO 29.2**  
 CUMULATIVE NITROGEN DEPOSITION, BUT NOT INCLUDING PROJECT CONTRIBUTION (UNITS OF KG/HA/YR)

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](http://WWW.ENERGY.CA.GOV)

APPLICATION FOR CERTIFICATION  
FOR THE *PIO PICO ENERGY CENTER, LLC*

Docket No. 11-AFC-1  
PROOF OF SERVICE  
(Revised 5/12/11)

**Pio Pico Energy Center, LLC**

**Letter to Eric Solorio, Siting Project Manager, California Energy Commission,  
dated August 1, 2011 re Applicant's Supplemental Responses to Staff's Data  
Requests, Set 1 (#29 and #30)**

APPLICANT

Gary Chandler, President  
Pio Pico Energy Center  
P.O. Box 95592  
South Jordan, UT 84095  
[grchandler@apexpowergroup.com](mailto:grchandler@apexpowergroup.com)

David Jenkins, Project Manager  
Pio Pico Energy Center, LLC  
1293 E. Jessup Way  
Mooresville, IN 46158  
[djenkins@apexpowergroup.com](mailto:djenkins@apexpowergroup.com)

APPLICANT'S CONSULTANTS

Maggie Fitzgerald, Project Manager  
URS Corporation  
2020 East 1st Street, Suite 400  
Santa Ana, CA 92705  
[maggie\\_fitzgerald@urscorp.com](mailto:maggie_fitzgerald@urscorp.com)

COUNSEL FOR APPLICANT

John A. McKinsey  
Melissa A. Foster  
Stoel Rives, LLP  
500 Capitol Mall, Suite 1600  
Sacramento, CA 95814  
[jamckinsey@stoel.com](mailto:jamckinsey@stoel.com)  
[mafoster@stoel.com](mailto:mafoster@stoel.com)

INTERESTED AGENCIES

California ISO  
*E-mail Preferred*  
[e-recipient@caiso.com](mailto:e-recipient@caiso.com)

ENERGY COMMISSION

CARLA PETERMAN  
Commissioner and Presiding Member  
[cpeterma@energy.state.ca.us](mailto:cpeterma@energy.state.ca.us)

Jim Bartridge  
Adviser to Commissioner Peterman  
[jbartrid@energy.state.ca.us](mailto:jbartrid@energy.state.ca.us)

KAREN DOUGLAS  
Commissioner and Associate  
Member  
[kldougla@energy.state.ca.us](mailto:kldougla@energy.state.ca.us)

Galen Lemei  
Adviser to Commissioner Douglas  
[glemei@energy.state.ca.us](mailto:glemei@energy.state.ca.us)

Raoul Renaud  
Hearing Officer  
[rrenaud@energy.state.ca.us](mailto:rrenaud@energy.state.ca.us)

Eric Solorio  
Siting Project Manager  
[esolorio@energy.state.ca.us](mailto:esolorio@energy.state.ca.us)

Kevin W. Bell  
Staff Counsel  
[kwbell@energy.state.ca.us](mailto:kwbell@energy.state.ca.us)

Jennifer Jennings  
Public Adviser  
*E-mail preferred*  
[publicadviser@energy.state.ca.us](mailto:publicadviser@energy.state.ca.us)

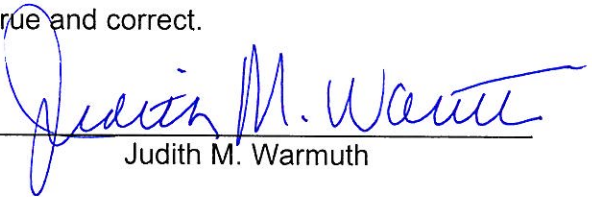
**DECLARATION OF SERVICE**

I, Judith M. Warmuth, declare that on August 1, 2011, I deposited copies of the aforementioned document in the United States mail at 500 Capitol Mall, Suite 1600, Sacramento, California 95814, with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

**AND/OR**

Transmission via electronic mail, personal delivery or first class U.S. mail were consistent with the requirements of California Code of Regulations, Title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.

  
\_\_\_\_\_  
Judith M. Warmuth