

February 6, 2008

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
PACIFIC GAS AND ELECTRIC COMPANY	)	Docket No. 72-26-ISFSI
	)	
(Diablo Canyon Power Plant Independent Spent Fuel Storage Installation)	)	ASLBP No. 08-860-01-ISFSI-BD01

NRC STAFF'S INTERROGATORIES  
DIRECTED TO PACIFIC GAS AND ELECTRIC COMPANY

Pursuant to the *Scheduling and Management Order for Discovery* of January 24, 2008, the Nuclear Regulatory Commission Staff (Staff) hereby requests Pacific Gas and Electric (PG&E) answer the following Interrogatories separately, fully, in writing, and under oath by February 20, 2008.

I. DEFINITIONS

1. The word "document" as used herein shall mean any written or recorded matter, whether produced, reproduced, or stored on paper, cards, tapes, disks, film, e-mail, computer storage devices, or any other medium and shall include, without limitation, matter in the form of books, reports, studies, statements, speeches, notebooks, agreements, appointment calendars, working papers, manuals, memoranda, notes, procedures, orders, instructions, directions, training materials, records, correspondence, diaries, plans, charts, diagrams, drawings, periodicals, lists, telephone logs, recordings, minutes, photographs, negatives, computer printouts, legal pleadings (other than those filed in this proceeding), and any published materials, and shall also include, without limitation, originals, copies (with or without notes or changes thereon), and drafts.
2. "Licensee" or "Applicant" means in the context of this discovery request, Pacific Gas and Electric Company and any agent, servant, employee, consultant, contractor, technical advisor,

representative, officer, or other person(s) acting for or on behalf of all or any of them, or at their direction and control, or in concert with or assisting them.

3. "Intervenor" means in the context of this discovery request, the San Luis Obispo Mothers for Peace and any member, agent, servant, employee, consultant, contractor, technical advisor, representative, officer, or other person(s) acting for or on behalf of all or any of them, or at their direction and control, or in concert with or assisting them.

4. "Concerns," "concerning," or any other derivative thereof, includes referring to, responding to, relating to, pertaining to, in connection with, comprising, memorializing, commenting on, regarding, discussing, showing, describing, reflecting, analyzing, supporting, contradicting, and constituting.

5. "Relate" or "relating to" means pertaining to, recording, evidencing, setting forth, reflecting, referring to, discussing, showing, disclosing, describing, explaining, summarizing, concerning, or regarding.

6. "Identify" when used in reference to a natural person means to set forth the following: his name; his present or last known residential address and telephone number; his present or last known business address and telephone number; his employer; his title or position; his area of responsibility; and his business, professional, or other relationship with the Applicant or other parties. If any of the above information has changed subsequent to the time period referenced in a particular interrogatory, set forth in the answer, and label appropriately, current information as well as the information applicable to the time period referenced in the interrogatory.

7. "Identify" when used in reference to a corporation or other entity that is not a natural person shall mean to set forth the following:

a. the full name of such entity, including its legal name and any assumed or trade names under which it transacts or has transacted business;

b. the nature or form of such entity, if known;

c. the address and telephone number of the entity's principal place of business or the principal place where such entity is to be found;

d. whether the Applicant has or has had a relationship or affiliation with such entity, its affiliates or subsidiaries, and, if so, a description of such relationship;

e. the persons presently or formerly employed by or associated with that entity who have the principal knowledge concerning the subject matter in question; and

f. if any of the above information has changed subsequent to the time period referenced in a particular interrogatory, set forth in the answer, and label appropriately, current information as well as the information applicable to the time referenced in the interrogatory.

8. "Identify" when used in reference to a document shall mean to set forth the following: its title; its subject matter; its date; its author; its addressee (including the designated recipient, "cc" and "bcc" recipients, and the like); its file designation or other identifying designation; and its present location and present custodian.

9. "Possession, custody, or control" includes actual and constructive possession, custody, and control. Any document which is not in a person's immediate physical possession, but in regard to which the person has a right to compel production from a third person, or which is otherwise subject to the control of the person in question, is within the person's "possession, custody, or control."

10. The words "you" or "your" as used herein shall mean Applicant Pacific Gas and Electric and any member, agent, servant, employee, consultant, contractor, technical advisor, representative, officer or other person(s) acting for or on behalf of it, or at their direction and control, or in concert with or assisting it.

## II. INSTRUCTIONS

1. Each interrogatory shall be answered separately and fully, in writing, and under oath or affirmation, and shall include all pertinent information available to you, your officers, employees, directors, advisors, representatives, or counsel, based upon the personal knowledge of the

person answering. The production of the documents requested herein shall take place at the offices of the U.S. Nuclear Regulatory Commission in Rockville, Maryland, unless other arrangements for inspection and copying are mutually agreed to by the parties.

2. To the extent that you do not have specific, complete and accurate information with which to answer any interrogatory, you should so state, and the interrogatory should be answered to the extent information is available, identifying each person who is believed to have accurate information with respect thereto.

3. Each interrogatory and document request shall be deemed to be continuing, and you are requested timely to supplement your answers with additional facts, documents, information, and names of witnesses which become known, in accordance with 10 C.F.R. § 2.740(e)(1) and (2) of the NRC's Rules of Practice.

4. The word "and" and "or" shall be construed either in the conjunctive or in the disjunctive so as to bring within the scope of these discovery requests any information that might otherwise be construed to be outside their scope.

5. Wherever appropriate, the singular form of a word shall be interpreted in the plural, and vice versa, so as to bring within the scope of these discovery requests any information that might otherwise be construed to be outside their scope.

6. Wherever appropriate, the word "his" shall include "her" or "their," and vice versa, so as to bring within the scope of these discovery requests any information that might otherwise be construed to be outside their scope.

7. Please produce each document requested herein in the form and condition in which it exists on the date of service of this request, including all comments, notes, remarks, and other material that may have been added to the document after its initial preparation.

8. Documents produced in compliance with this request should be accompanied with an indication as to the particular paragraph(s) or questions under which the documents are being produced.

10. For any document or part of a document that was at one time, but is no longer, in your possession, custody, or control, or which is no longer in existence, or which cannot be located or produced, identify the document, state where and how it passed out of existence or why it can no longer be located and the reasons therefore, and identify each person having knowledge concerning such disposition or loss and the contents of the document.

### III. GENERAL INTERROGATORIES

#### INTERROGATORY NO. 1

State the name, business address, and job title of each person who supplied information for responding to these interrogatories and requests for production of documents. Specifically note for which interrogatories each such person supplied information. Provide a statement of qualification, résumé, or *curriculum vitae* for each such person.

#### INTERROGATORY NO. 2

Identify each expert on whom the Applicant intends to rely in its written filing for the Subpart K proceeding described in the Commission's January 15, 2008, Memorandum and Order, the general subject matter on which each expert is expected to provide sworn affidavits and declarations for the written filing, the qualifications of each expert whom the Applicant expects to provide sworn affidavits and declarations for the written filing. Include in the qualifications a description of the educational and scientific experience of the expert; specifically addressing (1) education, training and certifications in health physics, (2) training or experience in dose modeling for calculating radiation dose, (3) a list of all dose modeling calculations and assessments performed during the last 10 years, (4) a list of publications authored by the expert within the preceding ten years, and (5) a listing of any other cases in which the expert has testified as an expert at a trial, hearing, or by deposition within the preceding four years.

#### IV. SPECIFIC INTERROGATORIES

##### INTERROGATORY NO. 1

Do you contend that land contamination would result from a radiological release from a successful terrorist attack? If the answer is yes, please answer the following with regard to the land contamination you contend would result from such an attack:

1) Describe with specificity the amount of land contamination you contend would result from a successful terrorist attack. In particular, provide any opinions on which you base your contention; including, but not limited to, the amount of land that would be contaminated, the location of that land, and the extent and nature of radiological contamination that you contend would be present on the land as a consequence of a terrorist attack.

2) Describe with specificity the means by which you contend that land contamination will result from a terrorist attack and the specific methods used to ascertain the extent and nature of land contamination you contend will result from such an attack. Specifically, answer the following:

a) Do you contend that land contamination will result from a radiological release into the atmosphere? If so, specify the following:

- The nature and extent of the radiological release upon which you base your conclusions and all facts and opinions you rely on in determining that release
- Specify the mechanism by which you contend the radiological release will be dispersed, including any dispersal of airborne or other form of the radiological release you contend would result from a successful terrorist attack. Identify the type, nature, and magnitude of the driving force over the period of time over which you allege the dispersion would occur that would lead to land contamination. Identify the facts, opinions, calculations, and sources and references which support your contention.
- The calculations used to assess the extent and nature of land contamination resulting from that release, including all input parameters, calculations and codes supporting your assessment or any sources relied on in making that assessment;
- All assumptions and input parameters for dispersal of any airborne radiological release you contend will result in land contamination, including chemical and physical form of dispersed material, atmospheric stability, wind speed and

direction, weather conditions, including the basis or source for those assumptions and the basis for your conclusions, if any, regarding the applicability of those assumptions to the Diablo Canyon site.

3) Describe with specificity the impacts you allege would result from land contamination, separate and apart from health effects. For each impact, answer the following:

- Specify the volume and areal amount of contamination you contend will occur as the result of a terrorist attack, the amount of time over which you contend health effects will occur, and the amount of contamination that will remain present over that time or each segment of time if you contend that the contamination will change over time;
- Describe each and every environmental impact of the land contamination that you contend should be considered in the environmental analysis. For each impact, specify the nature and extent of the consequences you contend would result from land contamination and state all facts and opinions which support your contention;
- Specify the time period over which you are assessing the environmental impacts described above and state whether you account for any mitigation of consequences during that time frame due to clean up, evacuation, or any other mitigative measures. Describe all calculations, including all input parameters and codes methods used and sources relied on, references, and expert opinion which support your contention.

4) Describe with specificity all human health effects you contend would result from land contamination. For each impact, state the specific health effects you contend would occur and quantify the extent of those health effects that you contend would occur. Explain all exposure scenarios and pathways including ingestion, inhalation, and external radiation, by which you contend humans will ingest radioactive material or be exposed to direct radiation as a result of land contamination and the time period over which you contend that ingestion will occur. Describe any assumptions underlying your ingestion analysis regarding the extent of radiological contamination, whether people will live, work, or recreate on contaminated land and whether any contamination will naturally diminish or be abated at any time after the terrorist event and describe all facts and opinions which support those assumptions. Describe with specificity all references and expert opinion used to support your contention, including all calculations performed.

## INTERROGATORY NO. 2

Do you contend that the radiological consequences, other than those from land contamination, from a successful terrorist attack would result in human health effects other than early fatalities, including non-fatal health effects such as latent cancers? If the answer is yes, please answer the following:

1) Describe the extent and nature of the radiological release from a successful terrorist attack that you contend would result in the human health effects described above. Specify whether the health effects would result from an atmospheric release of radiation or any other means or source of human exposure to radiation. For each source of radiological exposure, describe the following:

- The nature and extent of any radiological release you contend would occur, including all calculations, facts, and opinions relied on in determining the extent and nature of the release;
- All calculations used to make your assessments and the source of all calculations;
- The time period over which you contend radiation exposure will occur for the purpose of assessing health effects.

2) Describe the extent and nature of health effects described above which you contend would be caused by the radiological release from a successful terrorist attack. Include the following:

- The specific nature of the health effects that you contend would be caused by the radiological release. Describe with specificity all facts, opinions, and calculations which support your contention;
- The extent of the health effects, including the number and location of people you contend would be impacted for each separate health effect and the nature and extent of the health effects you contend would occur. Describe with specificity all facts, opinions, and calculations which support your contention.

Respectfully submitted,

*/RA/*

Lisa B. Clark  
Molly Barkman  
Counsel for NRC Staff

Dated at Rockville, MD  
This 6<sup>th</sup> day of February, 2008

February 6, 2008

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
PACIFIC GAS AND ELECTRIC COMPANY	)	Docket No. 72-26-ISFSI
	)	
(Diablo Canyon Power Plant Independent Spent Fuel Storage Installation)	)	ASLBP No. 08-860-01-ISFSI-BD01

NRC STAFF'S REQUEST FOR PRODUCTION OF DOCUMENTS  
AND THINGS DIRECTED TO PACIFIC GAS AND ELECTRIC COMPANY

Pursuant to the *Scheduling and Management Order for Discovery* of January 24, 2008, the Nuclear Regulatory Commission Staff (Staff) hereby requests the Pacific Gas and Electric Company (PG&E) produce the following documents and things described and requested below at the office of the Nuclear Regulatory Commission in Rockville, Maryland, and serve written responses to these requests by February 20, 2008.

I. DEFINITIONS

The NRC Staff incorporates herein by reference the Definitions contained in its Interrogatories Directed to PG&E which, unless otherwise stated herein, shall govern these Requests.

II. INSTRUCTIONS

1. These requests cover all documents and things in PG&E's actual or constructive possession, custody, or control.
2. These requests are addressed to PG&E and its present or former agent, servant, employee, consultant, contractor, technical advisor, representative, officer, or other person(s) acting for or on behalf of all or any of them, or at their direction and control, or in concert with or assisting them.

3. You shall produce all documents in a form which renders the documents susceptible of copying.

4. Where originals of documents are not available, authentic copies of such documents may be produced; but, if a document has been prepared in separate copies, or additional copies have been made and the copies are not identical (whether by reason of subsequent modification, addition of notations, inclusion of metadata, or otherwise), each non-identical copy is a separate document and should be identified or produced.

5. If any requested document or thing was, but no longer is, in your possession, custody, or control, or is known to you but is no longer in existence or not within your custody, state whether it is (a) missing or lost, (b) destroyed, (c) deleted, (d) transferred (voluntarily or involuntarily) to others or (e) disposed of in some other manner. In each instance, describe and explain in detail the circumstances surrounding the disposition of the document or thing, including who authorized the action taken, who performed the action, and the date of the action taken. Additionally, identify each such document or thing, including: (a) the type or character of the document or thing (e.g., letter, memorandum, notes, electronic data, etc.); (b) the title, if any, of the document or thing; (c) the name and address of the author or creator of the document or thing; (d) the name and address of the recipient(s) of the document or thing; (e) all information contained in the document or thing; (f) the date and circumstances under which the document or thing ceased to exist or to be in your possession, custody, or control; (g) the time period during which the document or thing existed or was maintained; (h) the current and last known location and custodian of the document or thing; and (i) the identity of the person(s) from whom the document may be requested, obtained, retrieved, or recovered.

6. In searching for and producing documents and things responsive to these requests, you are specifically requested and instructed to search all document management systems, computer archives, and back-up tapes or disks, and production of such documents or things should be made regardless of the form in which such documents or things exist. If any

requested document or thing is maintained or exists in digital, electronic, and/or imaged form, you shall produce both a tangible (or “hard”) copy and a copy of the document in digital, electronic or imaged form.

7. These requests require the production of documents in the same form and the same order as they are kept in the usual course of business or, alternatively, organized and labeled to correspond with the particular requests set forth below. If you choose the former method, the documents are to be produced in boxes, file folders, bindings, or other containers in which the documents are found. The titles, labels, or other descriptions on the boxes, file folders, bindings, or other containers are to be left intact.

8. The phrasing of these requests shall be construed so as to make your responses inclusive rather than exclusive. For example: (a) the word “including” is intended to be comprehensive and means “including, but not limited to;” (b) the singular form of all words includes the plural form and vice versa; (c) the words “and” and “or” shall be interpreted as both conjunctive and disjunctive; (d) the word “any” shall mean “any and all;” and (e) the word “each” shall mean “each and every.”

9. Your responses to these requests should be amended or supplemented in accordance with the applicable rules and the presiding officer’s orders in this proceeding.

### III. REQUESTS

#### REQUEST NO. 1

All documents and things that you identified, or were asked to identify, in your answers to Staff's Interrogatories.

#### REQUEST NO. 2

All documents or things that you relied upon, assembled, reviewed, obtained, considered, drafted, prepared, or generated in preparing your answers to Staff's Interrogatories.

### REQUEST NO. 3

All documents and things you relied upon, assembled, reviewed, obtained, considered, drafted, prepared, or generated in preparing all filings in this proceeding concerning Contention 2.

### REQUEST NO. 4

All documents and things on which you intend or expect to rely on in support of any fact, allegation, claim, contention, or opinion, in this proceeding, including all relevant documents, communications, and information.

### REQUEST NO. 5

All relevant documents, communications, and information that constitute or relate to any articles, books, or publications by any person whose testimony you intend, expect, or anticipate to obtain, subpoena, offer, proffer, present, introduce, or rely upon in this proceeding.

### REQUEST NO. 6

Biographies, résumés, *curriculum vitae*, and personnel records sufficient to provide a full background and description of each person whose testimony you intend, expect, or anticipate to obtain, subpoena, offer, proffer, present, introduce, or rely upon in this proceeding.

### REQUEST NO. 7

All relevant documents, communications, and information relating to any persons whom you intend, expect, or anticipate to call as expert witnesses at the hearing in this proceeding and any persons from whom you intend, expect, or anticipate to obtain, subpoena, offer, proffer, present, or introduce any opinion testimony at the hearing in this proceeding, including the following: (a) biographies, résumés, *curriculum vitae*, and personnel records sufficient to provide a full background and description of such person; (b) all contracts, engagement letters, or agreements with such persons; (c) all documents that relate to any compensation that has been or will be paid to such persons for any services they may render in this proceeding; (d) all relevant documents, communications, or information that you have sent to or received from

such persons; (e) all documents that relate to the facts, data, documents, or other information considered by such persons in forming their opinions; (f) all documents that relate to or constitute any exhibits to be used as a summary of, or support for, such persons' opinions and testimony; (g) all documents that relate to the qualifications of such persons to render the opinions; (h) a list of all publications authored by such persons within the preceding ten (10) years; and (i) a list of any other cases or legal proceedings in which such persons have testified as an expert or rendered opinion testimony at trial, by deposition, or otherwise within the preceding four (4) years.

REQUEST NO. 8

All documents and things that you identified, or were asked to identify, in your answers to San Luis Obispo Mothers for Peace's Interrogatories.

REQUEST NO. 9

All documents and things that you intend to mark, identify, proffer, offer, present, introduce, use, show, reference, demonstrate, or rely upon at the hearing in this proceeding, including all documents that you intend, expect, or anticipate might be identified, disclosed, marked, offered, proffered, or admitted as any direct, rebuttal, impeachment, summary, or demonstrative exhibit.

Respectfully submitted,

*/RA/*

Lisa B. Clark

Molly L. Barkman  
Counsel for Staff

Dated at Rockville, MD  
This 6<sup>th</sup> day of February, 2008

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of	)	
	)	
PACIFIC GAS & ELECTRIC CO.	)	Docket No. 72-26-ISFSI
	)	
(Diablo Canyon Power Plant Independent Spent Fuel Storage Installation)	)	ASLBP No. 08-860-01-ISFSI-BD01

CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF'S INTERROGATORIES DIRECTED TO PACIFIC GAS AND ELECTRIC COMPANY" and "NRC STAFF'S REQUEST FOR PRODUCTION OF DOCUMENTS AND THINGS DIRECTED TO PACIFIC GAS AND ELECTRIC COMPANY" in the above-captioned proceedings have been served on the following by deposit in the United States mail; through deposit in the Nuclear Regulatory Commission's internal system as indicated by an asterisk (\*), and by electronic mail as indicated by a double asterisk (\*\*) on this 6<sup>th</sup> day of February, 2008..

E. Roy Hawkens \* \*\*  
Chief Administrative Judge  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Mail Stop: T 3-F23 \*  
Washington, D.C. 20555

Diane Curran, Esq. \*\*  
Harmon Curran Spielberg & Eisenberg, LLP  
1726 M Street N.W., Suite 600  
Washington, D.C. 20036  
E-mail: [dcurran@harmoncurran.com](mailto:dcurran@harmoncurran.com)

Office of the Secretary \* \*\*  
ATTN: Rulemakings and Adjudication Staff  
U.S. Nuclear Regulatory Commission  
Mail Stop: O-16G4  
Washington, D.C. 20555  
E-mail: [HEARINGDOCKET@nrc.gov](mailto:HEARINGDOCKET@nrc.gov)

David A. Repka, Esq. \*\*  
Tyson R. Smith, Esq.  
Winston & Strawn  
1400 L. Street, N.W.  
Washington, D.C. 20005-3502  
E-mail: [drepka@winston.com](mailto:drepka@winston.com)  
[trsmith@winston.com](mailto:trsmith@winston.com)

Office of Commission Appellate  
Adjudication \* \*\*  
U.S. Nuclear Regulatory Commission  
Mail Stop: O-16G4  
Washington, D.C. 20555  
E-mail: [OCAAMAIL@nrc.gov](mailto:OCAAMAIL@nrc.gov)

San Luis Obispo Mothers for Peace \* \*\*  
P.O. Box 164  
Pismo Beach, CA 93448  
E-mail: [beckers@thegrid.net](mailto:beckers@thegrid.net)  
[jzk@charter.net](mailto:jzk@charter.net)

Jennifer Post \*\*  
Pacific Gas and Electric Co.  
77 Beale Street, B30A  
San Francisco, CA 94105  
E-mail: [JLkm@pge.com](mailto:JLkm@pge.com)

Erica LaPlante, Law Clerk \* \*\*  
Atomic Safety and Licensing Board  
U.S. Nuclear Regulatory Commission  
Mail Stop: T 3-F23  
Washington, D.C. 20555

*/RA/*

---

Lisa B. Clark  
Counsel for the NRC Staff