

March 10, 2010

Mr. Ren Lohofener, Regional Director  
Pacific Southwest, U.S. Fish and  
Wildlife Service  
2800 Cottage Way, W-2606  
Sacramento, CA 95825

SUBJECT: REQUEST FOR LIST OF PROTECTED SPECIES WITHIN THE AREA UNDER  
EVALUATION FOR THE DIABLO CANYON NUCLEAR POWER PLANT,  
UNITS 1 AND 2, LICENSE RENEWAL APPLICATION REVIEW

Dear Mr. Lohofener:

The U.S. Nuclear Regulatory Commission (NRC or the staff) is reviewing an application submitted by Pacific Gas & Electric (PG&E) for the renewal of the operating licenses for Diablo Canyon Nuclear Power Plant (DCPP), Units 1 and 2. DCPP is located approximately 12 miles west-southwest of San Luis Obispo, California. As part of the review of the license renewal application (LRA), the NRC is preparing a Supplemental Environmental Impact Statement (SEIS) under the provisions of Title 10 of the *Code of Federal Regulations* Part 51 (10 CFR Part 51), the NRC's regulation that implements the National Environmental Policy Act (NEPA) of 1969. The SEIS includes an analysis of pertinent environmental issues, including endangered or threatened species and impacts to fish and wildlife. This letter is being submitted under the provisions of the Endangered Species Act of 1973; as amended, and the Fish and Wildlife Coordination Act of 1934, as amended.

The proposed action would include the use and continued maintenance of existing plant facilities and transmission lines. The DCPP site consists of approximately 750 acres of land located near the mouth of Diablo Creek, and a portion of the power plant site is bounded by the Pacific Ocean. Approximately 165 acres of the owner-controlled area are located north of Diablo Creek. The remaining 585 acres are located adjacent to and south of Diablo Creek. The entire acreage is owned by PG&E. PG&E owns all coastal properties north of Diablo Creek, to the southerly boundary of Montana de Oro State Park and inland a distance of 0.5 to 1.75 miles. Similarly, PG&E owns all coastal properties south of Diablo Creek for approximately 8 miles and inland approximately 1.75 miles. Except for the DCPP site, all of the acreage north and south of DCPP is encumbered by two grazing licenses.

DCPP utilizes a once-through cooling (OTC) water system whereby raw, ambient temperature seawater is drawn from the Pacific Ocean through a shoreline intake structure, and discharged back to the Pacific Ocean at a second, separate, shoreline location approximately 20°F on average above ambient temperature. The seawater is pumped through heat exchanging steam condensers located in the turbine building. Each unit utilizes an independent cooling system, however the systems share common intake and discharge structures. During full power operations, the plant circulates approximately 2.45 billion gallons (equivalent to 9.275 million cubic meters) of raw seawater per day through the main steam condensers.

PG&E indicates that the main condenser OTC system was initially designed for heat treatment to control marine fouling organisms. Heat treatments were discontinued early during the initial license period. PG&E found treatments to be ineffective at managing acorn barnacles (*Megabalanus tintinnabulum*), the primary seawater systems fouling problem. PG&E indicates that treatment of seawater systems will not be used in the license renewal period.

Heated discharge from the main condensers of each unit combine and flow to a common structure terminating in a shoreline outfall. The discharge for Unit 1 and 2 are parallel within the structure separated by a central concrete partition. Cutouts exist in the dividing wall to promote mixing of thermal effluent between the operating units. PG&E indicates that the mixing also provides dilution and reduction of residual oxidants from seawater inlet systems chemical treatments.

The transmission lines in the scope of NRC's environmental review for license renewal are those that were originally constructed for the specific purpose of connecting the plant to the transmission system. The enclosed transmission line map shows the transmission system that is being evaluated in the SEIS. The transmission lines consist of three single-circuit 500 kV lines and one double-circuit 230 kV line. One double-circuit 230 kV line was connected to an existing Morro Bay-Mesa line 10.25 miles from DCPD with an 80-foot right-of-way width. One single-circuit 500 kV line was connected to the Gates Substation in Fresno County 79 miles from DCPD with a 350-foot right-of-way width. Lastly, two single-circuit 500 kV lines were connected to the Midway Substation in Kern County 84 miles from DCPD with a combined right-of-way width of 400 feet.

In total, for the specific purpose of connecting DCPD to the transmission system, PG&E has approximately 170 miles of corridor that occupy approximately 7,500 acres. The corridors pass primarily through foothills and rolling land. In addition, there are parcels of land that are agricultural and forest land. All lines, except the Morro Bay-Mesa feeder line, cross Highway 101. The transmission line and site boundary are identified in the enclosed maps.

To support the SEIS preparation process and to ensure compliance with Section 7 of the Endangered Species Act, the NRC requests information on Federally-listed, proposed, and candidate species and critical habitat that may be in the vicinity of the DCPD site, as shown on the enclosed plant location map, as well as the transmission system being evaluated by the SEIS. In addition, please provide any information you consider appropriate under the provisions of the Fish and Wildlife Coordination Act.

During the week of April 19, 2010, the NRC staff plans to conduct a site audit at DCPD. You and your staff are invited to attend the site audit. Your office will receive a copy of the draft SEIS along with a request for comments. The anticipated publication date for the draft SEIS is October 2010.

R. Lohofener

- 3 -

The DCPD LRA is available on the internet at [www.nrc.gov/reactors/operating/licensing/renewal/applications/diablo-canyon.html](http://www.nrc.gov/reactors/operating/licensing/renewal/applications/diablo-canyon.html). If you have any questions concerning the NRC staff's review of this LRA, please contact Mr. Drew Stuyvenberg, Environmental Project Manager, at 301-415-4006 or [Andrew.Stuyvenberg@nrc.gov](mailto:Andrew.Stuyvenberg@nrc.gov).

Sincerely,

**/RA/**

David J. Wrona, Chief  
Projects Branch 2  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosures:  
As stated

cc w/encls.: See next page

The DCPD LRA is available on the internet at [www.nrc.gov/reactors/operating/licensing/renewal/applications/diablo-canyon.html](http://www.nrc.gov/reactors/operating/licensing/renewal/applications/diablo-canyon.html). If you have any questions concerning the NRC staff's review of this LRA, please contact Mr. Drew Stuyvenberg, Environmental Project Manager, at 301-415-4006 or [Andrew.Stuyvenberg@nrc.gov](mailto:Andrew.Stuyvenberg@nrc.gov).

Sincerely,  
**/RA/**  
 David J. Wrona, Chief  
 Projects Branch 2  
 Division of License Renewal  
 Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosures:  
 As stated

cc w/encls.: See next page

DISTRIBUTION:

**HARD COPY:**

DLR RF

**E-MAIL:**

PUBLIC

RidsNrrDir Resource  
 RidsNrrDirRpb1 Resource  
 RidsNrrDirRpb2 Resource  
 RidsNrrDirRarb Resource  
 RidsNrrDirRapb Resource  
 RidsNrrDirRasb Resource  
 RidsNrrDirRerb Resource  
 RidsNrrDirRpob Resource  
 RidsOgcMailRoom Resource

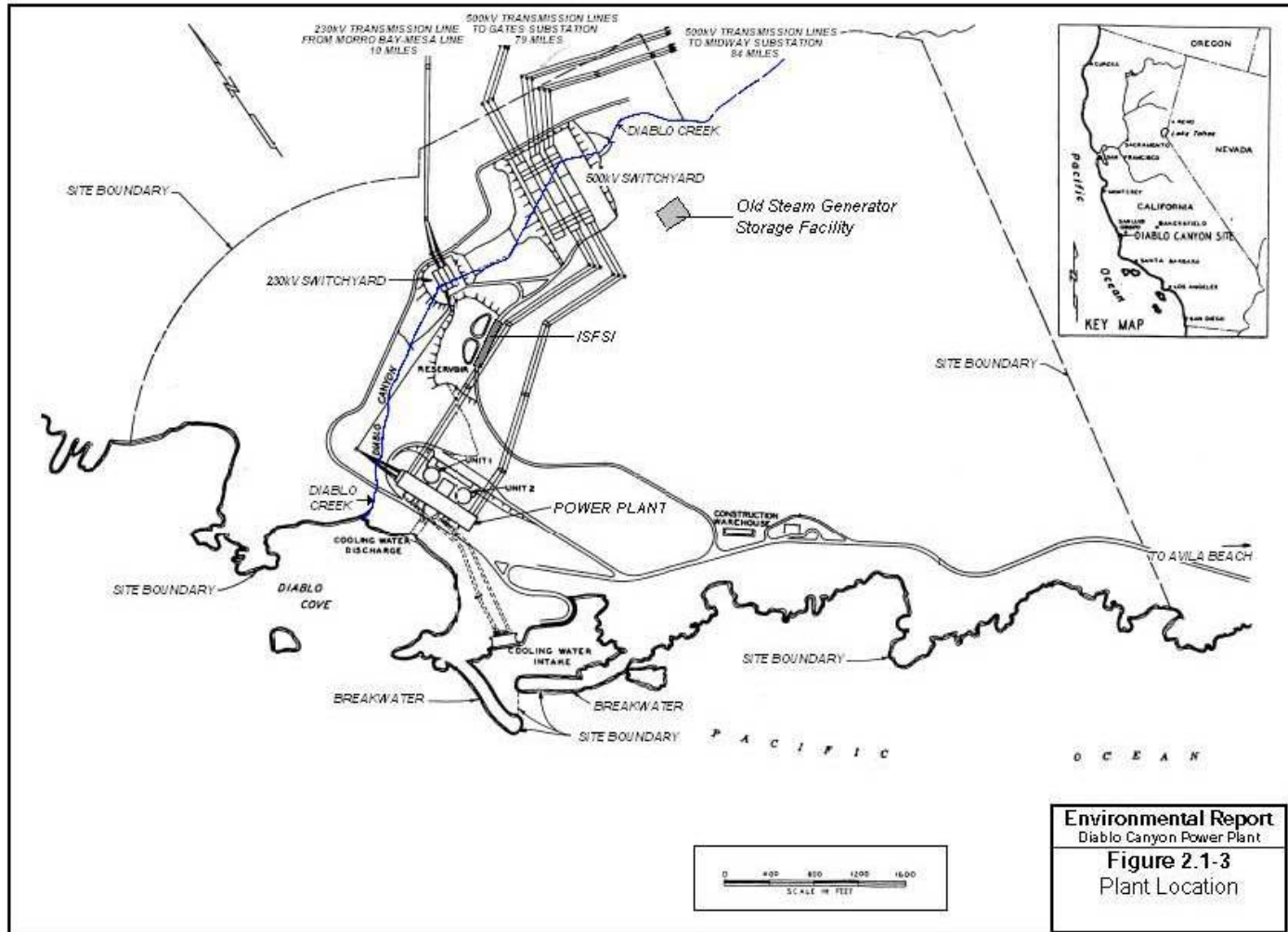
-----  
 N. Ferrer  
 K. Green  
 A. Stuyvenberg  
 D. Wrona  
 A. Wang  
 M. Peck, RIV  
 T. Brown, RI  
 G. Miller, RIV  
 N. O'Keefe, RIV  
 I. Couret, OPA  
 V. Dricks, OPA  
 W. Maier, RIV  
 J. Weil, OCA  
 E. Williamson, OGC  
 S. Uttal, GOC  
 R. Rihm, EDO

ADAMS Accession No. **ML100340297**

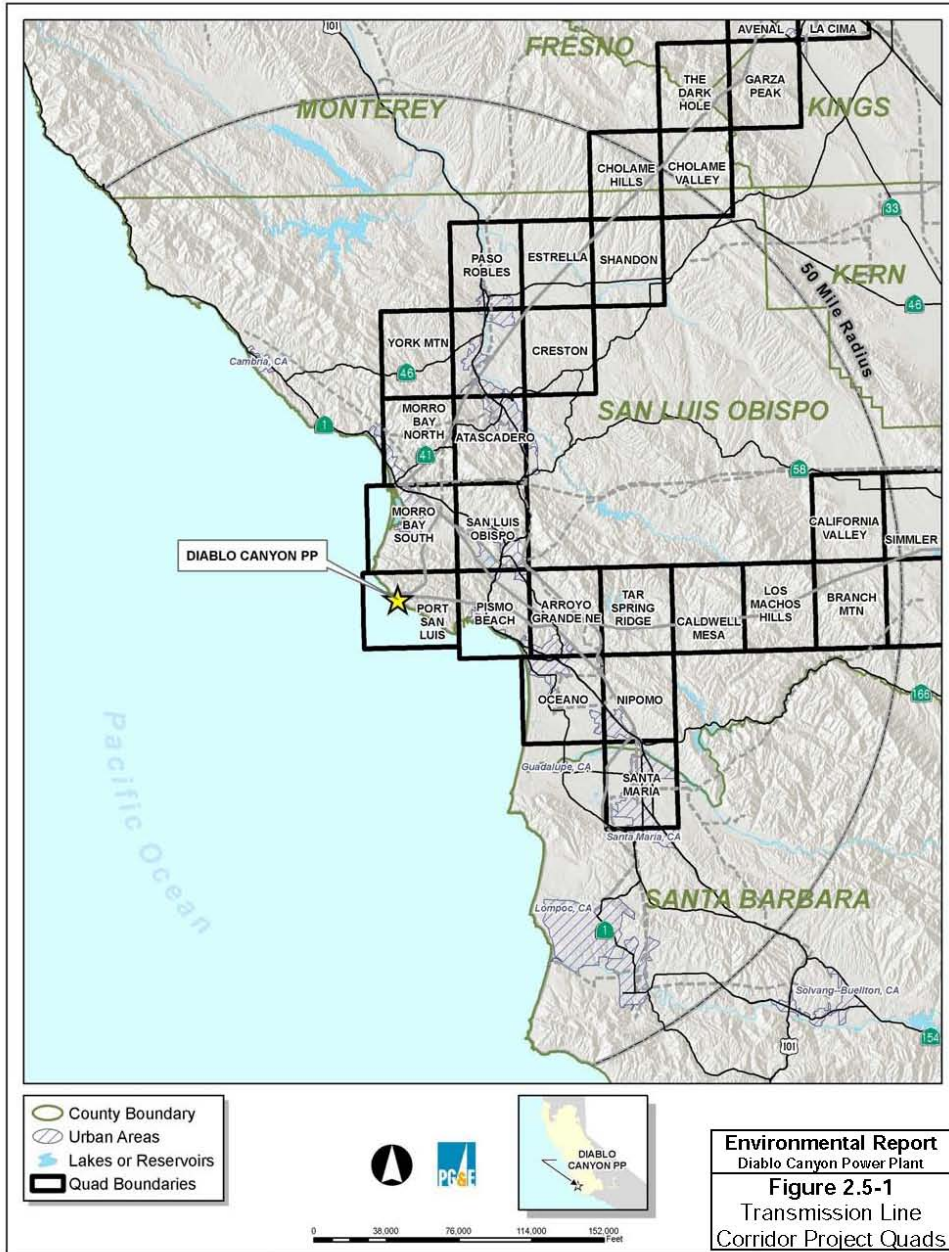
OFFICE	PM:RPB2:DLR	LA:RPOB:DLR	OGC (NLO)	BC:RPB2:DLR
NAME	AStuyvenberg	YEdmonds	L. Subin	DWrona
DATE	02/18/10	02/05/10	02/22/10	03/10/10

OFFICIAL RECORD COPY

APPENDIX E  
ENVIRONMENTAL REPORT



APPENDIX E  
ENVIRONMENTAL REPORT



Diablo Canyon Nuclear Power Plant  
Units 1 and 2

cc:

Chairman  
San Luis Obispo County Board of  
Supervisors  
1055 Monterey Street, Suite D430  
Room 370, County Government Center  
San Luis Obispo, CA 93408

Mr. James R. Becker, Site Vice President  
Pacific Gas & Electric Company  
Diablo Canyon Nuclear Power Plant  
P.O. Box 3, Mail Station 104/6/601  
Avila Beach, CA 93424

Ms. Jennifer Post, Esq.  
Pacific Gas & Electric Company  
77 Beale Street, Room 2496  
Mail Code B30A  
San Francisco, CA 94120

Mr. Gary Butner  
Chief, Radiological Health Branch  
California Department of Public Health  
P.O. Box 997414, MS 7610  
Sacramento, CA 95899-7414

Mr. Tony Brown  
NRC Resident Inspector  
Diablo Canyon Nuclear Power Plant  
c/o U.S. Nuclear Regulatory Commission  
P.O. Box 369  
Avila Beach, CA 93424

Mr. Michael Peck  
NRC Senior Resident Inspector  
Diablo Canyon Nuclear Power Plant  
c/o U.S. Nuclear Regulatory Commission  
P.O. Box 369  
Avila Beach, CA 93424

Regional Administrator, Region IV  
U.S. Nuclear Regulatory Commission,  
Texas Health Resources Tower  
612 East Lamar Boulevard, Suite 400  
Arlington, TX 76011-4125

Mr. Terence L. Grebel  
Manager, Regulatory Projects  
Diablo Canyon Nuclear Power Plant  
P.O. Box 56  
Avila Beach, CA 93424

Mr. Truman Burns  
Mr. Robert Kinosian  
California Public Utilities Commission  
505 Van Ness, Room 4102  
San Francisco, CA 94102

Mr. James D. Boyd, Commissioner  
California Energy Commission  
1516 Ninth Street (MS 31)  
Sacramento, CA 95814

Mr. Brian Hembacher  
Deputy Attorney General  
300 South Spring Street, Suite 1702  
Los Angeles, CA 90013

Ms. Susan Durbin  
1300 I Street  
P.O. Box 944255  
Sacramento, CA 94244-2550

Mr. Tom Luster  
CA Coastal Commission  
45 Fremont Street, #2000  
San Francisco, CA 94105

Mr. Mark Johnsson  
CA Coastal Commission  
45 Fremont Street, #2000  
San Francisco, CA 94105

Mr. Eric Green  
505 Van Ness Avenue  
San Francisco, CA 94102-3214

Diablo Canyon Nuclear Power Plant,  
Units 1 and 2

- 2 -

cc:

Ms. Barbara Byron  
Senior Policy Advisor  
California Energy Commission  
1516 9<sup>th</sup> Street, MS 36  
Sacramento, CA 95814

Lieutenant Jim Epperson  
California Highway Patrol  
Commercial Vehicle Section  
601B North 7<sup>th</sup> Street  
Sacramento, CA 95811

Mr. Kevin Bell  
General Council  
California Energy Commission  
1516 9<sup>th</sup> Street, MS 36  
Sacramento, CA 95814

Mr. Peter Von Lagen, PhD, PG  
895 Areovista Place, Suite 101  
San Luis Obispo, CA 93401

Ms. Rachel MacDonald  
Nuclear Policy Advisor  
California Energy Commission  
1516 9<sup>th</sup> Street, MS 36  
Sacramento, CA 95814

Mr. Burton Chadwick, PhD, PG  
Core Regulatory Permitting  
Central Coast Water Board  
895 Areovista Place, Suite 101  
San Luis Obispo, CA 93401

Mr. Bill Potter  
Senior Emergency Services Coordinator  
California Emergency Management Agency  
Radiological Preparedness Unit  
3650 Schriever Avenue  
Mather, CA 95655

Mr. Gary W. Butner  
Branch Chief  
Division of Food, Drug, and Radiation  
Safety  
California Department of Health Services  
P.O. Box 997414, MS-7610  
Sacramento, CA 95899-7414

Mr. Michael Warren  
California Emergency Management Agency  
Radiological Preparedness Unit  
3650 Schriever Avenue  
Mather, CA 95655

Ms. Jane Swanson  
San Luis Obispo Mothers for Peace  
P.O. Box 3608  
San Luis Obispo, CA 93403

Mr. Chris Wills  
Supervising Geologist  
California Geological Survey  
801 K Street, MS 12-32  
Sacramento, CA 95814-3531

Ms. Rochelle Becker, Executive Director  
Alliance for Nuclear Responsibility  
P.O. Box 1328  
San Luis Obispo, CA 93406-1328

Mr. John G. Parrish, PhD  
State Geologist  
California Geological Survey  
801 K Street, Suite 1200  
Sacramento, CA 95814

Mr. John T. Conway, Senior Vice President,  
Generation and Chief Nuclear Officer  
Diablo Canyon Nuclear Power Plant,  
Units 1 and 2  
Pacific Gas & Electric Company  
77 Beale Street, MC B32  
San Francisco, CA 94105