

RAS 5715

RELATED CORRESPONDENCE

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

February 11, 2003 (3:08PM)

In the Matter of)
)
)
PACIFIC GAS AND ELECTRIC CO.)
(Diablo Canyon Power Plant Independent)
Spent Fuel Storage Installation))
)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF
Docket No. 72-26-ISFSI
ASLBP No. 02-801-01-ISFSI

CALIFORNIA ENERGY COMMISSION'S, AVILA BEACH COMMUNITY
SERVICES DISTRICT'S, CALIFORNIA PUBLIC UTILITIES COMMISSION'S,
AND SAN LUIS OBISPO COUNTY'S RESPONSE TO
NRC STAFF'S INTERROGATORIES AND REQUEST FOR PRODUCTION

INTRODUCTION

By Motion presented January 28, 2003, the California Energy Commission "CEC", the Avila Beach Community Services District ("ABCSD"), the California Public Utilities Commission ("CPUC"), and San Luis Obispo County, ("SLOC") requested to provide joint responses to the NRC's interrogatories. Pursuant to 10 C.F.R. §§ 2.740, 2.740b, 2.741, 2.1111, and 2.1117, and the Atomic Safety and Licensing Board's ("Board") Memorandum and Order, dated December 26, 2002, (LBP-02-25, 56 NRC ____) ("Order"), the CEC, ABCSD, CPUC and SLOC hereby respond to the Nuclear Regulatory Commission ("NRC") staff's interrogatories. These responses have been sent to Stephen H. Lewis, Esq. and Angela B. Coggins, Esq., U.S. Nuclear Regulatory Commission, Office of the General Counsel, Mail Stop: O-15D21, Washington, D.C. 20555 and electronically to the above-named counsel, at the e-mail addresses for each previously identified in this proceeding.

RESPONSES TO INTERROGATORIES

GENERAL RESPONSE

In accordance with the Board's Order, CEC, ABCSD and SLOC consider the NRC staff to have used its five interrogatories, including all discrete subparts, with respect to them.

Order, Section III.1, at 6.

INTERROGATORY 1

San Luis Obispo Mothers for Peace, *et al.*, ("SLOMFP") Contention TC-2 asserts that: "PG&E has failed to demonstrate that it meets the financial qualifications requirements of 10 C.F.R. § 72.22(e)." *Footnote omitted.* Section 72.22(e) requires, in part that the application:

must show that the applicant either possesses the necessary funds, or that the applicant has reasonable assurance of obtaining the necessary funds, or that by a combination of the two, the applicant will have the necessary funds available to cover the following: (1) Estimated construction costs; (2) Estimated operating costs over the planned life of the ISFSI; and (3) Estimated decommissioning costs, and the necessary financial arrangements to provide reasonable assurance before licensing, that decommissioning will be carried out after the removal of spent fuel, high-level radioactive waste, and/or reactor-related GTCC [Greater Than Class C] waste from storage.

Does SLOC intend to participate in the oral argument in this proceeding, pursuant to 10 C.F.R. § 2.1113, by filing:

A detailed written summary of all the facts, data, and arguments, which are known to the party at such time and on which the party proposes to rely at the oral argument...[and] all supporting facts and data in the form of sworn written testimony or other sworn written submission.

RESPONSE TO INTERROGATORY 1

CEC, ABCSD, CPUC and SLOC intend to participate in the oral argument in this proceeding, pursuant to 10 C.F.R. § 2.1113, by filing a written summary of the facts, data, and arguments and supporting sworn testimony and/or submissions.

INTERROGATORY 2

If the answer to Interrogatory 1 is in the affirmative, please respond to the following three sub-parts of this interrogatory and provide in your response to A., B., and C., below, references to the pages of the ISFSI application, as supplemented by PG&E's letter to the NRC, dated June 7, 2002, identified as PG&E Letter DIL-02-008 and bearing in its title line "Supplemental General and Financial Information - 10 C.F.R. 72.22," that demonstrate this failure.

A. In what specific respects does SLOC contend that PG&E has failed to provide reasonable assurance that it will be able to fund, in the manner specified in 10 C.F.R. § 72.22(e), the estimated construction costs of the proposed ISFSI?

B. In what specific respects does SLOC contend that PG&E has failed to provide reasonable assurance that it will be able to fund, in the manner specified in 10 C.F.R. § 72.22(e), the estimated operating costs over the planned life of the ISFSI?

C. In what specific respects does SLOC contend that PG&E has failed to provide in its ISFSI application: "Estimated decommissioning costs, and the necessary financial arrangements to provide reasonable assurance before licensing, that decommissioning will be carried out after the removal of spent

fuel, high-level radioactive waste, and/or reactor-related GTCC waste from storage?”

RESPONSE TO INTERROGATORY 2

A.

CEC, ABCSD, CPUC and SLOC contend that Pacific Gas & Electric Company (“PG&E”) has failed to provide the Board a basis for making the required reasonable assurance finding, during the pendency of the bankruptcy proceeding, that PG&E will be able to fund the estimated construction costs of the proposed Independent Spent Fuel Storage Installation (“ISFSI”) in the manner specified in 10 C.F.R. § 72.22(e). Specifically, absent formal approval from the CPUC, PG&E will not be able to fund construction of the ISFSI from rates. PG&E has represented itself in this proceeding as a CPUC-regulated utility, however, its position in the bankruptcy proceeding makes it uncertain whether PG&E will have access to ratepayer funding for the ISFSI.

B.

CEC, ABCSD, CPUC and SLOC contend that Pacific Gas & Electric Company (“PG&E”) has failed to provide reasonable assurance that it will be able to fund the estimated operating costs of the proposed Independent Spent Fuel Storage Installation (“ISFSI”) in the manner specified in 10 C.F.R. § 72.22(e). Specifically, absent formal approval from the CPUC, PG&E will not be able to fund operation of the ISFSI from rates. PG&E has represented itself in this proceeding as a CPUC-regulated utility, however, given its representations in the bankruptcy proceeding, it is uncertain whether PG&E will have access to ratepayer funding for operation of the ISFSI.

C.

CEC, ABCSD, CPUC and SLOC contend that PG&E has failed to provide reasonable assurance that it will be able to make the necessary financial arrangements to provide reasonable assurance before licensing, that decommissioning of the proposed Independent Spent Fuel Storage Installation ("ISFSI") will be carried out after the removal of spent fuel from storage, because, as long as there is a pending bankruptcy there is uncertainty over the entity that will have final authority over the ISFSI and whether that entity will have access to the decommissioning fund held in trust by the CPUC. See responses to A and B above.

INTERROGATORY 3

Please identify, and provide a statement of professional qualifications for, the SLOC, expert(s) who will provide, in accordance with 10 C.F.R. § 2.1113(a), "all supporting facts and data in the form of sworn written testimony or other sworn written submission," in support of Contention TC-2.

RESPONSE TO INTERROGATORY 3

CEC, ABCSD, CPUC and SLOC intend to rely on the following expert whose statement of professional qualifications is attached:

- Mr. Truman Burns

RESPONSE TO REQUEST FOR PRODUCTION OF DOCUMENTS

CEC, ABCSD, CPUC and SLOC intend, at this time, to rely on the attached documents from PG&E's 2003 General Rate Case, A.02-11-017, currently pending before the CPUC, from PG&E's 2002 Nuclear Decommissioning Triennial Proceeding, as well as on the following publicly available documents:

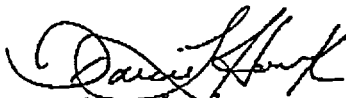
- PG&E Plan of Reorganization in PG&E Bankruptcy case
- CPUC Plan of Reorganization in PG&E Bankruptcy case

These publicly available documents can be found at the following website:

http://www.pge.com/court_docs/

Should CEC, ABCSD, CPUC and SLOC determine to rely on additional documents, they will provide the NRC staff copies of those documents or direction to locate publicly available documents, as applicable, as soon as that determination of reliance has been made.

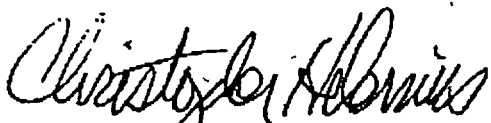
Submitted by,



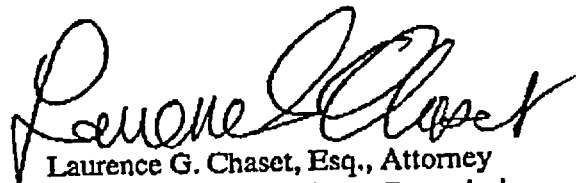
Darcie L. Houck,
Staff Counsel
California Energy Commission



Robert K. Temple, Esq.
Sheldon L. Trubatch,
Counsel for the County of San Luis
Obispo



Christopher Helenius, President
Avila Beach Community Services District



Laurence G. Chaset, Esq., Attorney
California Public Utilities Commission

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
PACIFIC GAS & ELECTRIC CO.)	Docket No. 72-26-ISFSI
)	
(Diablo Canyon Power Plant Independent)	ASLBP No. 02-801-01-ISFSI
Spent Fuel Storage Installation))	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "California Energy Commission's, Avila Beach Community Services District's, California Public Utilities Commission's, and San Luis Obispo County's Response to NRC Staff's Interrogatories and Request for Production" have been served upon the following persons by United States mail, first class; and by electronic mail as indicated by an asterisk (*) on this 31st day of January 2003.

G. Paul Bollwerk, III
Administrative Judge*
Atomic Safety & Licensing Board Panel
U.S. Nuclear Regulatory Commission
Mail Stop: T-3F23
Washington, D.C. 20555
E-mail: gpb@nrc.gov

Atomic Safety & Licensing Board Panel
U.S. Nuclear Regulatory Commission
Mail Stop: T-3F23
Washington, D.C. 20555

Office of Commission Appellate
Adjudication
U.S. Nuclear Regulatory Commission
Mail Stop: O-16C1
Washington, D.C. 20555

Lorraine Kitman*
P.O. Box 1026
Grover Beach, CA 93483
E-mail: lorraine@bejoseeds.com
l.kitman@bejoseeds.com

Peter S. Lam
Administrative Judge*
Atomic Safety & Licensing Board Panel
U.S. Nuclear Regulatory Commission
Mail Stop: T-3F23
Washington, D.C. 20555
E-mail: psl@nrc.gov

Jerry R. Kline*
Administrative Judge*
Atomic Safety & Licensing Board Panel
U.S. Nuclear Regulatory Commission
Mail Stop: T-3F23
Washington, D.C. 20555
E-mail: jrk2@nrc.gov
kjerry@erols.com

Office of the Secretary*
ATTN: Rulemakings & Adjudications
Staff
U.S. Nuclear Regulatory Commission
Mail Stop: O-16C1
Washington, D.C. 20555
E-mail: HEARINGDOCKET@nrc.gov

County Supervisor Peg Pinard*
County Government Center
1050 Monterey Avenue
San Luis Obispo, California 93408
E-mail: ppinard@co.slo.ca.us

San Luis Obispo Mothers for Peace*
P.O. Box 164
Pismo Beach, CA 93448
E-Mail: beckers@thegrid.net
Jzk@charter.net

Seamus M. Slattery
Chairman
Avila Valley Advisory Council
P.O. Box 58
Avila Beach, CA 93424

Lawrence F. Womack
Vice President
Nuclear Services
Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

General Counsel*
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555
E-mail: OGCMailCenter@nrc.gov
ABC1@nrc.gov
SHL@nrc.gov

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

Klaus Schumann
Mary Jane Adams
26 Hillcrest Drive
Paso Robles, CA 93446
e-mail: jayklaus@email.msn.com

David A. Repka,* Brooke D. Poole*
Winston & Strawn
1400 L Street N.W.
Washington, D.C. 20005-3502
E-Mail: bpoole@winston.com
drepka@winston.com

Robert R. Wellington, Esq.*
Robert W. Rathie, Esq.*
Wellington Law Offices
857 Cass Street, Suite D
Monterey, California 93940
E-Mail: info@dcisc.org

Dated this 31st day of January 2003



Robert K. Temple, Esq.
2524 N. Maplewood Avenue
Chicago, IL 60647
nuclaw@mindspring.com

Statement of Professional Qualifications for Mr. Truman Burns
505 Van Ness Avenue
San Francisco, California 94102
415-703-1825

Education

University of California, Davis	B.A. Political Science and English	1983
University of California, Davis	M.A. Political Science	1985
University of San Francisco	JD	1991

Member of the California Bar since 1993

Relevant Employment History (1986 to present)

California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Public Utilities Regulatory Analyst - V	2002 – Current
Public Utilities Regulatory Analyst - IV	1998 – 2002
Public Utilities Regulatory Analyst - III	1991 – 1998
Public Utilities Regulatory Analyst - II	1988 – 1991
Public Utilities Regulatory Analyst - I	1986 – 1988

Office of Ratepayer Advocates

Analyzed rate applications and provided testimony before the California Public Utilities Commission relating to Pacific Gas & Electric Company's Diablo Canyon Nuclear Power Plant on subjects including:

- The 1988 Diablo Canyon rate settlement
- target capacity factor
- decommissioning costs
- long term operating costs
- utility retained generation capital, and
- operating costs

Analyzed rate applications and provided testimony before the California Public Utilities Commission relating to Southern California Edison's San Onofre Nuclear Power Plant Units 2 & 3 on subjects including:

- utility retained generation capital, and
- plant operating costs

Analyzed rate applications and provided testimony before the California Public Utilities Commission relating to Southern California Edison's San Onofre Nuclear Power Plant Unit 1 on subjects including:

- environmental costs, and
- rate-base recovery.

In addition, Mr. Burns has analyzed rate applications and provided testimony before the California Public Utilities Commission in numerous other matters relating to water companies, gas companies and telecommunications companies, and has testified in numerous hearings before the California Legislature and the California Energy Commission.

Excerpts from PG&E's 2002 Nuclear
Decommissioning Triennial Proceeding

**PACIFIC GAS AND ELECTRIC COMPANY
2003 GENERAL RATE CASE
ORA DATA RESPONSE TRANSMITTAL**

TO: Martin G. Lyons, GRC Project Coordinator
Office of Ratepayer Advocates
California Public Utilities Commission
State Building
505 Van Ness Avenue, Room 4205
San Francisco, CA 94102

FROM: GRC Coordinators
Pacific Gas and Electric Company
Revenue Requirements Department
77 Beale Street, Room 971
San Francisco, CA 94105

Mailing Address: Mail Code B9A
P.O. Box 770000
San Francisco, CA 94177

DATE: October 30, 2002

PG&E Data Response No.: ORA 0061-14

CPUC WITNESS: Truman Burns

ITEM NO(S): _____

ORA Data Request No.: P-TXB-061

PG&E WITNESS: Lawrence Womack

ITEM NO(S): _____

NOTES:

Regarding the response to the above referenced data request.

This confirms that a copy of this material was hand-delivered to the CPUC on 10/30/02.
This transmittal does/~~does not~~ contain confidential material protected under CPUC Code 583.

Sent by: Travis Graumann

cc w/encl.: Travis Graumann

PACIFIC GAS AND ELECTRIC COMPANY
2003 General Rate Case
A.02-_____
Data Response

PG&E Data Request No.:	ORA 0061-14		
PG&E File Name:	GRC2003-Ph-I_DR_ORA_0061-14		
Request Date:	October 11, 2002	Requester Data Request No.:	P-TXB-061
Date Sent:	October 30, 2002	Requesting Party:	ORA
PG&E Witness:	Lawrence Womack	Requester:	Truman L. Burns

QUESTION 14

Referring to page 1-13, lines 25-32, could additional space be freed up by re-racking the spent fuel rods in the spent fuel pools? If not, please explain why not.

ANSWER 14

PG&E did consider reracking of the Diablo Canyon spent fuel pools to provide additional space for the spent fuel rods. This option was not pursued because complete reracking would require major upgrades to Diablo Canyon's spent fuel pool cooling system. These upgrades would be very costly and would not provide a benefit to decommissioning the reactor plant at end of license.

**PACIFIC GAS AND ELECTRIC COMPANY
2003 GENERAL RATE CASE
ORA DATA RESPONSE TRANSMITTAL**

TO: Martin G. Lyons, GRC Project Coordinator
Office of Ratepayer Advocates
California Public Utilities Commission
State Building
505 Van Ness Avenue, Room 4205
San Francisco, CA 94102

FROM: GRC Coordinators
Pacific Gas and Electric Company
Revenue Requirements Department
77 Beale Street, Room 971
San Francisco, CA 94105

Mailing: Mail Code B9A
Address: P.O. Box 770000
San Francisco, CA 94177

DATE:	<u>November 20, 2002</u>	PG&E Data Response No.:	<u>ORA 0099-09</u>
CPUC WITNESS:	<u>Truman Burns</u>	ITEM NO(S):	<u></u>
	<u></u>		
	<u></u>	ORA Data Request No.:	<u>P-TXB-099</u>
PG&E WITNESS:	<u>Dave Miklush</u>	ITEM NO(S):	<u></u>
	<u></u>		

NOTES:

Response regarding the response to the above referenced data request.

This confirms that a copy of this material was hand-delivered to the CPUC on 11/20/02.
This transmittal does ~~not~~ contain confidential material protected under CPUC Code 583.

Sent by: Travis Graumann

cc w/encl.:

Paul Graumann

PACIFIC GAS AND ELECTRIC COMPANY
2003 General Rate Case
Application 02-11-017
Data Response

PG&E Data Request No.:	ORA 0099-09		
PG&E File Name:	GRC2003-Ph-I DR ORA 0099-09		
Request Date:	November 4, 2002	Requester DR No.:	P-TXB-099
Date Sent:	November 20, 2002	Requesting Party:	ORA
PG&E Witness:	David Miklush	Requester:	Truman Burns

QUESTION 9

Referring to page 4-19, lines 15-31, what does PG&E do to minimize the out-of-core inventory?

ANSWER 9

PG&E takes several steps to minimize out-of-core inventory. Fuel components are delivered just in time to meet contract delivery commitments. Loading patterns are designed to optimize the use of fuel assemblies already in the core, and to minimize the amount of fresh fuel needed for each refueling outage. Flexibilities negotiated in the fuel component supply contracts allow a reduction in the quantities to be ordered if final requirements are less than projected. These contract flexibilities also allow PG&E to reduce the quantity of the out-of-core inventory needed to ensure security of supply.

**PACIFIC GAS AND ELECTRIC COMPANY
2003 GENERAL RATE CASE
ORA DATA RESPONSE TRANSMITTAL**

TO: Martin G. Lyons, GRC Project Coordinator
Office of Ratepayer Advocates
California Public Utilities Commission
State Building
505 Van Ness Avenue, Room 4205
San Francisco, CA 94102

FROM: GRC Coordinators
Pacific Gas and Electric Company
Revenue Requirements Department
77 Beale Street, Room 971
San Francisco, CA 94105

Mailing Address: Mail Code B9A
P.O. Box 770000
San Francisco, CA 94177

DATE:	<u>November 20, 2002</u>	PG&E Data Response No.:	<u>ORA 0099-10</u>
CPUC WITNESS:	<u>Truman Burns</u>	ITEM NO(S):	<u></u>
	<u></u>		
	<u></u>	ORA Data Request No.:	<u>P-TXB-099</u>
PG&E WITNESS:	<u>Dave Miklush</u>	ITEM NO(S):	<u></u>
	<u></u>		

NOTES:

Response regarding the response to the above referenced data request.

This confirms that a copy of this material was hand-delivered to the CPUC on 11/20/02.
This transmittal does does not contain confidential material protected under CPUC Code 583.

Sent by: Travis Graumann

cc w/encl.:

David Graumann

**PACIFIC GAS AND ELECTRIC COMPANY
2003 General Rate Case
Application 02-11-017
Data Response**

PG&E Data Request No.:	ORA 0099-10		
PG&E File Name:	GRC2003-Ph-I DR ORA 0099-10		
Request Date:	November 4, 2002	Requester DR No.:	P-TXB-099
Date Sent:	November 20, 2002	Requesting Party:	ORA
PG&E Witness:	David Miklush	Requester:	Truman Burns

QUESTION 10

Referring to question 9 above, what percentage of the fuel assemblies are typically replaced during a refueling outage?

ANSWER 10

There are 193 fuel assemblies in each unit. During each refueling outage either 45.6% or 47.7% of the assemblies are replaced (88 or 92 new assemblies, respectively). The actual number of fresh assemblies needed for each cycle depends on the number of months of operation required for each new operating cycle.

**PACIFIC GAS AND ELECTRIC COMPANY
2003 GENERAL RATE CASE
ORA DATA RESPONSE TRANSMITTAL**

TO: Martin G. Lyons, GRC Project Coordinator
Office of Ratepayer Advocates
California Public Utilities Commission
State Building
505 Van Ness Avenue, Room 4205
San Francisco, CA 94102

FROM: GRC Coordinators
Pacific Gas and Electric Company
Revenue Requirements Department
77 Beale Street, Room 971
San Francisco, CA 94105

Mailing: Mail Code B9A
Address: P.O. Box 770000
San Francisco, CA 94177

DATE: November 20, 2002

PG&E Data Response No.: ORA 0099-12

CPUC WITNESS: Truman Burns

ITEM NO(S): _____

PG&E WITNESS: Dave Miklush

ORA Data Request No.: P-TXB-099

ITEM NO(S): _____

NOTES:

Response regarding the response to the above referenced data request.

This confirms that a copy of this material was hand-delivered to the CPUC on 11/20/02.
This transmittal does not contain confidential material protected under CPUC Code 583.

Sent by: Travis Graumann

cc w/encl.: 

**PACIFIC GAS AND ELECTRIC COMPANY
2003 General Rate Case
Application 02-11-017
Data Response**

PG&E Data Request No.:	ORA 0099-12		
PG&E File Name:	GRC2003-Ph-I DR ORA 0099-12		
Request Date:	November 4, 2002	Requester DR No.:	P-TXB-099
Date Sent:	November 20, 2002	Requesting Party:	ORA
PG&E Witness:	David Miklush	Requester:	Truman Burns

QUESTION 12

Referring to page 4-20, line 25 to page 4-21, lines 3, are spent fuel pool capital and O&M costs recovered through base rates or from the decommissioning trust funds?

ANSWER 12

The spent fuel pool Capital and O&M costs are recovered in base rates.

**PACIFIC GAS AND ELECTRIC COMPANY
2003 GENERAL RATE CASE
ORA DATA RESPONSE TRANSMITTAL**

TO: Martin G. Lyons, GRC Project Coordinator
Office of Ratepayer Advocates
California Public Utilities Commission
State Building
505 Van Ness Avenue, Room 4205
San Francisco, CA 94102

FROM: GRC Coordinators
Pacific Gas and Electric Company
Revenue Requirements Department
77 Beale Street, Room 971
San Francisco, CA 94105

Mailing: Mail Code B9A
Address: P.O. Box 770000
San Francisco, CA 94177

DATE:	<u>November 20, 2002</u>	PG&E Data Response No.:	<u>ORA 0099-13</u>
CPUC WITNESS:	<u>Truman Burns</u>	ITEM NO(S):	<u></u>
	<u></u>		
	<u></u>	ORA Data Request No.:	<u>P-TXB-099</u>
PG&E WITNESS:	<u>Dave Miklush</u>	ITEM NO(S):	<u></u>
	<u></u>		

NOTES:

Response regarding the response to the above referenced data request.

This confirms that a copy of this material was hand-delivered to the CPUC on 11/20/02.
This transmittal does not contain confidential material protected under CPUC Code 583.

Sent by: Travis Graumann

cc w/encl.:

Travis Graumann

**PACIFIC GAS AND ELECTRIC COMPANY
2003 General Rate Case
Application 02-11-017
Data Response**

PG&E Data Request No.:	ORA_0099-13		
PG&E File Name:	GRC2003-Ph-I_DR_ORA_0099-13		
Request Date:	November 4, 2002	Requester DR No.:	P-TXB-099
Date Sent:	November 20, 2002	Requesting Party:	ORA
PG&E Witness:	David Miklush	Requester:	Truman Burns

QUESTION 13

Referring to question 12 above, will interim spent fuel storage installation O&M costs be recovered through base rates or from the decommissioning trust funds?

ANSWER 13

The interim storage spent fuel storage O&M costs will be recovered through base rates.

**PACIFIC GAS AND ELECTRIC COMPANY
2003 GENERAL RATE CASE
ORA DATA RESPONSE TRANSMITTAL**

TO: Martin G. Lyons, GRC Project Coordinator
Office of Ratepayer Advocates
California Public Utilities Commission
State Building
505 Van Ness Avenue, Room 4205
San Francisco, CA 94102

FROM: GRC Coordinators
Pacific Gas and Electric Company
Revenue Requirements Department
77 Beale Street, Room 971
San Francisco, CA 94105

Mailing Address: Mail Code B9A
P.O. Box 770000
San Francisco, CA 94177

DATE:	<u>November 20, 2002</u>	PG&E Data Response No.:	<u>ORA 0099-14</u>
CPUC WITNESS:	<u>Truman Burns</u>	ITEM NO(S):	<u></u>
	<u></u>		
	<u></u>	ORA Data Request No.:	<u>P-TXB-099</u>
PG&E WITNESS:	<u>Dave Miklush</u>	ITEM NO(S):	<u></u>
	<u></u>		

NOTES:

Response regarding the response to the above referenced data request.

This confirms that a copy of this material was hand-delivered to the CPUC on 11/20/02.
This transmittal does not contain confidential material protected under CPUC Code 583.

Sent by: Travis Graumann

cc w/encl.:

Travis Graumann

**PACIFIC GAS AND ELECTRIC COMPANY
2003 General Rate Case
Application 02-11-017
Data Response**

PG&E Data Request No.:	ORA 0099-14		
PG&E File Name:	GRC2003-Ph-I_DR_ORA_0099-14		
Request Date:	November 4, 2002	Requester DR No.:	P-TXB-099
Date Sent:	November 20, 2002	Requesting Party:	ORA
PG&E Witness:	David Miklush	Requester:	Truman Burns

QUESTION 14

Referring to question 12 above, when does PG&E expect the federal spent fuel repository to begin accepting spent fuel?

ANSWER 14

PG&E is not certain when the federal spent fuel repository will begin accepting spent fuel. The earliest the Yucca Mountain facility could be licensed and built is 2010. Based on a 2010 opening of Yucca Mountain the soonest PG&E could expect Diablo Canyon fuel to be accepted is 2018.

**PACIFIC GAS AND ELECTRIC COMPANY
2003 GENERAL RATE CASE
ORA DATA RESPONSE TRANSMITTAL**

TO: Martin G. Lyons, GRC Project Coordinator
Office of Ratepayer Advocates
California Public Utilities Commission
State Building
505 Van Ness Avenue, Room 4205
San Francisco, CA 94102

FROM: GRC Coordinators
Pacific Gas and Electric Company
Revenue Requirements Department
77 Beale Street, Room 971
San Francisco, CA 94105

Mailing Address: Mail Code B9A
P.O. Box 770000
San Francisco, CA 94177

DATE:	<u>November 20, 2002</u>	PG&E Data Response No.:	<u>ORA 0099-15</u>
CPUC WITNESS:	<u>Truman Burns</u>	ITEM NO(S):	<u></u>
	<u></u>		
	<u></u>	ORA Data Request No.:	<u>P-TXB-099</u>
PG&E WITNESS:	<u>Dave Miklush</u>	ITEM NO(S):	<u></u>
	<u></u>		

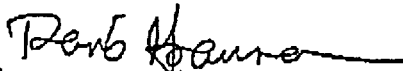
NOTES:

Response regarding the response to the above referenced data request.

This confirms that a copy of this material was hand-delivered to the CPUC on 11/20/02.
This transmittal does/~~does not~~ contain confidential material protected under CPUC Code 583.

Sent by: Travis Graumann

cc w/encl.:



**PACIFIC GAS AND ELECTRIC COMPANY
2003 General Rate Case
Application 02-11-017
Data Response**

PG&E Data Request No.:	ORA 0099-15		
PG&E File Name:	GRC2003-Ph-I DR_ORA_0099-15		
Request Date:	November 4, 2002	Requester DR No.:	P-TXB-099
Date Sent:	November 20, 2002	Requesting Party:	ORA
PG&E Witness:	David Miklush	Requester:	Truman Burns

QUESTION 15

Referring to question 12 above, is PG&E paying a fee to the federal government for the proposed federal spent fuel repository? If so, can PG&E be reimbursed for delays in opening the repository?

ANSWER 15

PG&E pays a \$0.001/kWhr fee for all electrical generation transmitted from the plant, or approximately \$16 million per year. This fee is mandated by the federal government in the 1989 Nuclear Waste Policy Act and applies to all U.S. utilities with nuclear power plants. PG&E is a participant of an industry-wide effort seeking a settlement with the US DOE for the recovery of increased operating costs due to the delay in opening Yucca Mountain. As of November 2002, none of the efforts to negotiate or litigate settlements with the US DOE to recover these costs has been successful.

**PACIFIC GAS AND ELECTRIC COMPANY
2003 GENERAL RATE CASE :
ORA DATA RESPONSE TRANSMITTAL**

TO: Martin G. Lyons, GRC Project Coordinator
Office of Ratepayer Advocates
California Public Utilities Commission
State Building
505 Van Ness Avenue, Room 4205
San Francisco, CA 94102

FROM: GRC Coordinators
Pacific Gas and Electric Company
Revenue Requirements Department
77 Beale Street, Room 971
San Francisco, CA 94105

Mailing Address: Mail Code B9A
P.O. Box 770000
San Francisco, CA 94177

DATE:	<u>November 20, 2002</u>	PG&E Data Response No.:	<u>ORA 0099-16</u>
CPUC WITNESS:	<u>Truman L. Burns</u>	ITEM NO(S):	<u>16</u>
	<u></u>		
	<u></u>	ORA Data Request No.:	<u>P-TXB-099</u>
PG&E WITNESS:	<u>Dave Miklush</u>	ITEM NO(S):	<u>16</u>
	<u></u>		

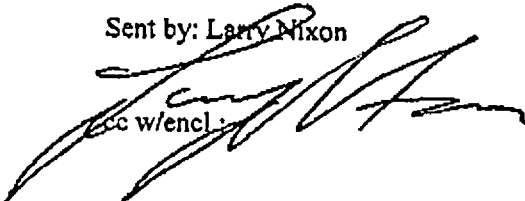
NOTES:

Response regarding the response to the above referenced data request:

NOV 20 2002

This confirms that a copy of this material was hand-delivered to the CPUC on _____
This transmittal does not contain confidential material protected under CPUC Code 583.

Sent by: Larry Nixon


cc w/encl:

**PACIFIC GAS AND ELECTRIC COMPANY
2003 General Rate Case
Application 02-11-017
Data Response**

PG&E Data Request No.:	ORA 0099-16		
PG&E File Name:	GRC2003-Ph-I_DR_ORA_0099-16		
Request Date:	November 4, 2002	Requester DR No.:	P-TXB-099
Date Sent:	November 20, 2002	Requesting Party:	ORA
PG&E Witness:	David Miklush	Requester:	Truman Burns

QUESTION 16

Page 4-20, line 33 to page 4-21, line 1 states

"This facility will be sized to allow Diablo Canyon to run through its current licensed life."

Will the ISFSI be sized to take all spent fuel assemblies through the end of Diablo Canyon's currently licensed life, or just up to the opening of the federal spent fuel repository?

ANSWER 16

If PG&E builds the Diablo Canyon ISFSI, to the full extent of the license request, the facility can handle all DCPD fuel through the licensed life of both units.

**PACIFIC GAS AND ELECTRIC COMPANY
2003 GENERAL RATE CASE
ORA DATA RESPONSE TRANSMITTAL**

TO: Martin G. Lyons, GRC Project Coordinator
Office of Ratepayer Advocates
California Public Utilities Commission
State Building
505 Van Ness Avenue, Room 4205
San Francisco, CA 94102

FROM: GRC Coordinators
Pacific Gas and Electric Company
Revenue Requirements Department
77 Beale Street, Room 971
San Francisco, CA 94105

Mailing Address: Mail Code B9A
P.O. Box 770000
San Francisco, CA 94177

DATE: January 13, 2003

PG&E Data Response No.: ORA 0212-05

CPUC WITNESS: Truman L. Burns

ITEM NO(S): _____

PG&E WITNESS: David Miklush

ORA Data Request No.: P-TXB-212

ITEM NO(S): _____

NOTES:

Response to the above-referenced data request.

This confirms that a copy of this material was hand-delivered to the CPUC on 1/13/03.
This transmittal does/~~does not~~ contain confidential material protected under CPUC Code 583.

Sent by: Lynn Chas. Riser

Lynn Chas. Riser

cc w/encl.:

PACIFIC GAS AND ELECTRIC COMPANY
2003 General Rate Case
Application 02-11-017
Data Response

PG&E Data Request No.:	ORA 0212-05		
PG&E File Name:	GRC2003-Ph-I_DR_ORA_0212-05		
Request Date:	December 31, 2002	Requester DR No.:	P-TXB-212
Date Sent:	January 13, 2003	Requesting Party:	ORA
PG&E Witness:	David Miklush	Requester:	Truman L. Burns

QUESTION 5

Referring to Table 4-13, line item 3 and page 4-23, please provide any additional work papers substantiating the 2005 forecast cost of \$12 million for the Interim Fuel Storage Installation.

ANSWER 5

Referring to Table 4-13, line item 3 and page 4-23 - The table below reflects the 2005 forecast expenditures of \$12 million for the Interim Fuel Storage Installation based upon the current contract and current implementation plan.

Pad Construction	\$4 million
Cask & Overpacks	\$3 million
Ancillary Equip	\$3 million
Cask Loading	\$2 million
	<u>\$12 million</u>

(U 39 M)

Application No.: _____

Exhibit No.: (PG&E-10)

Date: _____

Witness: Various

A.02-11-017

A.02-09-005

PACIFIC GAS AND ELECTRIC COMPANY

2003 TEST YEAR

RETAINED GENERATION RESULTS OF OPERATIONS



1 the outside of the tube. Based on the results of PG&E's tube inspection
2 program and predictions of crack growth rates, it will be necessary to
3 chemically remove these deposits, to arrest outside tube diameter
4 cracking. Without this one-time maintenance work, there would be a
5 need to install protective sleeves on the steam generator tubes to
6 extend their lives until the time projected for steam generator
7 replacement. Tube sleeves are very expensive, result in extensive
8 inspection requirements and extended refueling outages.

9 ➤ • Interim Spent Fuel Storage Installation (ISFSI)

10 Diablo Canyon's spent fuel pools are approaching their storage
11 capacity. The original plan was for spent fuel to be disposed of at a
12 federal repository, or recycled at a fuel reprocessing plant. Neither of
13 these options is available, nor will they be in the foreseeable future. ~~To~~
14 ~~allow~~ Diablo Canyon to continue to operate past 2006, PG&E is
15 permitting and building an interim spent fuel storage facility scheduled to
16 be completed in 2005. The spent fuel can then be stored dry in an inert
17 environment, within a shielded cask on a newly constructed cask
18 storage pad. ~~This facility will be sized to allow Diablo Canyon to run~~
19 ~~through its current licensed life.~~ The forecast costs include support for
20 license hearings, support for the NRC process and the early stages of
21 design completion.

22 • Intake Structure

23 ~~Ongoing concrete repairs are required because the intake structure~~
24 ~~concrete is experiencing an acceleration in corrosion damage,~~
25 ~~particularly for the existing delaminated concrete areas. From corrosion~~
26 ~~experience at the intake structure, the increased repair costs are~~
27 ~~expected to range from 10 to 15 percent per year.~~ Due to the
28 continuing loss of reinforcing steel and reduction of the bond strength
29 between the concrete and the steel there will be further adverse impacts
30 on structural capacities of degraded concrete elements. This may affect
31 the structure's design and licensing bases and could effect operation of
32 the plant.

33 • Refuel Water Purification Project

Table 4-13
Pacific Gas and Electric Company
Diablo Canyon
One-Time O&M Forecast Adjustments
2001 \$000

Line No.	FERC Act.	Process	Project Description	Basis Of Estimate*	Recorded 2001	2002	2003	2004	2005
1	519	Manage DCPD Plant Assets	Refuel Water Purification Project	1			1,000		
2	524	Manage Business & Information Management	Software Infrastructure	1		1,000	1,000		1,000
3	524	Manage Engineering Assets & Maintain License & Used Fuel Storage	Onion Spot Fuel Storage Installation	2	8,900	(3,000)	(1,000)	0	12,000
4	524	Manage DCPD Plant Assets	Outage Bonus(Labor)	3	500	(500)	(500)	(500)	(500)
5	524	Manage Business & Information Management	INDEPENDENT COSTING IN 2001 ? <i>delete?</i>	4		10,000	1,000	1,000	11,500
6	524	Loss Prevention	Emergency Planning Fund	4	2,000	(1,000)	(1,000)	(1,000)	(1,000)
7	524	Loss Prevention	Security Enhancements resulting from 9/11(Labor)	3		2,000	2,000	2,000	2,000
8			Subtotal(Act. 524)			0	2,000	2,000	15,000
9	529	Manage DCPD Plant Assets	Intake Structure				500	500	
10	530	Manage DCPD Plant Assets	Unit 2 Internal Upflow Modification	1			1,000	1,000	1,000
11	530	Manage DCPD Plant Assets	Reactor Head Penetration Inspection	1				1,000	
12	530	Manage DCPD Plant Assets	Reactor Head Penetration Inspection	3				3,000	
13			Subtotal(Act. 530)			0	1,000	5,000	1,000
14	531	Manage DCPD Plant Assets	Turbine Rotor Repairs		11,500	6,700	(1,500)	(5,500)	(6,500)
15	531	Manage DCPD Plant Assets	Steam Generator Chemical Cleaning	5			10,000	13,000	1,000
16	531	Manage DCPD Plant Assets	Additional Steam Generator Chemical Cleaning Labor	3				10,188	
17	531	Manage DCPD Plant Assets	Additional Steam Generator Chemical Cleaning Labor	3				22,000	
18			Subtotal(Act 531)			6,700	8,500	35,688	(5,500)
19			Total			60,200	23,000	24,188	10,500

Basis Of Estimate:
 1 Engineering Estimate
 2 Contract
 3 Historic cost
 4 Actual Invoice
 5 Vendor Proposal

Application No.: 02-03-020

(U 39 M)

Exhibit No.: _____

Date: April 1, 2002

PACIFIC GAS AND ELECTRIC COMPANY

2002 NUCLEAR DECOMMISSIONING COST TRIENNIAL PROCEEDING

WORKPAPERS SUPPORTING CHAPTER 4



*Diablo Canyon Power Plant
Decommissioning Cost Study*

*Document P01-1421-003, Rev. 0
Section 2, Page 4 of 18*

- Design/procurement and testing of tooling and equipment;
- Identification/selection of specialty contractors;
- Procedures for removing and disposing of radioactive materials; and
- Sequential planning of activities to minimize conflicts with simultaneous tasks.

Site Preparations

Following final plant shutdown and in preparation for actual decommissioning activities, the following activities are initiated.

- Prepare site support and storage facilities, as required.
- Perform site characterization study to determine extent of site contamination.
- Isolate spent fuel storage services and fuel handling systems located in the Fuel Handling Buildings from the power block such that decommissioning operations can commence on the balance of the plant. This activity may be carried out by existing plant personnel in accordance with existing operating technical specifications. Decommissioning operations are assumed to be scheduled around the Fuel Handling Buildings to the greatest extent possible such that the overall project schedule is optimized. Current dry storage cask designs are licensed for spent fuel with a core discharge decay time averaging approximately five years or longer. Considering the longer fuel cycles and higher fuel burnup, the fuel at DCPD may require up to twelve years of active cooling before being relocated to dry storage. Therefore, decommissioning operations for the Fuel Handling Buildings cannot be expected to begin prior to twelve years after the cessation of plant operations. As spent fuel decays to the point that it meets the heat load criteria of the dry storage casks, it will be transferred either to the on-site ISFSI or to the DOE high-level waste repository. It is assumed that all fuel is transferred from the Fuel Handling Buildings within approximately 12 years after cessation of operations at each unit.
- Clean all plant areas of loose contamination and process all liquid and solid wastes.

*Diablo Canyon Power Plant
Decommissioning Cost Study*

*Document P01-1421-003, Rev. 0
Section 2, Page 12 of 18*

ponding and inhibit the refloating of subsurface materials. Activities include:

- Demolition of the remaining portions of the containment structure and interior portions of the Reactor Building. Internal floors and walls are removed from the lower levels upward, using controlled blasting techniques. Concrete rubble and clean fill produced by demolition activities are used on site to backfill voids. Suitable materials can be used on site for fill; other wise the rubble is trucked off site for disposal as construction debris.
- Removal of remaining buildings using conventional demolition techniques for above ground structures, including the Turbine Building, Auxiliary Building, Fuel Handling Buildings, and other site structures, including the Breakwater.
- Preparation of the final dismantling program report.

2.1.4 Post-Period 3 - ISFSI Operations and Demolition

Following the transfer of the spent fuel inventory from the Fuel Handling Buildings, the ISFSI will continue to operate under a separate and independent license (§72). Transfer of spent fuel to a DOE or interim facility will be exclusively from the ISFSI once the fuel pool structures have been emptied and the released for decommissioning. Assuming initiation of the federal Waste Management System in 2010, transfer of spent fuel is assumed to begin in 2018 and continue for a period of approximately 22 years, with the final spent fuel shipment presumed to occur in the year 2040.

At the conclusion of the spent fuel transfer process, the ISFSI will be decommissioned. Long-term exposure from the spent fuel assemblies will have produced low-level neutron activation of the interior surfaces of the dry storage modules to levels exceeding current release limits. Consequently, portions of the modules will be disposed of as low-level radioactive waste.

The NRC will terminate the §72 license if it determines that site remediation has been performed in accordance with a license termination plan and the terminal radiation survey and associated documentation demonstrate that the facility is suitable for release. Once

the requirements are satisfied, the NRC can terminate the license for the ISFSI.

The reinforced concrete dry storage modules are then demolished and disposed of as clean fill, the concrete loading ramps are removed, and the area graded and landscaped to conform with the surrounding environment.

2.2 SAFSTOR

The NRC defines SAFSTOR as "the alternative in which the nuclear facility is placed and maintained in a condition that allows the nuclear facility to be safely stored and subsequently decontaminated (deferred decontamination) to levels that permit release for unrestricted use." The facility is left intact, (during the SAFSTOR period) with structures maintained in a sound condition. Systems not required to operate in support of the spent fuel pool or site surveillance and security are drained, de-energized, and secured. Minimal cleaning/removal of loose contamination and/or fixation and sealing of remaining contamination is performed. Access to contaminated areas is secured to provide controlled access for inspection and maintenance.

The engineering and planning requirements are similar to those for the DECON alternative, although a shorter time period is expected for these activities due to the more limited work scope. Site preparations are also similar to those for the DECON alternative. However, with the exception of the required radiation surveys and site characterizations, the mobilization and preparation of site facilities is less extensive.

2.2.1 Period 1 - Operations

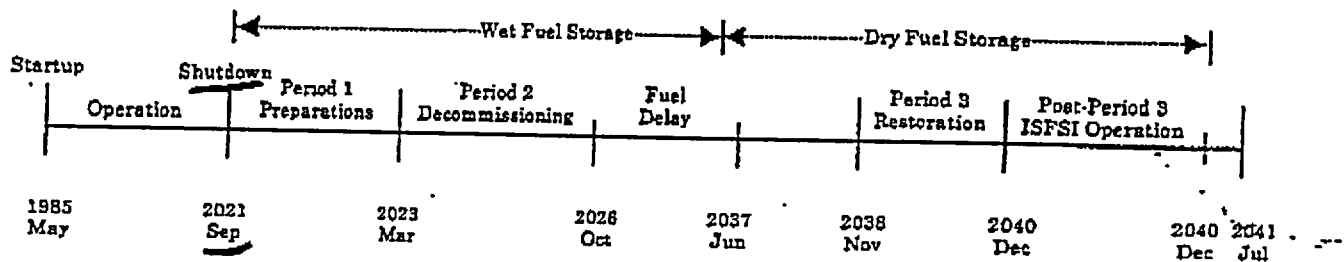
In anticipation of the cessation of plant operations, detailed preparations are undertaken to provide a smooth transition from plant operations to site decommissioning. While implementing the staffing transition plan, the organization required to manage the intended decommissioning program is assembled from available plant staff and outside resources. Preparations include the planning for permanent defueling of the reactor, revision of technical specifications appropriate to the operating conditions and requirements, characterization of the facility and major components, and development of the PSDAR.

The program outlined in the PSDAR will be designed to accomplish the required tasks within the ALARA guidelines for protection of personnel

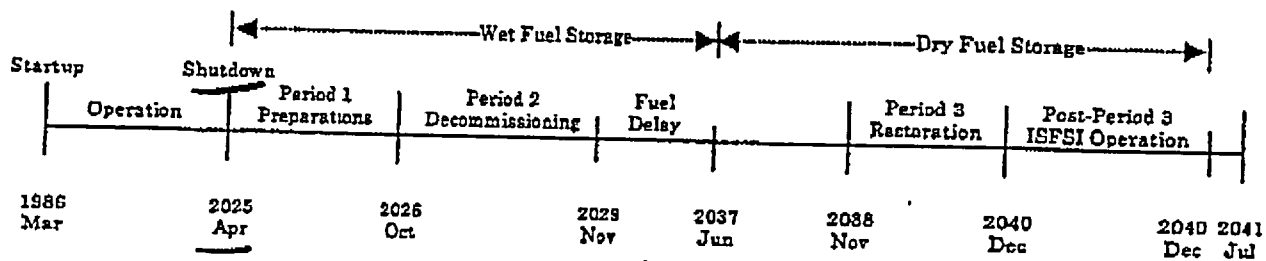
FIGURE 4.2a

DECON DECOMMISSIONING TIMELINES

DCPP UNIT 1



DCPP UNIT 2



NOT TO SCALE

TABLE 6.1

SUMMARY OF DECON DECOMMISSIONING COST CONTRIBUTORS

Work Category	Costs 02\$ (thousands) ¹	Percent of Total Costs ¹
Unit 1		
Decontamination	15,820	2.7
<u>Removal</u>	87,382	<u>15.2</u>
Packaging	12,939	2.2
Shipping	4,847	0.8
Burial or Recycling (Off Site)	125,518	21.8
<u>Decommissioning Staffs</u>	216,926	<u>37.7</u>
Spent Fuel Management	56,555	9.8
<u>Other²</u>	<u>55,857</u>	<u>9.7</u>
Subtotal	575,844	100.0
Unit 2 & Common		
Decontamination	17,738	2.2
<u>Removal</u>	118,997	<u>14.9</u>
Packaging	12,890	1.6
Shipping	4,814	0.6
<u>Burial or Recycling (Off Site)</u>	125,670	<u>15.7</u>
<u>Decommissioning Staffs</u>	242,727	<u>30.3</u>
<u>Breakwater Removal</u>	165,533	<u>20.7</u>
Spent Fuel Management	56,555	7.1
<u>Other²</u>	<u>56,397</u>	<u>7.0</u>
Subtotal	801,321	100.0
Station Total (with contingency)	1,377,165	

1. Columns may not add due to rounding.

2. Other includes engineering & preparations, undistributed costs, NRC Fees, EP Fees and Maintenance Costs, etc.

**Diablo Canyon Power Plant
Decommissioning Cost Study**

**Document P01-1421-003, Rev. 0
Section 6, Page 4 of 4**

TABLE 6.2

SUMMARY OF SAFSTOR DECOMMISSIONING COST CONTRIBUTORS

Work Category	Costs 02\$ (thousands) ¹	Percent of Total Costs ¹
Unit 1		
Decontamination	10,500	1.8
Removal	81,960	14.0
Packaging	11,322	1.9
Shipping	3,112	0.5
Burial or Recycling (Off Site)	111,620	19.1
Decommissioning Staffs	242,806	41.6
Spent Fuel Management	56,555	9.7
<u>Other²</u>	<u>65,575</u>	<u>11.2</u>
Subtotal	588,451	100.0
Unit 2 & Common		
Decontamination	15,026	1.9
Removal	114,523	14.7
Packaging	11,440	1.5
Shipping	3,180	0.4
Burial or Recycling (Off Site)	114,897	14.7
Decommissioning Staffs	231,998	29.8
Breakwater Removal	165,533	21.2
Spent Fuel Management	56,555	7.3
<u>Other²</u>	<u>66,392</u>	<u>8.5</u>
Subtotal	779,543	100.0
Station Total (with contingency)	1,362,994	

1. Columns may not add due to rounding.

2. Other includes engineering & preparations, undistributed costs, NRC Fees, EP Fees and Maintenance Costs, etc.