

From: [Adam Alberty](#)
To: [Martinez, Nancy](#)
Subject: [External_Sender] RE: STARS License Renewal review library - DCP
Date: Thursday, September 24, 2015 4:11:53 PM
Attachments: [image001.png](#)
[image002.png](#)

Hi Nancy,

Sorry for the delay. Please try again.

Adam Alberty | Systems Architect
T: 623-239-3251
F: 623-536-3354
adam.alberty@starsalliance.com
www.starsalliance.com

STARS  **Alliance**

From: Martinez, Nancy [<mailto:Nancy.Martinez@nrc.gov>]
Sent: Thursday, September 24, 2015 5:54 AM
To: Adam Alberty <adam.alberty@starsalliance.com>
Subject: RE: STARS License Renewal review library - DCP

Hi Adam,

I tried to log into the review library today and received a message that said my credentials are invalid. Could you please look into this to see if maybe my password needs to be reset?

Thank you,
Nancy

From: Adam Alberty [<mailto:adam.alberty@starsalliance.com>]
Sent: Thursday, June 04, 2015 4:01 PM
To: Martinez, Nancy <Nancy.Martinez@nrc.gov>
Subject: STARS License Renewal review library - DCP

Hello Nancy

My name is Adam Alberty and I am technical administrator for the STARS Alliance License Renewal review library (LRLibrary) for DCP. You are receiving this email because DCP has identified you as part of the review activities. You will have read-only access to the reference document files and you will not be able to copy, save, or print any of the content there-in.

The LRLibrary is located at <https://lrlibrary2.starsalliance.com/>

Your assigned username is: (b)(6)

The password is: (b)(6)

The tool is secured with Citrix XenApp technology. You will need a Citrix client installed on your computer to use the tool. Any of the Citrix clients will work (ex: MetaFrame, ICA Client, XenApp Desktop, Receiver, etc) and, if needed, you can download the latest client from Citrix directly here <http://receiver.citrix.com/>

Please let me know if you have any questions.

Adam Alberty | adam.alberty@starsalliance.com

T: 623-239-3251

F: 623-536-3354

adam.alberty@starsalliance.com

www.starsalliance.com

STARS  **Alliance**



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

LICENSEE: Pacific Gas and Electric Co.

FACILITY: Diablo Canyon Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 7, 2016, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Pacific Gas and Electric Co. (PG&E) held a telephone conference call on January 7, 2016, to discuss and clarify the PG&E's December 4, 2015, responses to the NRC staff's request for additional information (RAI) concerning the environmental review of the Diablo Canyon Power Plant, Units 1 and 2, license renewal application.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the responses discussed with PG&E, including a brief description of the status.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosure: As stated

cc w/encl: Listserv

LICENSEE: Pacific Gas and Electric Co.

FACILITY: Diablo Canyon Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 7, 2016, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Pacific Gas and Electric Co. (PG&E) held a telephone conference call on January 7, 2016, to discuss and clarify the PG&E's December 4, 2015, responses to the NRC staff's request for additional information (RAI) concerning the environmental review of the Diablo Canyon Power Plant, Units 1 and 2, license renewal application.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the responses discussed with PG&E, including a brief description of the status.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosure: As stated

cc w/encl: Listserv

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*concurrence via email

OFFICE	LA:DLR*	PM:RPB2:DLR	BC:RPB2:DLR	PM:RPB2:DLR
NAME	IBetts	MWentzel	JDanna	MWentzel
DATE				

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SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 7, 2016, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

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MWentzel

JDanna

RPlasse

KFolk

NMartinez

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CKanatas, OGC

JLindell, OGC

THipschman, SRI

JReynoso, RI

JGroom, RIV

DMcIntyre, OPA

LUselding, OPA

WMaier, RIV

AMoreno, OCA

TELEPHONE CONFERENCE CALL
DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

LIST OF PARTICIPANTS
JANUARY 7, 2016

PARTICIPANTS

Kevin Folk
Nancy Martinez
Michael Wentzel
Bryan Cunningham
Terry Grebel
Michelle Olsofsky
Philippe Soenen

ORGANIZATION

U.S. Nuclear Regulatory Commission (NRC)
NRC
NRC
Pacific Gas and Electric Co. (PG&E)
PG&E
PG&E
PG&E

TELEPHONE CONFERENCE CALL CONCERNING THE
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
RELATED TO THE SEVERE ACCIDENT MITIGATION ALTERNATIVES REVIEW
OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

JANUARY 7, 2016

By letter dated November 5, 2015, the U.S. Nuclear Regulatory Commission (NRC) staff issued a request for additional information (RAI) to Pacific Gas and Electric Co. (PG&E) related to the environmental review of the Diablo Canyon Power Plant, Units 1 and 2 (DCPP), license renewal application. By letter dated December 4, 2015, PG&E submitted responses to NRC staff RAIs. On January 7, 2016, the NRC staff and representatives of PG&E held a telephone conference call to discuss and clarify the following RAI responses.

Response to RAI-AIR-5(c).

Discussion: The NRC staff requested PG&E clarify whether there is a greenhouse gas emissions reduction program implemented specifically at DCP. PG&E stated that it would provide an amended response to the RAI to provide the necessary clarification.

Response to RAI-SWR-1.

Discussion: The NRC staff requested that PG&E clarify how total surface water withdrawals at DCP could be determined using the spreadsheets that were provided in response to this RAI. PG&E stated that it would provide an amended response to the RAI to provide the necessary clarification.

Response to RAI-SWR-10.

Discussion: The NRC staff requested that PG&E resolve the apparent discrepancy between this RAI response, which states that the DCP desalination facility is licensed to produce 1.5 million gallons per day (gpd) and Section 3.1.2 of the environmental report, which states that the desalination facility has the capacity to produce 450 gallons per minute (648,000 gpd). PG&E stated that it would provide an amended response to the RAI to provide the necessary clarification.

ENCLOSURE 2



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001**

LICENSEE: Pacific Gas and Electric Company

FACILITY: Diablo Canyon Nuclear Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON MARCH 4, 2015, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC COMPANY CONCERNING THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Pacific Gas and Electric Company (PG&E or the applicant) held a telephone conference call on March 4, 2015, to discuss the status of the Diablo Canyon Power Plant Units 1 and 2 (DCPP) license renewal application (LRA).

By letters dated December 22, 2014, and February, 25, 2015, PG&E provided most of the additional information necessary for the NRC staff to complete its review of the DCPP license renewal application, as requested by the NRC in our letter to PG&E dated July 3, 2014. As noted in its February 25, 2015 letter, PG&E intends to submit in June 2015 an evaluation of any changes to the DCPP SAMA analysis resulting from the Fukushima Near-Term Task Force Recommendation 2.1 seismic hazard re-evaluation. Additionally, PG&E stated that the technical items required to be completed for the DCPP reactor vessel internals aging management program and associated implementation of the "Materials Reliability Program: Pressurized Water Reactor Internals Inspection and Evaluation Guidelines (MRP-227-A)", are planned to be provided to the staff in December 2015.

Having provided the information in its December 2014 and February 2015 updates, PG&E stated that it expects that the NRC staff will continue its review of the DCPP license renewal application. The NRC staff agreed that the information provided in the December 2014 and February 2015 updates is sufficient to continue its review of the DCPP license renewal application, as appropriate, pending submittal of the outstanding items identified above. The NRC staff will evaluate the resources necessary to complete the review of the DCPP license renewal application and issue a schedule once complete. Enclosure 1 provides a listing of the participants.

The applicant had an opportunity to comment on this summary.

Michael J. Wentzel, Project Manager
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: Listserv

The applicant had an opportunity to comment on this summary.

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosures:

As stated

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DATE				
OFFICE	BC:RPB2:DLR	PM:RPB2:DLR		
NAME	BWittick	MWentzel		
DATE				

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TELEPHONE CONFERENCE CALL
DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION
LIST OF PARTICIPANTS
MARCH 4, 2015

PARTICIPANTS:

Yaira Diaz
Yosef Lindell
Rick Plasse
Michael Wentzel
Brian Wittick
Al Bates
Terry Grebel
Jerl Strickland

AFFILIATIONS:

U.S. Nuclear Regulatory Commission (NRC)
NRC
NRC
NRC
NRC
Pacific Gas and Electric Company (PG&E)
PG&E
PG&E

**SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON MARCH 4, 2015,
BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC
GAS AND ELECTRIC COMPANY CONCERNING THE DIABLO CANYON
POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION**

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MWentzel

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YDiaz-Sanabria

SLingam

Suttai, OGC

JOindell, OGC

EWilliamson, OGC

THipschman, SRI

JReynoso, RI

GMiller, RIV

WWalker, RIV

DMcIntyre, OPA

VDricks, OPA

WMaier, RIV

AMoreno, OCA

RRihm, EDO



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

LICENSEE: Pacific Gas and Electric Co.

FACILITY: Diablo Canyon Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON NOVEMBER 4, 2015, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE DRAFT REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Pacific Gas and Electric Co. (PG&E) held a telephone conference call on November 4, 2015, to discuss and clarify the NRC staff's request for additional information (RAI) concerning the Diablo Canyon Power Plant, Units 1 and 2, license renewal application environmental review. The draft RAI was transmitted to PG&E by email dated October 21, 2015.

The following draft RAIs were discussed during the call:

SSH-13(g) – PG&E stated that the document requested in draft RAI SSH-13(g), "Observations of the gray whale migration in the vicinity of Diablo Canyon, California: 1981-1994 migrations" is not available. As such, the NRC staff agreed to delete the request.

SWR-1 – PG&E stated that the annual environmental reports submitted to the California Energy Commission are transmitted electronically; therefore, the correspondence requested in draft RAI SWR-1 is not available. The NRC staff agreed to delete "Include associated transmittal correspondence with the CEC" from the request.

SWR-13 – PG&E stated that the portion of the RAI requesting an evaluation of trends in the frequency of operating with two auxiliary saltwater pump trains is incorrect in that the plant does not operate with two auxiliary saltwater pumps. Rather, in accordance with Technical Specification Limiting Conditions for Operation 3.7.9, a second heat exchanger is placed in service when inlet temperature exceeds 64 degrees Fahrenheit. As such, the NRC staff modified the statement to read, "As part of the response address whether there is any apparent trend in the frequency or annual hours of operation in accordance with Technical Specifications Limiting Conditions for Operation 3.7.9, Condition A."

Enclosure 1 provides a listing of the participants.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosure: As stated

cc w/encl: Listserv

Enclosure 1 provides a listing of the participants.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

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*concurrence via email

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NAME	IBetts	MWentzel	JDanna	MWentzel
DATE				

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SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON NOVEMBER 4, 2015, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE DRAFT REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

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RidsNrrDlrRasb Resource

RidsNrrDlrRsrg Resource

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RidsNrrPMDiabloCanyon Resource

MWentzel

JDanna

RPlasse

DWrona

SLingam

CKanatas, OGC

JLindell, OGC

THipschman, SRI

JReynoso, RI

GMiller, RIV

DMcIntyre, OPA

LUselding, OPA

WMaier, RIV

AMoreno, OCA

TELEPHONE CONFERENCE CALL
DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

LIST OF PARTICIPANTS
NOVEMBER 4, 2015

PARTICIPANTS

Michael Wentzel
Terry Grebel
Michelle Olsofsky

ORGANIZATION

U.S. Nuclear Regulatory Commission
Pacific Gas and Electric Co.
Pacific Gas and Electric Co.

ENCLOSURE



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

LICENSEE: Pacific Gas and Electric Co.

FACILITY: Diablo Canyon Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON DECEMBER 10, 2015, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Pacific Gas and Electric Co. (PG&E) held a telephone conference call on December 10, 2015, to discuss and clarify the PG&E's responses to the NRC staff's request for additional information (RAI) concerning the severe accident mitigation alternatives review of the Diablo Canyon Power Plant, Units 1 and 2, license renewal application.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the responses discussed with PG&E, including a brief description of the status.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosure: As stated

cc w/encl: Listserv

LICENSEE: Pacific Gas and Electric Co.

FACILITY: Diablo Canyon Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON DECEMBER 10, 2015, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

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Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the responses discussed with PG&E, including a brief description of the status.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

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NAME	IBetts	MWentzel	JDanna	MWentzel
DATE				

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THipschman, SRI
JReynoso, RI
JGroom, RIV
DMcIntyre, OPA
LUselding, OPA
WMaier, RIV
AMoreno, OCA

TELEPHONE CONFERENCE CALL
DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

LIST OF PARTICIPANTS
DECEMBER 10, 2015

PARTICIPANTS

Jerry Dozier
Michael Wentzel
Bob Schmidt
Steve Short
Nathan Barber
Terry Grebel
Michelle Olsofsky
John Pyo
Philippe Soenen

ORGANIZATION

U.S. Nuclear Regulatory Commission
U.S. Nuclear Regulatory Commission
Pacific Northwest National Laboratory
Pacific Northwest National Laborator
Pacific Gas and Electric Co. (PG&E)
PG&E
PG&E
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TELEPHONE CONFERENCE CALL CONCERNING THE
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
RELATED TO THE SEVERE ACCIDENT MITIGATION ALTERNATIVES REVIEW
OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

DECEMBER 10, 2015

By letter dated October 22, 2015, the U.S. Nuclear Regulatory Commission (NRC) staff issued a request for additional information (RAI) to Pacific Gas and Electric Co. (PG&E) related to the severe accident mitigation alternatives (SAMA) review of the Diablo Canyon Power Plant, Units 1 and 2, license renewal application. By letter dated November 12, 2015, PG&E submitted responses to NRC staff RAIs. On December 10, 2015, the NRC staff and representatives of PG&E held a telephone conference call to discuss and clarify the following RAI responses.

1. Response to RAI 1.c.

Discussion: *The NRC staff requested PG&E clarify what was meant by the statement "and of the reactor coolant system (RCS)" in item 1 on page 3 of the RAI responses. PG&E stated that the statement should be struck, as its inclusion was unintentional.*

2. Response to RAI 1.d.

Discussion: *The NRC staff requested that PG&E briefly describe the seismic hazard information used in probabilistic risk assessment (PRA) models DC02 and DC03, particularly in relation to the information provided in PG&E's 2010 RAI response, as discussed on pages F-34 and F-35 of PG&E's amended environmental report. PG&E stated that the 2010 RAI response incorporated the Shoreline fault seismic hazard into the model. PRA model DC03 also accounts for the Shoreline fault; however, it updates the seismic hazard from that provided in the 2010 RAI response.*

3. Response to RAI 1.i.

Discussion: *The NRC staff requested that PG&E identify the internal events model that was used as the basis for the interim fire PRA model that was peer reviewed in 2012 and provide the internal events core damage frequency (CDF). Additionally, the NRC staff requested PG&E to confirm that the fire PRA CDF given for DC02 was based on models predating PG&E's NFPA-805 revision and to provide the dates of models DC02 and DC02A.*

PG&E stated that the interim fire PRA was based on PRA model DC01 and that the internal events CDF was 1.08×10^{-5} . Relative to the fire CDF, PG&E stated that the fire PRA model developed for the NFPA-805 revisions was separated out from the plant model in December 2010. Finally, PG&E stated that the dates for models DC02 and DC02A are November 2012 and January 2013, respectively.

ENCLOSURE 2

ADAMS documents are relevant to the request:

DCPP Portal Documents

ML14364A259
ML15037A540
ML15057A102
ML15068A406
ML15069A095
ML15091A659
ML15104A509
ML15131A528
ML15140A564
ML15182A303
ML15182A424
ML15182A425
ML15182A452
ML15183A014
ML15198A089
ML15202A005
ML15231A726
ML15233A518
ML15245A004
ML15243A582
ML15252A528
ML15252A529
ML15253A653
ML15253A655
ML15257A008
ML15261A745
ML15261A747
ML15261A748
ML15261A750
ML15261A751
ML15279A367
ML15275A094
ML15275A130
ML15281A312
ML15287A165
ML15295A373
ML15316A770
ML15310A069
ML15348A170
ML16027A355
ML16090A217
ML16090A291
ML16090A300
ML16090A301
ML16090A302

ML16090A305

ML16050A180

ML16048A203

Non Responsive

ML15131A528

From: Wentzel, Michael
Sent: Thursday, February 04, 2016 6:53 AM
To: 'Soenen, Philippe R'
Subject: Contact Information

Philippe,

When you and Tom came in for the drop-in, you had mentioned the possibility of using the county's facility for our eventual public meeting to discuss the draft SEIS. Can you provide me with the facility contact info? Obviously, there is some time between now and then, but I happened to think about it and wanted to ask for it while I had it on my mind.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Wednesday, January 06, 2016 7:08 AM
To: 'Soenen, Philippe R'; Terrence Grebel (TLG1@pge.com)
Subject: DCPD ER RAI Response Clarifications

Philippe and Terry,

As I mentioned yesterday, we would like to have a phone call to clarify a few of the recent RAI responses. I've provided the specific clarifications we are requesting below. Please let me know when you think you will have an availability to discuss.

Thanks,
Mike

RAI-AIR-5(c): Please clarify whether PG&E has a GHG emissions reduction program implemented specifically at DCPD.

RAI-SWR-1: PG&E provided its last five annual submissions to the CEC (i.e., form CEC-1304 Schedule 3 Part A-Annual Water Supply and Use and Wastewater Discharge Report). In lieu of completing the CEC prescribed forms, PG&E has elected to append the forms with a set of three spreadsheets as part of its annual submittals. While one spreadsheet ("DCPD Once-Through Cooling (OTC) System Flows") provides monthly and total yearly discharge (which appears to be limited to just condenser circulating water return flows), none of the spreadsheets appears to have a cumulative total for surface water (ocean) withdrawals. This is necessary in order to calculate the delta between intake and discharge. Please clarify how total surface water withdrawals can be determined using the spreadsheets that were provided.

RAI-SWR-10: This RAI response states that the desalination facility is licensed to produce 1.5 million gpd; however, Section 3.1.2 of the ER states that the desalination facility has the capacity to produce 450 gpm (648,000 gpd). Please clarify.

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Thursday, July 02, 2015 12:28 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Diablo Canyon Tour

Terry,

In conjunction with our August 5 public meetings for license renewal, a few of my managers were interested in trying to set up a tour of the site. The group would consist of Michele Evans, the Deputy Office Director for NRR, Jane Marshall, the Deputy Director for license renewal, and two of the license renewal branch chiefs. Ideally, they were hoping to set something up for 9am on August 5. Can you let me know if it would be possible to something up and what information we would need to provide in order to facilitate that?

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Tuesday, December 15, 2015 11:03 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: Document Control POC

Terry,

You can have your person contact Kenny Nguyen at 301-287-0786, or at kenny.nguyen@nrc.gov to resolve the issues with your submittals.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Wednesday, August 26, 2015 1:06 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Draft Audit Plan for the Environmental Site Audit
Attachments: License Renewal Environmental Site Audit Regarding Diablo Canyon Power Plant, Units 1 and 2 - DRAFT.docx

Terry,

Attached is the current draft the environmental audit plan. We are still having some discussions about what, if anything, we want to do with alternatives, and I will update the plan once we have a path forward there. I hope to have resolution on that by COB today, or early tomorrow morning. The remaining audit needs should be fairly well set at this point, but I will let you know if there are any substantive changes.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RP82
(301) 415-6459
michael.wentzel@nrc.gov



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

SUBJECT: LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT REGARDING DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 (TAC NOS. MF4019 AND MF4020)

Dear Mr. Halpin:

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing Pacific Gas and Electric Company's license renewal application for Diablo Canyon Power Plant, Units 1 and 2. The environmental site audit will be conducted at Diablo Canyon Power Plant, Units 1 and 2, during the week of September 28, 2015, by NRC staff and its contractors. The environmental audit activities will be conducted in accordance with the environmental audit plan (Enclosure 1).

To develop the Supplemental Environmental Impact Statement, the NRC staff requests the information described in the environmental audit needs list (Enclosure 2) be made available, to the extent possible, during the environmental site audit. The NRC staff informally transmitted this information to your staff (Terry Grebel) by e-mail on August XX, 2015.

If you have any questions, please contact me by telephone at 301-415-6459, or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323
Enclosure: As stated
cc w/encl: Listserv

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

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If you have any questions, please contact me by telephone at 301-415-6459, or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323
Enclosure: As stated
cc w/encl: Listserv
DISTRIBUTION: See next page

ADAMS Accession No.:

*concurrence via email

OFFICE	LA:DLR*	PM:RPB2:DLR	BC:RERB:DLR	BC:RPB2:DLR	PM:RPB2:DLR
NAME		MWentzel	DWrona	JDanna	MWentzel
DATE					

OFFICIAL RECORD COPY

Letter from M. Wentzel to E. Halpin dated XXXX

SUBJECT: LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT REGARDING DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 (TAC NOS. MF4019 AND MF4020)

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CKanatas, OGC

THipschman, SRI

JReynoso, RI

GMiller, RIV

DMcIntyre, OPA

LUselding, OPA

WMaier, RIV

AMoreno, OCA

MWaters, EDO

LICENSE RENEWAL ENVIRONMENTAL AUDIT PLAN DIABLO CANYON POWER PLANT, UNITS 1 AND 2

1. Background

By letter dated November 24, 2009, Pacific Gas and Electric Company (PG&E or applicant) submitted to the U.S. Nuclear Regulatory Commission (NRC) an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54 (10 CFR Part 54) to renew the operating licenses for Diablo Canyon Power Plant, Units 1 and 2 (DCPP). In accordance with the requirements of 10 CFR Part 51, the NRC staff is reviewing the information contained in the environmental report (ER) submitted in conjunction with the license renewal application (LRA).

As part of its review of the ER, the NRC staff's will perform an environmental audit in San Luis Obispo. The purpose of this audit is to gain understanding, verify information, and identify information that will require docketing to support the basis of the licensing or regulatory decision. Specifically, the NRC staff will identify pertinent environmental data, review the facility and area, and obtain clarifications regarding information provided in the ER.

Per NRC guidance, the NRC staff prepared a regulatory audit plan that provides a clear overview of audit activities, scope, and team assignments.

2. Environmental Audit Bases

License renewal requirements are specified in 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." Licensees are required by 10 CFR 54.23 to submit an ER that complies with the requirements in 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," as part of the LRA. Review guidance for the staff is provided in NUREG-1555, "Standard Review Plans for Environmental Reviews for Nuclear Power Plants: Supplement 1 – Operating License Renewal."

NRC staff is required to prepare a site-specific supplement to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants." During the scoping process required in 10 CFR Part 51, NRC staff is required to define the proposed action, identify significant issues which must be studied in depth, and to identify those issues that can be eliminated from further study.

3. Environmental Audit Scope

The scope of this environmental audit is to identify those issues which are significant and those issues which can be eliminated from further study and to identify the environmental resources that must be adequately described and evaluated in the site-specific supplemental environmental impact statement (SEIS). Audit team members will focus on reviewing the documents and requested information listed in the Environmental Audit Needs List (Enclosure 2) and discussing the information with the applicant's subject matter experts.

4. Information and Other Material Necessary for the Environmental Audit

As described in the Environmental Audit Needs List (Enclosure 2).

ENCLOSURE 1

5. Tentative Team Assignments Area of Review Assigned Auditor

The environmental audit team members are shown in Table 1. Those members of the team who are contractors from Pacific Northwest National Laboratory will have PNNL after their name.

Table 1 Environmental Audit Team Members and Resource Assignments

Discipline	Team Members
Environmental Project Manager	Michael Wentzel, NRC
Alternatives	Robert Hoffman, NRC*
Aquatic Resources	Michelle Moser, NRC Valerie Cullinan, PNNL*
Geology and Soils	William Ford, NRC
Historic and Cultural Resources	Jeffrey Rikhoff, NRC Tara O'Neill, PNNL
Human Health	Russell Chazell, NRC*
Meteorology, Air Quality, and Noise	Nancy Martinez, NRC
Socioeconomics	Jeffrey Rikhoff, NRC
Special Status Species and Habitats	Michelle Moser, NRC Briana Grange, NRC
Terrestrial Resources	Briana Grange, NRC
Waste Management and Pollution Prevention	Russell Chazell, NRC*
Water Resources – Surface Water	Kevin Folk, NRC
Water Resources – Groundwater	William Ford, NRC
*Will participate in the environmental site audit by telephone, as necessary.	

6. Logistics

The environmental audit will be conducted in San Luis Obispo from September 29-October 1, 2015. An entrance meeting will be held with plant management at the beginning of the audit. An exit meeting will be held at the end of this audit.

7. Special Requests

The NRC staff requests the applicant make available the information identified on the Environmental Audit Needs List (Enclosure 2). Plant staff members who are subject matter experts in the disciplines listed on the Environmental Site Audit Needs List should be available for interviews and site tours as identified on the Environmental Audit Needs List (Enclosure 2).

8. Deliverables

An audit summary report is scheduled to be issued by NRC staff within 90 days from the end of the environmental audit.

DIABLO CANYON POWER PLANT, UNITS 1 AND 2 LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT NEEDS LIST

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed Appendix E, the Environmental Report (ER), of the Diablo Canyon Power Plant, Units 1 and 2 (DCPP) license renewal application (LRA), as revised by amendments submitted by Pacific Gas and Electric (PG&E) in December 2014 and February 2015.

Please be prepared to discuss the following issues and make available the following information during the environmental site audit.

Alternatives

Aquatic Resources

AQ-1 Section 2.2.1 of the ER, "Marine Ecology," describes the various aquatic monitoring efforts that have occurred near DCPD since 1976, including the Thermal Effects Monitoring Program (TEMP); the Marine Ecological Monitoring Program (MEMP); and the Receiving Water Monitoring Program (RWMP). The most recent RWMP from 2012 and 2013 provide the count or percent cover, mean, and standard deviation for the abundance or percent cover for algae, invertebrates, and fish. For monitoring efforts from 1976-2011, provide the count or percent cover, mean, and standard deviation for each year of monitoring for the following species:

a) Algae

- i) Bull kelp (*Nereocystis luetkeana*)
- ii) Feather-boa kelp (*Egregia menziesii*)
- iii) Hollow-branched seaweed (*Gastroclonium subarticulatum*, formerly *G. coulteri*)
- iv) Iridescent seaweed (*Mazzella flaccida*, formerly *Iridaea flaccida*)
Oar-blade kelp (*Laminaria dentigera*)
- v) Tree kelp (*Pterygophora californica*)
- vi) Un-named red seaweed (*Chondracanthus canaliculatus*, formerly *Gigartina canaliculata*)

b) Invertebrates

- i) Aggregating sea anemone (*Anthopleura elegantissima*)
- ii) Black abalone (*Haliotis cracherodii*)
- iii) Brown turban snail (*Chlorostoma brunnea*, formerly *Tegula brunnea*)
- iv) Kelp crab (*Pugettia producta*)
- v) Ochre starfish (*Pisaster ochraceus*)
- vi) Purple sea urchin (*Strongylocentrotus purpuratus*)
- vii) Red Abalone (*Haliotis rufescens*)
- viii) Red sea urchin (*Strongylocentrotus franciscanus*)

ENCLOSURE 2

- ix) Rock crab (*Cancer antennarius*)
- x) Sun stars (*Pycnopodia helianthoides*)
- xi) White abalone (*Haliotis sorenseni*)

c) Fish

- i) Blue rockfish (*Sebastes mystinus*)
- ii) Cabezon (*Scorpaenichthys marmoratus*)
- iii) Coho salmon (*Oncorhynchus kisutch*)
- iv) Green sturgeon (*Acipenser medirostris*)
- v) Gopher rockfish (*Sebastes carnatus*)
- vi) Rock Prickleback (*Xiphister mucosus*)
- vii) Steelhead trout (*Oncorhynchus mykiss*)

- AQ-2 Section 2.2.1.2 of the ER, "Species/Habitat Inventories, Marine Mammal Resources," states that no known or recorded incidents of marine mammal injuries or fatalities have occurred due to power plant operations through 2014. The NRC staff is aware of 3 reports of Marine Mammal Strandings at DCP in 2015 (February 22, March 16, and May 6). In each case, PG&E reported to the NRC that the death was likely attributable to natural causes and verbal notification of the incident was reported to National Oceanic and Atmospheric Administration (NOAA) Fisheries. Describe any comments or letters received from NOAA Fisheries in response to the Marine Mammal Strandings report, especially in regards to the cause of death.
- AQ-3 Section 2.2.1.3 of the ER, "Commercial and Recreationally Important Species" describes the commercial landing data collected by the California Department of Fish and Wildlife (CDFW) from 2009 through 2013. Provide a reference for this data.
- AQ-4 Section 2.2.2.1 of the ER, "Species and Relative Abundance," was revised to describe recent rainbow trout and steelhead (*Oncorhynchus mykiss*) studies in Diablo Creek and Coon Creek. In addition, a discussion of other aquatic resources in these creeks was deleted. Provide a description of the aquatic resources in Diablo Creek and Coon Creek, other than *O. mykiss*.
- AQ-5 Section 4.1 of the ER, "Entrainment of Fish and Shellfish in Early Life Stages," states that PG&E has had extensive communications and consultations with the Central Coast Regional Water Quality Control Board (CCRWWCB), the California State Water Resource Control Board (SWRCB), and the CDFW. Provide copies of all letters and communications to and from these agencies regarding impingement, entrainment, and heat shock since 2010. Indicate if PG&E anticipates or is aware of the need to conduct any additional studies related to impingement, entrainment, or heat shock, or any studies that may be conducted by State agencies or other organizations on these topics.

- AQ-6 Section 4.1 of the ER, "Entrainment of Fish and Shellfish in Early Life Stages," states that the Once Through Cooling (OTC) Water Policy adopted by the SWRCB effectively requires reductions of at least 85 percent of flow or commensurate with closed-cycle cooling. The SWRCB states that the OTC Water Policy requires a 93 percent reduction in water use. Describe PG&E's basis for the stating the OTC Water Policy requirement of reducing flow by at least 85 percent.
- AQ-7 Section 4.1 of the ER, "Entrainment of Fish and Shellfish in Early Life Stages," states that "during the current period of operation, available data from both DCPD-specific ecological studies, as well as independent studies of regional marine fisheries, provide evidence that local populations of fish susceptible to entrainment in larval stages have remained relatively stable...The conclusion from the extensive data from past and ongoing monitoring has shown that overall population decreases have not occurred, and the local marine ecosystem remains healthy." Describe the basis for this statement, including the references for studies that would support this statement.
- AQ-8 Section 4.3 of the ER, "Impingement of Fish and Shellfish," states that PG&E completed an impingement assessment of the OTC system in 1986 and the ER Amendment provides a summary of the results of the study. Provide a copy of this study.
- AQ-9 Section 4.4 of the ER, "Heat Shock," states that DCPD is updating a cooling system thermal discharge impacts assessment using data gathered from 2008 through 2013 from the ongoing Receiving Water Monitoring Program (RWMP) and expects the final report to be completed during the 2nd Quarter in 2015. Provide a copy of this report.

Meetings requested: Provide PG&E's subject matter expert(s) and/or contractor(s) responsible for writing the aquatic resources portion of the ER and who can discuss the above information requests. This meeting may be combined with the terrestrial resources and special status species and habitats meetings, as appropriate.

Geology and Soils

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) Soil erosion control practices that have been implemented at the DCPD site.
- 2) Alluvial and stream terrace deposits associated with Diablo Creek.
- 3) Terrace deposits on top of the wave-cut platform along the Pacific Ocean.
- 4) The Obispo Formation from the shoreline along the Pacific Ocean. (Perhaps near the mouth of Diablo Creek or some other location where the structures and beds of the Diablo Creek Formation can be safely observed and examined).

Historic and Cultural Resources

- HC-1 Provide an updated map detailing the level of ground disturbance at the DCPD site, including documentation on how this level of disturbance was determined.
- HC-2 What percentage of land within the DCPD property has been formally surveyed?

- HC-3 What percentage of land within the DCPD property is undisturbed?
- HC-4 Provide updated map(s) of previously surveyed areas and archaeological site locations within the entire DCPD property (plant site and PG&E plant property) and along existing in-scope transmission lines, up to the first substation, which will be needed during the site visit. These maps will not be docketed, as they are considered sensitive information.
- HC-5 Provide copies of all references used to develop the historic and cultural resources portions of the ER.
- HC-6 Provide the status – and a draft copy if available – of the most recent Cal Poly Field School technical report for the excavation at CA-SLO-5 as discussed on page 2.11-8 of the ER (last sentence of first partial paragraph at the top of the page).
- HC-7 Provide the charter and meeting minutes for the last four years of the DCPD Land Stewardship Team as discussed in Section 2.11.3 of the ER. Provide a description of how a proposed activity on the DCPD site is evaluated for cultural resource impacts.
- HC-8 Provide a copy of any administrative controls and environmental procedures in place for land-disturbing activities (e.g., trenching, clearing, digging) on or associated with DCPD property. Describe how inadvertent discoveries are treated by DCPD during normal operations.
- HC-9 Provide information on management around less-developed areas of the plant site, especially near known historic and cultural resources or near unsurveyed areas.
- HC-10 Provide a copy of the program developed to monitor North Ranch sites as discussed in Section 2.11.4 of the ER. Additionally, provide copies of any reports generated from this monitoring (pages 2.11-6 and 7).
- HC-11 Provide the current status of the updated *National Register* nomination package for the *Pecho* district as discussed in Section 2.11.4 of the ER (page 2.11-7).
- HC-12 Provide documentation of construction projects that have occurred on the property since the last NRC license renewal site visit and tour in 2010. How were potential impacts to historic and cultural resources considered? Documentation demonstrating compliance with existing administrative controls and environmental procedures would be useful. What materials are used by PG&E staff to determine whether the SHPO should be consulted?
- HC-13 Provide any information on cultural resource management and protection training required for DCPD staff.
- HC-14 Provide copies of all letters and communications to and from the California State Historic Preservation Officer specific to determining the National Register of Historic Places (NRHP)-eligibility of all cultural resources identified since 2010 within the DCPD property, including the plant site and along existing in-scope transmission lines, up to the first substation.
- HC-15 Provide updated information on procedures for consulting/interacting with Federal- and State-recognized Indian tribes that have ancestral or historical ties to the DCPD area and surrounding lands.

- HC-16 Provide consultation letters and other communication documents indicating correspondence to and from the California SHPO and Federal- and State-recognized Indian tribes that have ancestral or historical ties to the project area and surrounding lands.
- HC-17 Provide the status and updated draft document of the SHPO-requested *Programmatic Agreement* and *Historic Resources Management Plan* intended to replace the current Archaeological Resources Management Plan as discussed in Section 9.1.3 of the ER.

Meetings requested: Provide PG&E's subject matter expert(s) and/or contractor(s) familiar with the cultural resources located within the DCPD and PG&E property and the cultural resource management plan. Additionally, provide knowledgeable staff to discuss any PG&E administrative controls and environmental procedures in place for the protection of historic and cultural resources.

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) In-scope transmission line tour up to the first substation (including any archaeological sites recorded along the lines).
- 2) Existing archaeological sites, preferably led by an archaeologist and PG&E staff familiar with National Historic Preservation Act historic properties and cultural resources located within the DCPD and PG&E property.

Human Health

- HH-1 Provide copies of the plant procedures that workers use that address safety standards, minimization of risks through the use of engineering controls, design controls, administrative controls, personal protection equipment, and safe work practices. (ER Section 4.0.2)
- HH-2 Provide any information relative to the processes used by the plant to control electrical shock hazards. (ER Section 4.0.2).

Meteorology, Air Quality, and Noise

- MET-1 Provide copies of DCPD's air permit(s) issued by the San Luis Obispo County Air Pollution Control District. Describe the compliance history associated with DCPD's air permit. Has PG&E received any Notice of Violations (NOVs) from the San Luis Obispo County Air Pollution Control District regarding conditions established in the air permit(s)?
- MET-2 Provide copies of Annual Emission Reports submitted to the San Luis Obispo County Air Pollution Control District for the most recent 5 years.
- MET-3 Summarize stationary and mobile sources of non-radiological air emissions at DCPD. Identify the equipment and quantity.

- MET-4 Provide the associated annual air emissions (air pollutant and quantity) for the most recent 5 years of operation for air permitted emission sources at DCCP. Include criteria pollutants (ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, lead), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs).
- MET-5 Provide a site-wide emission (quantity) inventory data (annual) for greenhouse gases (GHG) for the most recent 5 years. Emissions should include stationary combustion sources, mobile sources (commuters, visitors, delivery vehicle, etc.) and other sources (refrigerant leakage, emissions from switchyard). Please: 1) identify and discuss the GHG emission sources and 2) provide information used to support the GHG emission values (e.g. operating hours per year, fuel consumption and rates, and energy rating, as applicable) for each source.
- MET-6 Have field tests concerning ozone and nitrogen oxides emissions generated by high voltage transmission lines been conducted near DCCP's in scope transmission lines? If so, please provide this information.
- MET-7 Are there expected upgrade/replacement activities for equipment/operation that could increase or decrease air emissions over the license renewal period?
- MET-8 Provide information about any noise complaints for the most recent 5 years resulting from plant operation.
- MET-9 Describe the DCCP off-site noise environment and primary noise sources in the vicinity of DCCP.
- MET-10 Identify and describe primary noise sources resulting from plant operation.
- MET-11 Has PG&E conducted ambient noise surveys in and/or around the DCCP site? If so, provide this information.

Meetings requested: Provide PG&E's subject matter expert(s) and/or contractor(s) to discuss the air quality and noise portions of the ER to discuss the following aspects of facility operations:

- 1) Sources of air pollutants operating at DCCP
- 2) Air permits and emission inventories

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) General site layout
- 2) Major air emission and noise sources
- 3) Nearby noise sensitive receptors

Socioeconomics

- SOC-1 Provide updated permanent workforce data, preferably residential distribution of permanent workforce by county, in table format.

- SOC-2 In addition to property tax payment information presented in Section 2.7 of the ER, describe any other major annual support payments (e.g., emergency preparedness fees and payments or fees because of the ISFSI), one-time payments, and other forms of non-tax compensation (if any) provided to local organizations, communities, and jurisdictions (e.g., county, municipality, townships, villages, incorporated places, and school districts) on behalf of DCCP.
- SOC-3 Provide information about any anticipated changes in State and local tax laws, rates, and assessed property value or any other recent or anticipated tax payment adjustments that could result in notable future increases or decreases in property taxes or other payments.

Special Status Species and Habitats

- SSH-1 In an Information for Planning and Conservation (IPaC) Report dated May 12, 2015 (ADAMS Accession No. ML15132A423), the U.S. Fish and Wildlife identified a number of Federally listed species that are not addressed in the ER. Provide any available information on potential habitat, occurrence, or sightings of the following species:
- a) Blunt-nosed leopard lizard (*Gambelia sila*)
 - b) California clapper rail (*Rallus longirostris obsoletus*)
 - c) California jewelflower (*Caulanthus californicus*)
 - d) Giant kangaroo rat (*Dipodomys ingens*)
 - e) Kern primrose sphinx moth (*Euproserpinus euterpe*)
 - f) Marbled murrelet (*Brachyramphus marmoratus*)
 - g) Pismo clarkia (*Clarkia speciosa* spp. *immaculate*)
 - h) Salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*)
 - i) Spreading navarretia (*Navarretia fossalis*)
 - j) Vernal pool fairy shrimp (*Branchinecta lynchi*)
- SSH-2 In the ER, Amendment 1, Table 2.4-1 states that multiple survey results have been negative for the California least tern (*Sternula antillarum browni*). However, the NRC staff was unable to find information indicating that past ecological studies actively surveyed for this species. Explain what surveys have been done for this species.
- SSH-3 In the ER, Amendment 1, Table 2.4-1 states that long-term monitoring has failed to identify western snowy plover (*Charadrius alexandrinus nivosus*) at Coon Creek beach. To what long-term monitoring is the ER referring?
- SSH-4 In the ER, Amendment 1, Table 2.4-1 states that long-term monitoring has failed to detect least Bell's vireo (*Vireo bellii pusillus*). To what long-term monitoring is the Environmental Report referring?

- SSH-5 In the ER, Amendment 1, Table 2.4-1 states that there is no record of the marsh sandwort (*Arenaria paludicola*) on the Diablo Canyon Lands. However, the NRC staff was unable to find information indicating that past ecological studies actively surveyed for this species. Explain what surveys have been done for this species.
- SSH-6 Section 2.5 of the ER, "Threatened and Endangered Species: Aquatic Listed Species," states that blue whale (*Balaenoptera musculus*), sperm whale (*Physeter macrocephalus*), fin whale (*Balaenoptera physalus*), humpback whale (*Megaptera novaeangliae*), and sei whale (*Balaenoptera borealis*) may be found near DCPD for limited amounts of time. Provide citations for any relevant monitoring studies that provide a basis for this statement. In addition, killer whales (*Orcinus orca*) and North Pacific right whales (*Eubalaena japonica*) could occur near DCPD. Provide any available information on the occurrence or sightings of whales near DCPD.
- SSH-7 Section 2.5 of the ER, "Threatened and Endangered Species: Aquatic Listed Species," states that white abalone (*Haliotis sorenseni*) may be found near DCPD for limited amounts of time. Provide citations for any relevant monitoring studies that provide a basis for this statement. In addition, provide any available information on the occurrence or sightings of this species near DCPD.
- SSH-8 Section 2.5 of the ER, "Threatened and Endangered Species, Tidewater Goby," states that no records of adult tidewater goby (*Eucyclogobius newberryi*) were found for drainages on the DCPD site. Describe the types of records PG&E searched in order to provide a basis for this statement. In addition, clarify whether any juveniles were observed on site.
- SSH-9 Section 2.5 of the ER, "Threatened and Endangered Species," describes the monitoring results for sea turtles, marine mammals, and black abalone. Provide a summary of the monitoring methods that are specific to sea turtles, marine mammals, and black abalone.
- SSH-10 Section 4.10 of the ER, "Threatened and Endangered Species," states that PG&E has not identified any impacts to the Southern Sea Otter (*Enhydra lutris*) or the Guadalupe Fur Seal (*Arctocephalus townsendi*) from DCPD operations based on extensive monitoring efforts. Provide a basis for this statement, including a summary of monitoring methods and activities and the references of any reports or studies that describe these monitoring efforts.
- SSH-11 Section 4.10 of the ER, "Threatened and Endangered Species," states that PG&E is not aware of sea turtles aggregating near the DCPD discharge area, based on stranding and siting data. Provide a summary of the stranding and siting data that PG&E reviewed to support this statement.
- SSH-12 Section 4.10 of the ER, "Threatened and Endangered Species," describes the likely presence of steelhead trout (*Oncorhynchus mykiss*), tidewater goby, green sturgeon (*Acipenser medirostris*), and coho salmon (*Oncorhynchus kisutch*) in the vicinity of the intake cover and potential impacts from impingement and entrainment. Provide a description of any known occurrences of these species near the discharge in Diablo Cove and potential direct and indirect effects to these species as a result of the thermal effluent.

Meetings requested: Provide PG&E's subject matter expert(s) and/or the contractor(s) responsible for writing the special status species and habitats portion of the ER and who can discuss the above information requests. This meeting may be combined with the aquatic and terrestrial resources meetings, as appropriate.

Terrestrial Resources

- TER-1 Approximately how many acres of land does the "Diablo Canyon Lands" (the DPCC site, North Ranch, and South Ranch, collectively) encompass? Within the DPCC site, how many acres are non-disturbed, natural areas?
- TER-2 Section 2.4.3 of the ER describes important state natural communities that are "considered unique or sensitive within California." Clarify whether these natural communities are considered unique or sensitive by the State, another organization, the scientific community, etc.
- TER-3 Do the Diablo Canyon Lands contain habitats designated as "environmentally sensitive habitat areas" as defined by the California Coastal Act of 1976, as amended? If so, describe the location, species composition, and any other important characteristics of these areas.
- TER-4 In the ER, Amendment 1, Table 2.4-1 states that "multiple surveys from 2005 through 2011 failed to identify a nesting colony" of tricolored blackbirds (*Agelaius tricolor*). To what surveys is the ER referring?
- TER-5 In the ER, Amendment 1, Table 2.4-1 states that the burrowing owl (*Athene cunicularia*) is believed to be "nearly extirpated as a breeding species in coastal San Luis Obispo County." What is the source of this information?
- TER-6 In the ER, Amendment 1, the "Record of Occurrence" column in Table 2.4-1 states that there is a record of occurrence for the silvery legless lizard (*Anniella pulchra pulchra*), but the "Occurrence Potential" column states that multiple survey results for the species have been negative. Clarify this seemingly contradictory information.
- TER-7 In the ER, Amendment 1, the "Record of Occurrence" column in Table 2.4-1 states that there is a record of occurrence for the southern rubber boa (*Charina umbratica*), but the "Occurrence Potential" column states that survey results for the species have been negative. Clarify this seemingly contradictory information.
- TER-8 Describe any site procedures that PG&E maintains for assessing and mitigating the environmental effects of new ground-disturbing activities or other new site activities that could affect terrestrial habitats or species. Provide copies of such procedures, as applicable.
- TER-9 Provide copies of PG&E's landscape maintenance procedures for the DCPD site. If PG&E does not maintain such procedures, briefly describe how non-industrial, previously disturbed, or landscaped areas of the site are maintained.
- TER-10 Provide a copy of PG&E's stormwater pollution prevention plan.

Meetings requested: Provide PG&E's subject matter expert(s) and/or the contractor(s) responsible for writing the terrestrial resources portion of the ER and who can discuss the above information requests. This meeting may be combined with the aquatic resources and special status species and habitats meetings, as appropriate.

Tours requested: Provide a tour such that the NRC staff can observe the various terrestrial and wetlands habitat types found on the site. This tour may be combined with the water resources – surface water tour, as appropriate.

Waste Management and Pollution Prevention

- | | |
|---------|---|
| WMPP-1 | Provide the chemical composition and generation volume of the waste streams discussed in Section 3.1.5 of the ER. |
| WMPP-2 | Provide a list of anticipated waste disposal companies and disposal sites for the waste streams discussed in Section 3.1.5 of the ER. |
| WMPP-3 | Provide NPDES monthly discharge monitoring reports for the past 5 years. (ER Section 3.1.5). |
| WMPP-4 | Provide a copy of the industrial process chemical inventory discussed in Section 4.0.2 of the ER. |
| WMPP-5 | Provide a copy of the Hazardous Waste Facility Permit discussed in Section 4.0.2 of the ER. |
| WMPP-6 | Provide an outline of the hazardous materials training program that workers complete. (ER Section 4.0.2) |
| WMPP-7 | Provide copies of the procedures used for managing hazardous waste, spill contingencies, waste minimization procedures, treatment, storage, & disposal (TSD) training, and industrial hygiene practices. (ER Section 4.0.2) |
| WMPP-8 | Discuss current DCPW waste minimization programs and their effectiveness. (ER Section 4.0.2). |
| WMPP-9 | Provide copies of the procedures used for managing universal wastes as defined in the Resource Conservation and Recovery Act (RCRA) and/or Chapter 22 of the California Code of Regulations (22 CCR). (ER Section 4.0.2). |
| WMPP-10 | Clarify whether DCPW is a large or small quantity hazardous waste generator under the RCRA and/or 12 CCR. (ER Section 4.0.2). |
| WMPP-11 | Provide a list, to include location within the facility, of any anticipated 90-day RCRA/CCR hazardous waste collection points and copies of applicable state or Federal RCRA audits for the last 5 years. (ER Section 4.0.2). |

Meetings requested: If necessary, provide PG&E's subject matter expert(s) and/or the contractor(s) responsible for writing the waste management and pollution prevention portion of the ER and who can discuss the above information requests.

Water Resources – Groundwater

- GW-1 Provide records documenting the volume of groundwater consumed.
- GW-2 Provide information that looks at the potential for saltwater intrusion into the groundwater of the Obispo Formation from the extraction of groundwater on site.
- GW-3 Provide any groundwater and geologic reports that have been prepared for DCPD to support the Nuclear Energy Institute "Industry Groundwater Protection Initiative."

Meetings requested: Provide PG&E's subject matter expert(s) and/or the contractor(s) responsible for writing the groundwater hydrology and quality portions of the ER and who can discuss the above information request and the following:

- 1) The direction of groundwater flow at the DCPD site and whether groundwater levels near the ocean are affected by ocean tides.
- 2) If Deep Water Well No. 2 withdraws its water from the Obispo Formation, provide context to the following statements in the ER:
 - a) From Page 2.3-1: "Groundwater at the DCPD site is limited to the streambed of Diablo Creek within the geographically isolated Diablo Canyon. No significant groundwater has been encountered outside of the stream bed gravels [...] Makeup water wells No. 1 and No. 2 with collar elevations at 232 ft above mean sea level (MSL) and 333.3 ft MSL, respectively, produced water from the alluvium in Diablo Creek and from fractured sandstone and dolomite of the Obispo Formation."
 - b) From Pages 2.3-1 and 2.3-2: "DCPD groundwater use is limited to the periodic withdrawal of freshwater supply from an onsite deep well. The groundwater source is geologically isolated to the DCPD watershed, and is therefore not hydraulically connected to other area groundwater resources."
 - c) From Page 3.1-6: "Groundwater reserves at the site are limited by the nature of the plant location, and lack of hydraulic connection with groundwater resources on properties outside of plant controlled lands."
 - d) From Page 4.0-7: "[T]he groundwater source at DCPD is geologically isolated to the DCPD watershed, and is therefore not hydraulically connected to other area groundwater resources."
 - e) From Page 4.5-2: "When in operation, the well draws from an isolated source specific to DCPD. The topography of the location precludes any connection between the well source water and offsite water resources. There are no neighboring wells (outside of the DCPD industrial site and adjacent controlled property) that can be impacted or made unavailable due to operation of the onsite well. Therefore, no cone of depression can be created from groundwater use on the plant site that could extend offsite regardless of pump withdrawal rate or an extended period of withdrawal."
 - f) From Page 5-3: "Deep Well #2 draws from an isolated source specific to Diablo Canyon that is replenished by flows through the alluvium near 200 ft MSL."

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) The locations of water wells 2 and 5.
- 2) The location of monitor wells GW-01 and GW-02.
- 3) Groundwater seeps, if any.

- 4) The desalination plant area, including the intake structure and brine discharge locations.

Water Resources – Surface Water

- SW-1 Provide a summary of documented/reported water withdrawals via the intake structure over the last 5 years and associated return discharges (via National Pollution Discharge Elimination System (NPDES) Outfall 001). Include monthly averages for each annual data set.
- SW-2 Provide a copy of the most recent application or Notice of Intent submitted to the State for coverage under the State General Industrial Storm Water Discharge permit.
- SW-3 Provide a copy of the Stormwater Pollution Prevention Plan (current version)
- SW-4 Provide a map of NPDES permitted outfall locations (inclusive of process wastewater and stormwater outfalls).
- SW-5 Provide a summary of the NPDES permit status for DCP, including status and recent actions and associated milestones for resolving outstanding NPDES permit renewal and associated Once-Through Cooling (OTC) Policy issues. In addition, provide copies of all letters and communications to and from the State of California (e.g., CCRWQCB and SWRCB) specific to the NPDES permit process since 2010. Indicate if PG&E anticipates or is aware of the need to conduct any additional studies with respect to the OTC Policy.
- SW-6 Provide copies of any NOVs, nonconformance notifications, or related infractions received from regulatory agencies associated with NPDES permitted discharges, sanitary sewage systems, groundwater or soil contamination, including spills, leaks, and other inadvertent releases of fuel solvents, chemicals, or radionuclides received to date (covering past 5 years inclusive of 2015). Include correspondence of self-reported violations to responsible agencies.
- SW-7 Clarify the use of the Raw Water Reservoirs, as described in Section 2.3 of the ER and cited elsewhere, and its relation to other plant systems. Clarify how the reservoirs are filled/maintained. Include information on size, capacity, and nature of construction.
- SW-8 The NRC staff understands that PG&E has very recently begun to provide the San Luis Obispo city and county with water produced by DCP's desalinization facility (discussed in Section 2.9.1 of the ER). Verify and provide a summary discussion of the nature of PG&E's agreement to deliver water and include the volume and rate supplied for public use, method of delivery, etc.
- SW-9 Provide a description of any planned operational and maintenance activities (or projects) anticipated to be undertaken during the license renewal term (as possible, identify expected timeframe, location(s) affected, acres disturbed, and activity/project duration).

Meetings requested: Provide PG&E's subject matter expert(s) and/or the contractor(s) responsible for writing the surface water hydrology and quality portions of the ER and who can discuss the following:

- 1) The DCP intake and circulating water systems, effluent discharges, and affected water resources.

- 2) The status of PG&E's NPDES permit renewal as well as related Once-Through Cooling Policy issues and the CWA Section 401 Water Quality Certification.

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) General tour of the site and vicinity including associated intake structures and conveyances (i.e., shoreline intake structure and circ. water/auxiliary pumps, Diablo Cove and shoreline outfall, Deep Well #2, and significant streams).
- 2) Other surface water/effluent management features (i.e., mouth of Diablo Creek at Diablo Cove, old Diversion Point 1 on Diablo Creek, Raw Water Storage Reservoir, and wastewater treatment facility).
- 3) Representative NPDES outfall locations.

From: Wentzel, Michael
Sent: Wednesday, October 21, 2015 8:49 AM
To: Terrence Grebel (TLG1@pge.com)
Cc: Olsofsky, Michelle (MMA0@pge.com); VOSBURG, ALIA (AKV1@pge.com)
Subject: Draft Environmental RAIs for the DCPD LRA Review
Attachments: Requests for Additional Information Related to the Diablo Canyon LRA Environmental Review.docx

Terry,

Attached is a draft copy of the environmental RAIs. In addition to modifying many of the audit needs requests based on the conduct of the site audit, I wanted to specifically point out that there are a few new requests, including CI-2, AIR-8, SWR-6, -11, -12, and -13. Once you have had a chance to review, please let me know if you think a clarifying phone call would be helpful.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION RELATED TO THE
ENVIRONMENTAL REVIEW OF THE DIABLO CANYON POWER PLANT,
UNITS 1 AND 2 LICENSE RENEWAL APPLICATION (TAC NOS. MF4019 AND
MF4020)

Dear Mr. Halpin:

On November 23, 2009, Pacific Gas & Electric Company (PG&E) submitted an application pursuant to Title 10 of the *Code of Federal Regulations* (CFR) Part 54 to the U.S. Nuclear Regulatory Commission (NRC) for renewal of operating licenses DPR-80 and DPR-82 for Diablo Canyon Power Plant (DCPP), Units 1 and 2. In accordance with 10 CFR Part 51, PG&E submitted an environmental report as an appendix to the license renewal application for DCPP. On December 22, 2014, and February 25, 2015, PG&E amended its environmental report to incorporate additional information necessary for the NRC staff to complete its review of the DCPP license renewal application. The staff is reviewing the information contained in the environmental report, as amended, and has identified in the enclosure, areas where additional information is needed to complete the review.

These requests for additional information were discussed with Terry Grebel and a mutually agreeable date to respond is within 30 days from the date of this letter. If you have any questions, please contact me at (301) 415-6459, or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323
Enclosure: As stated
cc w/encl: Listserv

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

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Sincerely,

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323
Enclosure: As stated
cc w/encl: Listserv

DISTRIBUTION: See next page

ADAMS Accession No.:

*concurrence via email

OFFICE	LA:DLR*	PM:RPB2:DLR	BC:RPB2:DLR	PM:RPB2:DLR
NAME		MWentzel	JDanna	MWentzel
DATE				

~~OFFICIAL RECORD COPY~~

Letter from M. Wentzel to E. Halpin dated XXXX

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION RELATED TO THE
ENVIRONMENTAL REVIEW OF THE DIABLO CANYON POWER PLANT,
UNITS 1 AND 2 LICENSE RENEWAL APPLICATION (TAC NOS. MF4019 AND
MF4020)

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MWentzel

JDanna

RPlasse

YDiaz-Sanabria

SLingam

CKanatas, OGC

JLindell, OGC

THipschman, SRI

JReynoso, RI

GMiller, RIV

DMcIntyre, OPA

LUselding, OPA

WMaier, RIV

AMoreno, OCA

**DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION ENVIRONMENTAL REVIEW
REQUESTS FOR ADDITIONAL INFORMATION**

Alternatives

- ALT-1 Identify the available acreage and locations on the Diablo Canyon Power Plant, Units 1 and 2 (DCPP) site that would be suitable for siting replacement power generation.
- ALT-2 Clarify whether 2012 state generating capacities or utilization presented in Section 7.2 of the Environmental Report (ER) (Amendment 2) were factored into the composition of the energy sources considered in the Combination Alternative.
- ALT-3 Clarify whether any components of the combination alternative would be sited outside of the Pacific Gas and Electric (PG&E) service area.
- ALT-4 Clarify the basis for the solar photovoltaic acreage estimates discussed on pages 7.2-9, 7.2-11, and 7.2-21.
- ALT-5 Provide the data sources that were consulted to support the discussion and associated conclusions regarding the feasibility of Compressed Air Energy Storage technology.
- ALT-6 Section 4.2.5 of the ER (Amendment 1) references studies that have been conducted which address retrofitting DCPD to closed-cycle cooling. Please indicate whether the applicant has conducted any additional DCPD closed-cycle cooling alternative analyses or associated screening studies since publication of the 2014 report prepared by Bechtel Power Corporation (reference 27 as listed in ER (Amendment 1), Section 4.22).

Aquatic Ecology

- AQ-1 Section 2.2.1 of the ER, "Marine Ecology," describes the various aquatic monitoring efforts that have occurred near DCPD since 1976, including the Thermal Effects Monitoring Program (TEMP); the Marine Ecological Monitoring Program (MEMP); and the Receiving Water Monitoring Program (RWMP). For the species listed below, provide the mean for each species at each sampling station for each survey conducted between 1976 through 2014. Provide the data in Excel file, as well as a description of the station designation and the station areas.
- a) Algae
- i) Bull kelp (*Nereocystis luetkeana*)
 - ii) Feather-boa kelp (*Egregia menziesii*)
 - iii) Hollow-branched seaweed (*Gastroclonium subarticulatum*, formerly *G. coulteri*)
 - iv) Iridescent seaweed (*Mazzella flaccida*, formerly *Iridaea flaccida*)
 - v) Oar-blade kelp (*Laminaria dentigera*)
 - vi) Tree kelp (*Pterygophora californica*)

ENCLOSURE

- vii) Un-named red seaweed (*Chondracanthus canaliculatus*, formerly *Gigartina canaliculata*)

b) Invertebrates

- i) Aggregating sea anemone (*Anthopleura elegantissima*)
- ii) Black abalone (*Haliotis cracherodii*)
- iii) Brown turban snail (*Chlorostoma brunnea*, formerly *Tegula brunnea*)
- iv) Kelp crab (*Pugettia producta*)
- v) Ochre starfish (*Pisaster ochraceus*)
- vi) Purple sea urchin (*Strongylocentrotus purpuratus*)
- vii) Red Abalone (*Haliotis rufescens*)
- viii) Red sea urchin (*Strongylocentrotus franciscanus*)
- ix) Rock crab (*Cancer antennarius*)
- x) Sun stars (*Pycnopodia helianthoides*)
- xi) White abalone (*Haliotis sorenseni*)

c) Fish

- i) Blue rockfish (*Sebastes mystinus*)
- ii) Cabezon (*Scorpaenichthys marmoratus*)
- iii) Coho salmon (*Oncorhynchus kisutch*)
- iv) Green sturgeon (*Acipenser medirostris*)
- v) Gopher rockfish (*Sebastes carnatus*)
- vi) Rock pricklyback (*Xiphister mucosus*)
- vii) Steelhead trout (*Oncorhynchus mykiss*)
- viii) Starry flounder (*Platichthys stellatus*)
- ix) Pacific sardine (*Sardinops sagax*)
- x) Common thresher (*Alopias vulpinus*)

AQ-2

Section 2.2.1.2 of the ER, "Species/Habitat Inventories, Marine Mammal Resources," states that no known or recorded incidents of marine mammal injuries or fatalities have occurred due to power plant operations through 2014. The NRC staff is aware of 3 reports of Marine Mammal Strandings at DCPD in 2015 (February 22, March 16, and May 6). In each case, PG&E reported to the NRC that the death was likely attributable to natural causes and verbal notification of the incident was reported to National Oceanic and Atmospheric Administration (NOAA) Fisheries. Describe any comments or letters received from NOAA Fisheries in response to the Marine Mammal Strandings report, especially in regards to the cause of death.

- AQ-3 Section 2.2.2.1 of the ER, "Species and Relative Abundance," was revised to describe recent rainbow trout and steelhead (*Oncorhynchus mykiss*) studies in Diablo Creek and Coon Creek. In addition, a discussion of other aquatic resources in these creeks was deleted in Section 2.2.2.2. Provide a description of the aquatic resources in Diablo Creek and Coon Creek, other than *O. mykiss*.
- AQ-4 Section 4.1 of the ER, "Entrainment of Fish and Shellfish in Early Life Stages," states that PG&E has had extensive communications and consultations with the Central Coast Regional Water Quality Control Board (CCRWQCB), the California State Water Resource Control Board (SWRCB), and the California Department of Fish and Wildlife (CDFW). Provide copies of all letters and communications to and from these agencies regarding impingement, entrainment, and heat shock since 2010. Indicate if PG&E anticipates or is aware of the need to conduct any additional studies related to impingement, entrainment, or heat shock, or any studies that may be conducted by State agencies or other organizations on these topics.
- AQ-5 Section 4.1 of the ER, "Entrainment of Fish and Shellfish in Early Life Stages," states that "during the current period of operation, available data from both DCPD specific ecological studies, as well as independent studies of regional marine fisheries, provide evidence that local populations of fish susceptible to entrainment in larval stages have remained relatively stable...The conclusion from the extensive data from past and ongoing monitoring has shown that overall population decreases have not occurred, and the local marine ecosystem remains healthy." Describe the basis for this statement, including the references for studies that would support this statement.
- AQ-6 Section 4.4 of the ER, "Heat Shock," states that DCPD is updating a cooling system thermal discharge impacts assessment using data gathered from 2008 through 2013 from the ongoing RWMP. Provide an anticipated schedule for when this comprehensive analysis being prepared for the CCRWQCB will be available.
- AQ-7 Submit a copy of the following documents for docketing:
- a) Fish, Heidi. 2002. PG&E trip and Holister Ranch access. Electronic correspondence (email), H. Fish, National Marine Fisheries Service to S. Krenn, Pacific Gas and Electric Company. Documenting results of request aquatic surveys on Diablo Lands.
 - b) Running SK. 1986. Diablo Creek aquatic survey. Pacific Gas and Electric Company, Dept. of Engineer Research. Rept. No. 420-86.423. 14pp.
 - c) The updated cooling system thermal discharge impacts assessment being prepared for the CCRWQCB, when available.

Cumulative Impacts

- CI-1 Provide name, description, location, and status of any additional past, present, or reasonably foreseeable projects or actions that have been identified since the applicants' ER (Amendment 1) was prepared.

- CI-2 Section 4.0.2 of the amended ER states that PG&E has no plans for refurbishment or other license renewal-related construction activities. In support of the NRC staff's cumulative impacts analysis, provide a summary of any other planned operational or maintenance activities (or projects) anticipated to be undertaken during the license renewal term, including any anticipated dredging or fill activities. (As possible, identify expected timeframe, location(s) affected, acres disturbed, activity/project duration, and permits/approvals which may be required.)

Meteorology and Air Quality

- AIR-1 Provide copies of DCP's air permit(s) issued by the San Luis Obispo County Air Pollution Control District and air permit renewal notices. Describe the compliance history associated with DCP's air permit and air permit renewal process and status. Has DCP received any Notice of Violations (NOVs) from the San Luis Obispo County Air Pollution Control District regarding conditions established in the air permit(s)?
- AIR-2 Provide copies of Annual Emission Reports submitted to the San Luis Obispo County Air Pollution Control District for the most recent 5 years.
- AIR-3 Summarize stationary and mobile sources of non-radiological air emissions at DCP. Identify the equipment and quantity.
- AIR-4 Provide the associated annual air emissions (air pollutant and quantity) for the most recent 5 years of operation for air permitted emission sources at DCP. Include criteria pollutants (ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, lead), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs).
- AIR-5 Provide a site-wide emission (quantity) inventory data (annual) for greenhouse gases (GHG) for the most recent 5 years. Emissions should include stationary combustion sources, mobile sources (commuters, visitors, delivery vehicle, etc.) and other sources (refrigerant leakage, emissions from switchyard). In the response:
- a) identify and discuss the GHG emission sources;
 - b) provide information used to support the GHG emission values (e.g. operating hours per year, fuel consumption and rates, and energy rating as applicable for each source); and
 - c) discuss if PG&E has a GHG Emissions Reduction Program implemented specifically at DCP. If so, identify actions that are implemented to reduce GHG emissions resulting from DCP operation (lower-emission fleet vehicle, reduction in energy use in facilities).
- AIR-6 Identify any expected upgrade/replacement activities for equipment/operation that could increase or decrease air emissions over the license renewal period.

- AIR-7 Provide seasonal and annual summary wind statistics in the form of wind direction and speed frequency distribution tables and wind roses from data recorded at DCP's meteorological facility. Discuss predominant wind direction and speed by season and annual average. The meteorological data should include the most recent 5 years for which the data are available.
- AIR-8 In support of the NRC staff's greenhouse gas, climate change, and cumulative impacts analysis, provide the following long-term meteorological information from the data recorded at DCP's meteorological facility and address if an ambient temperature and precipitation trend (i.e. increase/decrease, warming, etc.) has been observed at DCP. The meteorological data should include all years for which the data are available:
- a) mean monthly and annual temperatures; and
 - b) mean monthly precipitation and annual precipitation.

Noise

- NOI-1 Provide information about any noise complaints for the most recent 5 years resulting from DCP operation.
- NOI-2 Describe the DCP off-site noise environment and primary noise sources in the vicinity of DCP.
- NOI-3 Identify and describe primary noise sources resulting from plant operation. Include in the response the distance from DCP to the nearest off-site permanent resident and distance of the turbine building to the site boundary.
- NOI-4 Discuss ambient noise surveys that PG&E has conducted in and/or around the site. Include noise levels as part of the response.
- NOI-5 Submit a copy of the relevant sections from the following document for docketing:
- a) Marine Research Specialist, 2004, Diablo Canyon Independent Spent Fuel Storage Installation: Environmental Impact Report. Prepared for San Luis Obispo County Department of Planning and Building.

Socioeconomics

- SOC-1 Provide updated permanent workforce data, preferably residential distribution of permanent workforce by county, in table format.
- SOC-2 In addition to property tax payment information presented in Section 2.7 of the ER, describe any other major annual support payments (e.g., emergency preparedness fees and payments or fees because of the independent spent fuel storage installation), one-time payments, and other forms of non-tax compensation (if any) provided to local organizations, communities, and jurisdictions (e.g., county, municipality, townships, villages, incorporated places, and school districts) on behalf of DCP.
- SOC-3 Provide information about any anticipated changes in State and local tax laws, rates, and assessed property value or any other recent or anticipated tax payment adjustments that could result in notable future increases or decreases in property taxes or other payments.

Non-Rad Waste Management

- WM-NR-1 Discuss the chemical composition and generation volume of the waste streams discussed in Section 3.1.5 of the ER.
- WM-NR-2 Provide a list of waste disposal companies and disposal sites for the waste streams discussed in Section 3.1.5 of the ER to include mixed waste streams.
- WM-NR-3 Discuss the hazardous materials training program that workers complete at DCP.
- WM-NR-4 Discuss the processes used for managing hazardous waste, spill contingencies, waste minimization procedures, and treatment, storage, & disposal (TSD) of hazardous and mixed wastes.
- WM-NR-5 Discuss current DCP waste minimization programs and their effectiveness to include a discussion of waste volume trends.
- WM-NR-6 Clarify whether DCP is a large or small quantity hazardous waste generator under the Resource Conservation and Recovery Act (42 USC § 6901 et seq.) (RCRA) and/or Title 12, California Code of Regulations.
- WM-NR-7 Discuss State or Federal RCRA audits for the last 5 years.
- WM-NR-8 Submit a copy of the following document for docketing:
 - a) DCP Aggregate HazWaste SB14 Volume Trends (1994-2014)

Human Health, Non-Radioactive (HH-NR)

- HH-NR-1 Discuss plant procedures that workers use to address safety standards, minimization of risks through the use of hazard communication, engineering controls, design controls, administrative controls, personal protection equipment, and safe work practices.
- HH-NR-2 Discuss the processes used by the plant to control electrical shock hazards.

Historic and Cultural Resources

Sensitive cultural resources information, such as archaeological site location information, should be withheld from public disclosure, and guidance described in Section 304 of the National Historic Preservation Act should be followed.

- HC-1 Provide an updated map detailing the level of ground disturbance on PG&E property at DCP, including documentation on how the level of disturbance was determined.
- HC-2 What percentage of land on PG&E property at DCP has been formally surveyed?
- HC-3 What percentage of land on PG&E property at DCP is undisturbed?
- HC-4 Provide updated map(s) showing surveyed areas and archaeological sites on PG&E property at DCP and in-scope transmission lines.
- HC-5 Provide a copy of the summary and results pages from the following studies, "Final Report Results of a Cultural Resource Evaluation for the North Property Access Road Diablo Canyon Power Plant" and the "Cultural Resources Survey of Portions of Diablo Canyon Nuclear Power Plant South Property San Luis Obispo County, California"

- HC-6 Provide a copy of the summary and results pages of the most recent Cal Poly Field School Technical Report for the excavation at CA-SLO-5.
- HC-7 Provide a summary of meeting minutes pertaining to cultural resources issues for the last 4 years of the DCPD Land Stewardship Team meetings, as discussed in Section 2.11.3 of the ER.
- HC-8 Provide a summary description of any administrative controls and environmental procedures in place for land-disturbing activities on PG&E property at DCPD (e.g., trenching, clearing, and digging). Describe how inadvertent cultural resource discoveries are treated.
- HC-9 Provide summary information on land management activities on less-developed areas of PG&E property at DCPD, especially near known archaeological and historically sensitive sites and unsurveyed areas.
- HC-10 Provide a copy of the program developed to monitor North Ranch sites as discussed in Section 2.11.4 of the ER. Also include any information regarding the monitoring of South Ranch sites. Provide copies of the summary and results pages of any technical reports generated from this monitoring (Pages 2.11-6 and 7 of the ER).
- HC-11 Provide the current status of the updated *National Register* nomination package for the *Pecho District*. (Section 2.11.4 of the ER page 2.11-7). Continue to notify the NRC regarding any updates or changes in the status of the *National Register* nomination package during the license renewal environmental review and whether additional cultural resources are to be added to the proposed archaeological district.
- HC-12 Provide documentation of construction projects that have occurred on PG&E property at DCPD since the last NRC license renewal site visit and tour in 2010. How were potential impacts to historic and cultural resources considered? Documentation demonstrating compliance with existing administrative controls and environmental procedures would be useful. What materials are used by PG&E staff to determine whether the California State Historic Preservation Office (SHPO) should be notified or consulted?
- HC-13 Provide summary information on cultural resource management and protection training required for PG&E staff at DCPD.
- HC-14 Provide copies of all letters and communications between PG&E staff and the California SHPO regarding the eligibility of cultural resources at DCPD for listing in the National Register of Historic Places (NRHP) since 2010, including DCPD and in-scope transmission lines.
- HC-15 Provide updated information on procedures for consulting/interacting with Federal and California State recognized American Indian Tribes that have ancestral or historical ties to the DCPD area and surrounding lands.
- HC-16 Provide copies of consultation letters and other correspondence between PG&E staff and the California SHPO and Federal and State recognized American Indian Tribes that have ancestral or historical ties to the DCPD area and surrounding lands.
- HC-17 Provide the status and updated draft document of the SHPO requested Programmatic Agreement and DCPD Cultural Resources Management Plan intended to replace the current Archaeological Resources Management Plan as discussed in Section 9.1.3 of the ER.

- HC-18 Provide a status on PG&E's response to the new Assembly Bill 52, formally establishing a new requirement under the California Environmental Quality Act (CEQA) to require Tribal Cultural Resources to be considered as potentially significant cultural resources under the CEQA environmental review process.
- HC-19 Provide a status of the Traditional Cultural Properties Surveys that have occurred on PG&E property at DCPD.

Surface Water Resources

- SWR-1 Summarize reported water withdrawals via the intake structure over the last 5 years (2010-2014 and 2015 year-to-date) and associated return discharges (via National Pollution Discharge Elimination System (NPDES) Outfall 001) and provide copies of the annual environmental reports filed with the California Energy Commission (CEC) reflecting the requested information. Include associated transmittal correspondence with the CEC. When available, also provide the 2015 annual environmental report for the docket.
- SWR-2 Provide a copy of the most recent application or Notice of Intent submitted to the State for coverage under the State General Industrial Storm Water Discharge permit.
- SWR-3 As related to the submittal under SWR-2, provide a copy of DCPD's current Stormwater Pollution Prevention Plan for docketing.
- SWR-4 Please provide a map of NPDES permitted outfall locations (inclusive of process wastewater and stormwater outfalls).
- SWR-5 Sections 4.2 through 4.2.6 of the amended ER state that efforts to renew DCPD's NPDES permit are ongoing and closely related to implementation of the State of California's Once-Through Cooling Water Policy (OTC). Describe the current status of the NPDES permit renewal for DCPD, including status and recent actions and associated milestones for resolving outstanding NPDES permit renewal and associated OTC Policy issues. In addition, provide copies of all letters and communications to and from the State of California (e.g., CCRWQCB and State Water Resources Control Board) specific to the NPDES permit process since 2010. Indicate if PG&E anticipates or is aware of the need to conduct any additional studies with respect to the OTC Policy.
- SWR-6 Section 9.1.5 of the amended ER addresses the need for an applicant for a Federal license or permit that could result in a discharge to navigable waters of the U.S. to provide the licensing agency with a state water quality certification in accordance with Section 401 of the Federal Clean Water Act. Section 401(a)(1) of the Act specifies that the applicant for the Federal license or permit is responsible for providing the Federal licensing or permitting agency the certification or a waiver from the state in which the discharge originates. As stated in NRC's *Generic Environmental Impact Statement for License Renewal of Nuclear Plants* (NUREG-1437, Revision 1), some but not all states integrate their 401 certification process with NPDES permit issuance. As related to SWR-5 above, please clarify whether the State of California will require a separate Section 401 certification for license renewal of DCPD, independent of NPDES permit renewal, and indicate PG&E's plans and associated timeframe for

providing the NRC with required CWA Section 401 documentation from the State.

- SWR-7 Provide copies of any NOV's, nonconformance notifications, or related infractions received from regulatory agencies associated with NPDES permitted discharges, sanitary sewage systems, groundwater or soil contamination, including spills, leaks, and other inadvertent releases of fuel solvents, chemicals, or radionuclides received to date (covering past 5 years inclusive of 2015). Include correspondence of self-reported violations to responsible agencies.
- SWR-8 Provide copies of NPDES annual reports on discharge monitoring for DCPD covering the last 5 years (2010-2014). Include associated transmittal correspondence with the Water Quality Control Board(s). When available, provide the 2015 report for docketing.
- SWR-9 As described in Section 2.3 of the ER and cited elsewhere, please clarify the use of the Raw Water Reservoirs and relation to other plant systems, including the Ultra Pure Water Facility observed during the environmental site audit. Clarify how the reservoirs are filled/maintained. Include information on size, capacity, and nature of construction.
- SWR-10 The NRC staff understands that PG&E has initiated plans to provide San Luis Obispo city and county with water produced by DCPD's desalinization facility (discussed in Section 2.9.1 of the ER). Provide a status summary of this effort including that status of any delivery agreement(s), project timeframes, and the water volume and rate to be supplied for public use, etc.
- SWR-11 In Section 3.1.2.1 of the ER, the discussion of the seawater intake system provides a range of flow rates relative to the circulating water pumps. Please provide the rated capacities of each of the pumps for Units 1 and 2. As also discussed in the cited section, please verify the rated capacity of each of DCPD's auxiliary saltwater system pumps.
- SWR-12 DCPD's NPDES permit (included as attachment B to the ER) lists a Sanitary Wastewater Treatment System. Provide an updated summary discussion of this package treatment plant and include capacity and current treatment demand, the pathways for treated effluent disposal, and the method of sludge disposal.
- SWR-13 In support of the NRC staff's surface water, climate change, and cumulative impacts analyses, provide a summary of available average monthly intake water and return discharge temperature (via NPDES Outfall 001) for the period of record at DCPD and address if an ambient temperature trend has been observed. As part of the response address whether there is any apparent trend in the frequency or annual hours of operation over time in which 2 auxiliary saltwater system pump trains must be operated per unit based on sea surface temperatures.

Groundwater Resources

- GWR-1 Provide the records supporting the statements in the ER concerning the volume of groundwater consumed.

- GWR-2 Submit a copy of the following document for docketing:
- b) "Diablo Canyon Power Plant, Water Resources Evaluation Phase II Report: Well Rehabilitation, Monitoring Well Installation, and Aquifer Testing", by ENTRIX, August 22, 2008.

Terrestrial Resources

- TER-1 Approximately how many acres of land does the "Diablo Canyon Lands" (the DPCC site, North Ranch, and South Ranch, collectively) encompass? Within the DPCC site, how many acres are non-disturbed, natural areas?
- TER-2 Section 2.4.3 of the ER describes important state natural communities that are "considered unique or sensitive within California." Clarify whether these natural communities are considered unique or sensitive by the State, another organization, the scientific community, etc.
- TER-3 Do the Diablo Canyon Lands contain habitats designated as "environmentally sensitive habitat areas" as defined by the California Coastal Act of 1976, as amended? If so, describe the location, species composition, and any other important characteristics of these areas.
- TER-4 In the ER, Amendment 1, Table 2.4-1 states that "multiple surveys from 2005 through 2011 failed to identify a nesting colony" of tricolored blackbirds (*Agelaius tricolor*). To what surveys is the ER referring?
- TER-5 In the ER, Amendment 1, Table 2.4-1 states that the burrowing owl (*Athene cunicularia*) is believed to be "nearly extirpated as a breeding species in coastal San Luis Obispo County." What is the source of this information?
- TER-6 In the ER, Amendment 1, the "Record of Occurrence" column in Table 2.4-1 states that there is a record of occurrence for the silvery legless lizard (*Anniella pulchra pulchra*), but the "Occurrence Potential" column states that multiple survey results for the species have been negative. Clarify this seemingly contradictory information.
- TER-7 In the ER, Amendment 1, the "Record of Occurrence" column in Table 2.4-1 states that there is a record of occurrence for the southern rubber boa (*Charina umbratica*), but the "Occurrence Potential" column states that survey results for the species have been negative. Clarify this seemingly contradictory information.
- TER-8 Describe how PG&E assesses and mitigates any environmental effects of new ground-disturbing activities or other new site activities that could affect terrestrial habitats or species.
- TER-9 Briefly describe how non-industrial, previously disturbed, or landscaped areas of the site are maintained.

Special Status Species and Habitats

- SSH-1 In an Information for Planning and Conservation (IPaC) Report dated May 12, 2015 (ADAMS Accession No. ML15132A423), the U.S. Fish and Wildlife identified a number of Federally listed species that are not addressed in the ER. Provide any available information on potential habitat, occurrence, or sightings of the following species:

- a) Blunt-nosed leopard lizard (*Gambelia sila*)
- b) California clapper rail (*Rallus longirostris obsoletus*)
- c) California jewelflower (*Caulanthus californicus*)
- d) Giant kangaroo rat (*Dipodomys ingens*)
- e) Kerm primrose sphinx moth (*Euproserpinus euterpe*)
- f) Marbled murrelet (*Brachyramphus marmoratus*)
- g) Pismo clarkia (*Clarkia speciosa* spp. *immaculate*)
- h) Salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*)
- i) Spreading navarretia (*Navarretia fossalis*)
- j) Vernal pool fairy shrimp (*Branchinecta lynchi*)

- SSH-2 In the ER, Amendment 1, Table 2.4-1 states that multiple survey results have been negative for the California least tern (*Sternula antillarum browni*). However, the NRC staff was unable to find information indicating that past ecological studies actively surveyed for this species. Explain what surveys have been done for this species.
- SSH-3 In the ER, Amendment 1, Table 2.4-1 states that long-term monitoring has failed to identify western snowy plover (*Charadrius alexandrinus nivosus*) at Coon Creek beach. To what long-term monitoring is the ER referring?
- SSH-4 In the ER, Amendment 1, Table 2.4-1 states that long-term monitoring has failed to detect least Bell's vireo (*Vireo bellii pusillus*). To what long-term monitoring is the Environmental Report referring?
- SSH-5 In the ER, Amendment 1, Table 2.4-1 states that there is no record of the marsh sandwort (*Arenaria paludicola*) on the Diablo Canyon Lands. However, the NRC staff was unable to find information indicating that past ecological studies actively surveyed for this species. Explain what surveys have been done for this species.
- SSH-6 Section 2.5 of the ER, "Threatened and Endangered Species: Aquatic Listed Species," states that blue whale (*Balaenoptera musculus*), sperm whale (*Physeter macrocephalus*), fin whale (*Balaenoptera physalus*), humpback whale (*Megaptera novaeangliae*), and sei whale (*Balaenoptera borealis*) may be found near DCPD for limited amounts of time. Provide citations for any relevant monitoring studies that provide a basis for this statement. In addition, killer whales (*Orcinus orca*) and North Pacific right whales (*Eubalaena japonica*) could occur near DCPD. Provide any available information on the occurrence or sightings of whales near DCPD.
- SSH-7 Section 2.5 of the ER, "Threatened and Endangered Species: Aquatic Listed Species," states that white abalone (*Haliotis sorenseni*) may be found near DCPD for limited amounts of time. Provide citations for any relevant monitoring studies that provide a basis for this statement. In addition, provide any available information on the occurrence or sightings of this species near DCPD.

- SSH-8 Section 2.5 of the ER, "Threatened and Endangered Species, Tidewater Goby," states that no records of adult tidewater goby (*Eucyclogobius newberryi*) were found for drainages on the DCPD site. Describe the types of records PG&E searched in order to provide a basis for this statement. In addition, clarify whether any juveniles were observed on site.
- SSH-9 Section 2.5 of the ER, "Threatened and Endangered Species," describes the monitoring results for sea turtles, marine mammals, and black abalone. Provide a summary of the monitoring methods that are specific to sea turtles, marine mammals, and black abalone.
- SSH-10 Section 4.10 of the ER, "Threatened and Endangered Species," states that PG&E has not identified any impacts to the Southern Sea Otter (*Enhydra lutris*) or the Guadalupe Fur Seal (*Arctocephalus townsendi*) from DCPD operations based on extensive monitoring efforts. Provide a basis for this statement, including a summary of monitoring methods and activities and the references of any reports or studies that describe these monitoring efforts.
- SSH-11 Section 4.10 of the ER, "Threatened and Endangered Species," states that PG&E is not aware of sea turtles aggregating near the DCPD discharge area, based on stranding and siting data. Provide a summary of the stranding and siting data that PG&E reviewed to support this statement.
- SSH-12 Section 4.10 of the ER, "Threatened and Endangered Species," describes the likely presence of steelhead trout (*Oncorhynchus mykiss*), tidewater goby, green sturgeon (*Acipenser medirostris*), and coho salmon (*Oncorhynchus kisutch*) in the vicinity of the intake cover and potential impacts from impingement and entrainment. Provide a description of any known occurrences of these species near the discharge in Diablo Cove and potential direct and indirect effects to these species as a result of the thermal effluent.
- SSH-13 Submit a copy of the following documents for docketing:
- a) SLO. 2003. Coon Creek Culvert Replacement and Fish Passage Enhancement Project, Biological Assessment. City of San Luis Obispo, California. 20 pp.
 - b) Behrens, D.W. 1983. Observations of the gray whale migration in the vicinity of Diablo Canyon: 1981 - 1982 migration. Chapter XIII in Behrens, D.W (ed.), Environmental investigations at Diablo Canyon, 1982. PG&E, Dept. Engr. Res. June, 1983.
 - c) Behrens, D.W., D.J. Sommerville, and D.C. Sommerville. 1984. Observations of the gray whale migration in the vicinity of Diablo Canyon: 1982 - 1983 migration. Chapter VI in Behrens, D.W. and C.O. White (eds.), Environmental investigations at Diablo Canyon, 1983. PG&E, Dept. Engr. Res. August, 1984.
 - d) Behrens, D.W., P.A. Dunn, and D.C. Sommerville. 1985. Observations of the gray whale migration in the vicinity of Diablo Canyon: 1983 - 1984 migration. Chapter IX in Behrens, D.W. and C.O. White (eds.), Environmental investigations at Diablo Canyon, 1984. Volume I - Marine ecological studies. PG&E, Dept. Engr. Res. December, 1985.

- e) Behrens, D.W. and K.E. Shaffer. 1986. Observations of the gray whale migration in the vicinity of Diablo Canyon: 1984 - 1985 migration. Chapter VIII in Behrens, D.W. and C.O. White (eds.), Environmental investigations at Diablo Canyon, 1985. Volume I - Marine ecological studies. PG&E, Dept. Engr. Res. December 1986.
- f) Behrens, D.W. 1987. Observations of the gray whale migration in the vicinity of Diablo Canyon: 1985 - 1986 migration. Chapter VI in Behrens, D.W. and White, C.O. (eds.), Environmental investigations at Diablo Canyon, 1986.
- g) Tenera Environmental Services. 1994. Observations of the gray whale migration in the vicinity of Diablo Canyon, California: 1981-1994 migrations. Report to Pacific Gas and Electric Co., Diablo Canyon Power Plant, CA. 10 p.

From: Wentzel, Michael
Sent: Monday, March 09, 2015 4:27 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Draft Phone Call Summary
Attachments: 030415, Summary of Telephone Conference Call Held Between NRC and PG&E Concerning the Diablo Canyon LRA review.docx

Terry,

Attached is a draft phone call summary from our meeting last week. Please let me know if you have any comments.

Thanks.
Mike

Michael Wentzel
Project Manager
NRR/DLR/RP82
(301) 415-6459
michael.wentzel@nrc.gov



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001**

LICENSEE: Pacific Gas and Electric Company

FACILITY: Diablo Canyon Nuclear Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON MARCH 4, 2015, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC COMPANY CONCERNING THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Pacific Gas and Electric Company (PG&E or the applicant) held a telephone conference call on March 4, 2015, to discuss the status of the Diablo Canyon Power Plant Units 1 and 2 (DCPP) license renewal application (LRA).

By letters dated December 22, 2014, and February, 25, 2015, PG&E provided most of the additional information necessary for the NRC staff to complete its review of the DCPP license renewal application, as requested by the NRC in our letter to PG&E dated July 3, 2015. As noted in its February 25, 2015 letter, PG&E intends to submit in June 2015 an evaluation of any changes to the DCPP SAMA analysis resulting from the Fukushima Near-Term Task Force Recommendation 2.1 seismic hazard re-evaluation. Additionally, PG&E stated that the technical items required to be completed for the DCPP reactor vessel internals aging management program and associated implementation of the "Materials Reliability Program: Pressurized Water Reactor Internals Inspection and Evaluation Guidelines (MRP-227-A)", are planned to be provided to the staff in December 2015.

Having provided the information in its December 2014 and February 2015 updates, PG&E stated that it expects that the NRC staff will continue its review of the DCPP license renewal application. The NRC staff agreed that the information provided in the December 2014 and February 2015 updates is sufficient to continue its review of the DCPP license renewal application, as appropriate, pending submittal of the outstanding items identified above. The NRC staff will evaluate the resources necessary to complete the review of the DCPP license renewal application and issue a schedule once complete. Enclosure 1 provides a listing of the participants.

The applicant had an opportunity to comment on this summary.

Michael J. Wentzel, Project Manager
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: Listserv

The applicant had an opportunity to comment on this summary.

Michael J. Wentzel, Project Manager
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: Listserv

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DATE				
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NAME	BWittick	MWentzel		

DATE		
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TELEPHONE CONFERENCE CALL
DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION
LIST OF PARTICIPANTS
MARCH 4, 2015

PARTICIPANTS:

Yaira Diaz
Yosef Lindell
Rick Plasse
Michael Wentzel
Brian Wittick
Al Bates
Terry Grebel
Jerl Strickland

AFFILIATIONS:

U.S. Nuclear Regulatory Commission (NRC)
NRC
NRC
NRC
NRC
Pacific Gas and Electric Company (PG&E)
PG&E
PG&E

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON MARCH 4, 2015,
BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC
GAS AND ELECTRIC COMPANY CONCERNING THE DIABLO CANYON
POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION

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NO'Keefe, RIV

DMcIntyre, OPA

VDricks, OPA

WMaier, RIV

JWeil, OCA

RRihm, EDO

From: Wentzel, Michael
Sent: Thursday, October 08, 2015 12:17 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Draft RAIs for the DCP SAMA Review
Attachments: Requests for Additional Information Related to the Diablo Canyon LRA Environmental Review - SAMA.docx

Terry,

Attached is a draft of the SAMA RAI letter. Once you had a chance to review, please let me know if you would like to have a phone call to clarify.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

**SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION RELATED TO THE
ENVIRONMENTAL REVIEW OF THE DIABLO CANYON POWER PLANT,
UNITS 1 AND 2 LICENSE RENEWAL APPLICATION – SEVERE ACCIDENT
MITIGATION ALTERNATIVES (TAC NOS. MF4019 AND MF4020)**

Dear Mr. Halpin:

On November 23, 2009, Pacific Gas & Electric Company (PG&E) submitted an application pursuant to Title 10 of the *Code of Federal Regulations* (CFR) Part 54 to the U.S. Nuclear Regulatory Commission (NRC) for renewal of operating licenses DPR-80 and DPR-82 for Diablo Canyon Power Plant (DCPP), Units 1 and 2. In accordance with 10 CFR Part 51, PG&E submitted an environmental report as an appendix to the license renewal application for DCPP. On December 22, 2014, and February 25, 2015, PG&E amended its environmental report to incorporate additional information necessary for the NRC staff to complete its review of the DCPP license renewal application. The staff is reviewing the information contained in the environmental report, as amended, and has identified in the enclosure, areas where additional information is needed to complete the review.

These requests for additional information were discussed with Terry Grebel and a mutually agreeable date to respond is within 30 days from the date of this letter. If you have any questions, please contact me at (301) 415-6459, or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323
Enclosure: As stated
cc w/encl: Listserv

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION RELATED TO THE
ENVIRONMENTAL REVIEW OF THE DIABLO CANYON POWER PLANT,
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These requests for additional information were discussed with Terry Grebel and a mutually agreeable date to respond is within 30 days from the date of this letter. If you have any questions, please contact me at (301) 415-6459, or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323
Enclosure: As stated
cc w/encl: Listserv

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ADAMS Accession No.:

*concurrence via email

OFFICE	LA:DLR*	PM:RPB2:DLR	BC:RPB2:DLR	PM:RPB2:DLR
NAME		MWentzel	JDanna	MWentzel
DATE				

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Letter from M. Wentzel to E. Halpin dated XXXX

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION RELATED TO THE
ENVIRONMENTAL REVIEW OF THE DIABLO CANYON POWER PLANT,
UNITS 1 AND 2 LICENSE RENEWAL APPLICATION – SEVERE ACCIDENT
MITIGATION ALTERNATIVES (TAC NOS. MF4019 AND MF4020)

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THipschman, SRI

JReynoso, RI

GMiller, RIV

DMcIntyre, OPA

LUselding, OPA

WMaier, RIV

AMoreno, OCA

**DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION ENVIRONMENTAL REVIEW
REQUESTS FOR ADDITIONAL INFORMATION**

SEVERE ACCIDENT MITIGATION ALTERNATIVES

1. Provide the following information regarding the Level 1 Probabilistic Risk Assessment (PRA) used for the Severe Accident Mitigation Alternative (SAMA) analysis. Basis: Applicants for license renewal are required by Title 10 of the *Code of Federal Regulations* (10 CFR) 51.53(c)(3)(ii)(L) to consider SAMAs if not previously considered in an environmental impact assessment, related supplement, or environmental assessment for the plant. As part of its review of the Diablo Canyon Power Plant (DCPP) SAMA analysis, the U.S. Nuclear Regulatory Commission (NRC) staff is evaluating Pacific Gas and Electric's (PG&E's) treatment of internal events and calculation of core damage frequency (CDF) in the Level 1 Probabilistic Risk Assessment (PRA) model. The requested information is needed in order for the NRC staff to reach a conclusion on the sufficiency of PG&E's Level 1 PRA model for supporting the SAMA evaluation.

- a. Environmental Report (ER), Amendment 2, Section F.2 (p. F-12) states

"The CDF values for the models presented in Section F.2.1 are all point estimate values. The evaluation of base case benefits was based on point estimate values."

The CDF values given for a number of the PRA models in subsequent subsections (F.2.1.6, p. F-23; F.2.1.7, p. F-26; F.2.1.8, p. F-29; F.2.1.9, p. F-32; and F.2.1.10, p. F-36) are indicated to be mean values. Please clarify.

- b. Section F.2.1 of the ER describes the shared systems and/or the systems that can be cross-tied between Units 1 and 2. Discuss the treatment of the unavailability of Unit 2 components due to test, maintenance and refueling in the Unit 1 model. Discuss the potential for and the modeling of initiating events that can impact both Units 1 and 2.
- c. Section F.2.1.10 of the ER indicates that the DC03 Fire PRA includes the Westinghouse low leakage shutdown seals and an upgrade of the hot shutdown panel that are to be implemented in the future. Table 4 of PG&E Letter DCL -15-080 (p. 34) indicates that while the fire portion of the DC03SA model, and some steam generator tube rupture (SGTR) scenarios, include credit for the planned installation of the shutdown seals at DCPP, the seals are not credited in the DC03SA internal events model. Provide the status of the hot shutdown panel in all of the DC03SA models and of the low leakage seals in the internal flooding and seismic models, particularly with respect to the SGTR scenarios. Describe the differences between the current and new seals and the features of the hot shutdown panel upgrade and their qualitative impact on the PRA models, the identification and scope of relevant potential SAMAs, and the SAMA cost-benefit analysis.
- d. The original 2009 SAMA analysis submittal and responses to NRC staff request for additional information (RAIs) were based on PRA models DC01A and DC01B. These two models are not described in Section F.2.1 of the ER, but the seismic initiating event

ENCLOSURE

frequencies are cited in the discussion of the DC03 interim model. Briefly discuss these models. Also, clarify any differences between the descriptions and/or results provided in the 2009/2010 submittals and the current models, such as the statement in the 2009 ER Section F.2.1.9 that the charging pumps were replaced with centrifugal pumps, which is not mentioned in the current submittal.

- e. The initiating event contributors to the internal events CDF shown in Figure F.2-1 do not include loss of offsite power (LOOP). Provide the CDF due to LOOP initiators. If included in the "others" category (which would appear to indicate that LOOP contributes less than 2% to the total internal events CDF), explain why it is so low. Note that the 2010 SAMA analysis indicated that the CDF due to grid-related LOOP was $8.9\text{E-}07/\text{year}$ which corresponds to 8% of the current internal events CDF (excluding internal flooding).
- f. Provide the station blackout (SBO) and anticipated transient without scram (ATWS) contributions to the internal events and internal flooding CDFs for the DCP PRA used for the SAMA analysis
- g. Provide the "freeze date" or the date which corresponds to the DCP P design and operation incorporated into the DCP P PRA used for the SAMA analysis. Identify any design or operational (including fuel cycle) changes that have or, are planned, since this freeze date that might impact the SAMA analysis.
- h. The discussion in Section F.2.3.1 (p. F-47) of the ER regarding the PRA maintenance and update procedures states:

"These procedures delineate the responsibilities and guidelines for updating the full power internal events PRA models at the Diablo Canyon Power Plant."

Although guidelines for full power, internal and external events are mentioned, it is not clear whether these are included in the cited procedures or other documentation. Clarify the applicability of the cited procedures to other than internal events PRA models and if not applicable, identify the procedures that are applicable.

- i. Section F.3.2.2 (p. F-48) lists the dates of the peer reviews of the various DCP P PRAs. Identify the specific model revisions listed in Section 2.1 reviewed by each of the peer reviews, the scope of each review and the number of findings and Facts and Observations (F&Os) for each peer review. If the PRA model reviewed is not described in Section 2.1, provide the CDF and large early release frequency (LERF) for the model reviewed and how the model differs from the prior model.
- j. Confirm that no changes have been made to the DCP P PRA model used in the SAMA analysis since the Peer Reviews that would constitute an upgrade as defined by ASME/ANS RA-Sa-2009, as endorsed by Regulatory Guide (RG) 1.200, Revision 2.
- k. Section F.2.3.5 of the ER, Conclusion Regarding PRA Capability for SAMA Identification and Evaluation, discusses and concludes that the DCP P PRA Model DC03 results are suitable for use as a resource in the SAMA identification process. Clarify why the discussion and conclusions does not address the suitability for the SAMA cost-benefit evaluation process.

- I. With regard to ER, Amendment 2, Addendum 1:
 - i. For the first item "Internal flooding -NRC IN 98-31 ISER 3-98, A0468801" confirm that this has not been closed in the DC02 update of internal flooding and if not provide more information on the basis for the conclusion that no direct impact on the current model is anticipated.
 - ii. For the fourth item, "Address anchorage of relay panels in cable spreading rooms," confirm that the requested analysis has been performed or otherwise justify that this is only a documentation issue.
 - iii. For the fifth item, "Address potential for d/g lockout from cardox," provide the basis for the conclusion that the impact of this issue is expected to be minor.
 - m. The figures in ER Amendment 2 presenting the contributors to the internal fire and internal flood CDF and LERF (Figures F.2-5 through F.2-8) indicate that the contributions are by initiating event. Confirm that the contributions are by initiating event rather than fire or flood zone or if not, provide the correct description. Also, note that in Figure F.2-5, the contribution from 3BB115, while included in the figure itself, it is not included in the description table. Please add this to the table.
2. Provide the following information relative to the Level 2 PRA analysis. Basis: Applicants for license renewal are required by 10 CFR 51.53(c)(3)(ii)(L) to consider SAMAs if not previously considered in an environmental impact assessment, related supplement, or environmental assessment for the plant. As part of its review of the DCPRA SAMA analysis, the NRC staff is evaluating PG&E's treatment of accident propagation and radionuclide release in the Level 2 PRA model. The requested information is needed in order for the NRC staff to reach a conclusion on the adequacy of PG&E's Level 2 PRA model for supporting the SAMA evaluation.
- a. Section F.2.2 of the ER describes the Level 1 to Level 2 mapping and the need for plant damage states (PDSs) and key plant damage states (KPDSs). Is the transfer of information from Level 1 to Level 2 transferred directly in the logic models or are the numerical PDS frequency results of the Level 1 analysis added and input into the Level 2 analysis (the containment event trees (CETs)) as a frequency?
 - b. Section F.2.2.3 of the ER discusses the development of the KPDSs and Table F.2-3. This table presents the ranking of PDSs based on PRA model DCPRA-1991 and states that "the relative ranking of PDSs and therefore the definition of KPDSs is not expected to change significantly from DCPRA-1991 to DC03." Provide further support for the final statement and discuss the role of relative ranking in the definition of KPDSs. Discuss if all plant damage states (PDSs) that result from the Level 1 analysis are assigned to a KPDS or if some are grouped together as a remainder group and if so how is the remainder considered in the Level 2 analysis.
 - c. The discussion of release category binning in Section F.2.2.4.1 of the ER includes the statement:

"For early-small containment failures, the medium pressure sequences are binned with the high pressure sequences because containment pressures may be greater later in the event and high RCS retention then becomes a liability."

Table F.2-5 indicates that for small early release categories, the medium pressure sequences are binned with the low pressure sequences. In addition, Table F.3-11 of the ER describes the Modular Accident Analysis Program (MAAP) case RC16U as low pressure core melt while the description of the small early release category in Section F.2.2.4.2 states "Other cases within this release category group would either have medium to low RCS pressure..." Explain this binning and the selection of the representative MAAP case for the small early release category.

- d. Table F.3-11 of the ER identifies the representative MAAP case for ST3 as RC10 and describes it to include "CS OK". RC10 is indicated in Table F.2-5 to not have containment sprays available. The Section F.2.2.4.2 description of ST3 indicates that containment fails due to prolonged core-concrete interaction, while RC10 is indicated to have coolable debris. Please clarify.
- e. Section F.2.2.4.2 of the ER provides a discussion of assigning non-isolated steam generator tube rupture (SGTRN) with Auxiliary Feedwater (AFW) success to the interfacing system loss of cooling accident (ISLOCA) release category. Provide a further discussion of these sequences and the basis for this assignment. The discussion includes the statement "RC18 was reviewed to see if there are any sequences with AFW successful that should be allocated to the Containment Bypass group. None were found." Since RC18 is composed of ISLOCAs it is not clear why AFW availability is relevant. Explain.
- f. Table F.2-7 of the ER gives the frequency of RC17 as $3.59\text{E-}06/\text{year}$ and the frequency of RC18 as $1.28\text{E-}08/\text{year}$. Fifty percent of RC17 yields $1.79\text{E-}06/\text{year}$ for the frequency of ST4, in agreement with the frequency for ST4 in Table F.3-13. Fifty percent of RC17 added to the above value for RC18 yields $1.8\text{E-}06/\text{year}$ which is different from the value for ST5 given in Table F.3-13 of $2.97\text{E-}06/\text{year}$. Explain this difference and describe the basis for the 50 percent value.
- g. Provide an updated version of Table F.2-7 of the ER based on the results of the DC03SA PRA.
- h. Table F.3-11 of the ER provides the MAAP run times for each of the release category source term cases. Justify that the source term release fractions from these run durations represents the maximum release whenever the run end time is less than 48 hours after the declaration of general emergency.
- i. It is noted that the sum of DC03 model release categories ST1 and ST5, both leading to a large early release, is $1.02\text{E-}05$ per year while the quoted value for LERF for unit 1 is $1.20\text{E-}05$ per year. Explain the reasons for the difference. If this is due to Level 2 model changes compared to a LERF only model, describe the changes from the peer reviewed LERF model to the current full Level 2 model.

- j. Provide a discussion of the development of the Level 2 model, particularly the CETs, the basis for the CET split fractions, and updates since the Individual Plant Examination (IPE) to represent the current state of the art.
3. Provide the following information with regard to the treatment and inclusion of external events in the SAMA analysis. Basis: Applicants for license renewal are required by 10 CFR 51.53(c)(3)(ii)(L) to consider SAMAs if not previously considered in an environmental impact assessment, related supplement, or environmental assessment for the plant. As part of its review of the DCPD SAMA analysis, the NRC staff is evaluating PG&E's treatment of external events in the PRA models. The requested information is needed in order for the NRC staff to reach a conclusion on the sufficiency of PG&E's PRA models for supporting the SAMA evaluation.
 - a. Provide the total seismic CDF and LERF for the DC03SA model and the contribution to the seismic CDF by initiating event. Include the contribution from the new initiating event for ground motion accelerations greater than 4.0g for both the DC03 as well as DC03SA models.
 - b. Section F.2.3.2 of the ER indicates that a peer review of the seismic events model was conducted in January 2013 and states:

"The update of the seismic fragilities of PRA SSCs is currently in progress. Once the update is completed in 2015, the seismic F&Os will be resolved followed by the update of the Seismic model."

Page 1 of the PG&E Letter DCL-15-080 submittal states

"The DC03SA model uses the same fragilities as the DC03 model. The Long Term Seismic Program (LTSP) fragility curves are acceptable for use in DC03SA because no scaling is necessary for use with the updated hazard spectral information from the March 2015 50.54(f) response."

- i. The first statement indicates that changes to seismic fragilities were being made subsequent to the DC03 (interim) model, yet the second statement indicates that no changes were made from those used in the LTSP. Explain.
- ii. The first statement implies that the only seismic F&Os unresolved involve the seismic fragilities. Confirm that all the findings from the 2013 peer review have been resolved.
- iii. Page 1 of the PG&E Letter DCL-15-080 submittal provides a comparison of the LTSP uniform hazard spectrum with the updated spectral information indicating that in one frequency range the shapes may differ by plus or minus 14%. Provide an additional discussion of this comparison and of the potential impact of a 14% difference in spectral shapes on seismic risk in general and the SAMA analysis in particular.
- iv. The PG&E Letter DCL-15-080 discussion indicates that at other hazard levels relevant to the PRA model (1E-03 to 1E-05) the shape does not differ significantly

from the shape at 1E-04 hazard level. Since the new (greater than 4.0 g) seismic initiating event has a frequency on the order of 1E-06, are the conclusions in the ER concerning the spectral shape at this lower hazard level?

- c. Provide a further description of the development of the fire PRA used for the SAMA analysis, including its relationship to the Individual Plant Examination – External Events (IPEEE) model and the model revision(s) that incorporated the guidance of NUREG/CR-6850.
- d. Discuss the inclusion in the fire PRA used in the SAMA analysis of the changes resulting from and/or required by the NRC review of transition to NFPA 805 application. If not included, provide the CDF and LERF results by hazard class from PG&E's response to the NFPA 805 transition integrated analysis RAI and discuss the reasons for any differences in results between the models and their impact on the SAMA analysis.
- e. PG&E's flood hazard evaluation of March 11, 2015 in response to the 10 CFR 50.54(f) request includes in Section 3.6.4.2 the statement

"Based on the above assumptions, the probability of a large marine vessel arriving at the DCPD breakwater and impacting the intake structure was determined to be 3.1E-05 events per year."

Provide support for the continued use of the IPEEE ship impact CDF considering the 3.1E-05 events per year value given in the flood hazards report and/or an updated value of CDF that is appropriate for the conditions associated with flood hazard impact frequency. Discuss the effect of any changes in the ship impact CDF value on the results of the SAMA analysis.

- 4. Provide the following information relative to the Level 3 PRA analysis. Basis: Applicants for license renewal are required by 10 CFR 51.53(c)(3)(ii)(L) to consider SAMAs if not previously considered in an environmental impact assessment, related supplement, or environmental assessment for the plant. As part of its review of the DCPD SAMA analysis, the NRC staff is evaluating PG&E's analysis of consequences in the Level 3 PRA model. The requested information is needed in order for the NRC staff to reach a conclusion on the acceptability of PG&E's Level 3 PRA model for supporting the SAMA evaluation.
 - a. In Section F.3.1 of the ER, it is stated that "The MACCS2 code is being used in a slightly updated fashion ..." Clarify what is meant by 'updated fashion'.
 - b. In Section F.3.1 of the ER, uncertainty is discussed. Briefly describe/expand why the mean consequence is expected to be minor (e.g., there are no single contributing effects that could significantly impact the mean).
 - c. In Section F.3.2 of the ER, it is stated that "Individual growth rates were calculated for each grid element based on the county growth rate and the proportion of land in each grid element associated with the applicable counties." Clarify that this is the county population averaged over the county area, and the population is then partitioned to the spatial elements by the land fraction? Also, address whether there were any high

population density regions near the edges of a spatial element that could distort the spatial assessment.

- d. In Section F.3.2 of the ER, it is stated that projected populations were obtained from the California Department of Finance. Identify the date the data was accessed. Also, confirm that the population projections were taken directly from the California Department of Finance projections and not separately estimated by PG&E.
 - e. In Section F.3.3 of the ER, clarify what is the "year 2012 CPI"?
 - f. In Sections F.3.5 and F.4.5 of the ER, the original SAMA analysis used an electrical net power output of 1138 megawatt electric (MWe) and thermal output of 3411 megawatt thermal (MWt). The current SAMA analysis uses an electrical net power output of 1180 MWe and thermal output of 3411 MWt. Discuss why the thermal power is not increased with the increased electrical output. If the thermal power should be increased, address the potential impact on the core inventory and the SAMA analysis results.
 - g. In Section F.3.6 of the ER, it is stated that "An additional 15 minutes is added to the ETE evacuation times to account for processing time by offsite officials." Briefly describe the processing required by offsite officials.
5. Provide the following information with regard to the selection and screening of Phase I SAMA candidates. Basis: Applicants for license renewal are required by 10 CFR 51.53(c)(3)(ii)(L) to consider SAMAs if not previously considered in an environmental impact assessment, related supplement, or environmental assessment for the plant. As part of its review of the DCPD SAMA analysis, NRC staff is evaluating PG&E's basis for the selection and screening Phase I SAMA candidates. The requested information is needed in order for the NRC staff to reach a conclusion on the adequacy of PG&E's Phase I SAMA selection and screening process for the SAMA evaluation.
- a. Section F.5.1.2 of the ER indicates that the types of strategies called for in the DCPD Severe Accident Mitigation Guidelines to mitigate and recover from severe accidents are not included as SAMAs because they are already implemented at the site. Discuss if credit for these strategies is included in the current DCPD PRA model (DC03SA).
 - b. Review of Importance analysis
 - i. In a number of the discussions of potential SAMAs from review of importance lists, phrases such as "In most of the scenarios...", "The significant sequences..." or "Some of the larger contributors..." are used. Discuss in general terms what is meant by these phrases and the possibility of identifying potential SAMAs from the portion of the event impact that is not included in "most of the scenarios," "the significant sequences" or "some of the larger contributors."
 - ii. For events PRB1A and PRC1A (PG&E Letter DCL-15-080, Table 4, pp. 10 and 19), both involving fire induced loss of cooling accidents (LOCAs), would additional fire barriers be a feasible SAMA to limit the impact of the relevant fires?

- iii. For event RF3Z (PG&E Letter DCL-15-080, Table 4, p. 12), Fire: switchover to recirculation after SLOCA degraded instrumentation, SAMA 7 to automate the swap is proposed. Discuss if the fire procedures provide guidance specific to these fires and if they do not, the potential for developing these procedures as a viable alternative SAMA.
- iv. SAMA 9, identified to mitigate event AW4, support for both motor-driven (MD) pumps unavailable (PG&E Letter DCL-15-080, Table 4, p. 14), includes spray barriers to protect the turbine-driven (TD) AFW pump as well as MD pumps that can operate submerged. Discuss the potential and effectiveness for a SAMA that would only include the TD pump spray barriers.
- v. SAMA 11, to install a swing Residual Heat Removal (RHR) pump, is proposed to mitigate events LA1 and LB2 (PG&E Letter DCL-15-080, Table 4, pp. 15 and 16), involving failure of RHR pumps to start and run which results in loss of recirculation capability and containment heat removal. Consider improvements in the feed and bleed capability and other, less expensive means for providing containment heat removal capability.
- vi. SAMAs 2 and 18, both involving engine driven pumps, are identified to mitigate fire induced failures of 4 kV Bus F (event AZAF3, PG&E Letter DCL-15-080, Table 4, p. 16). Discuss the potential for SAMAs to directly impact the causes or severity of the relevant fires.
- vii. For event AWFZ (PG&E Letter DCL-15-080, Table 4, p. 18), no support for AFWP2, AFWP3 and fire impacts AFWP1, discuss the potential for additional fire barriers as a SAMA to limit the impact of the relevant fires.
- viii. For events SDS1, reactor coolant pump (RCP) shutdown seals fail to actuate (PG&E Letter DCL -15-080, Table 4, p.23), SAMA 18, consisting of engine driven high pressure RCS and steam generator (SG) injection pumps is evaluated. For event SPCET3 (PG&E Letter DCL-15-080, Table 5, p. 35), RCP seal cooling unavailable, SAMA 2, an engine driven SG injection pump is evaluated. Consider a SAMA that provides only alternative seal cooling for mitigating both of these events.
- ix. Event OR1 (PG&E Letter DCL-15-080, Table 4, p.23), operator cooldown and depressurize RCS, indicated to be associated with SGTRs combined with failure to isolate the ruptured SG, and Event OX1 (Table 5, p. 36), operator decides to isolate the ruptured SG, are both mitigated by SAMA 19 to install primary side SG isolation valves. Consider a SAMA for improving the procedures and training or automating the ruptured SG isolation function.
- x. The top contributor to Event CD1FL (PG&E Letter DCL-15-080, Table 4, p. 31) is described as a flood sequence from reactor water storage tanks (RWST) breaks in the fuel handling building. SAMA 18, portable engine driven high-pressure RCS and SG injection pumps, is identified to mitigate this event. Consider the potential for alternative SAMAs involving use of flood barriers and alternate supplies to make up for the loss of RWST.

- xi. The top contributors to Event GXH (PG&E Letter DCL-15-080, Table 5, p. 48) are described as flooding events in the AFW rooms. Consider the potential for flood barriers to mitigate these floods.
 - c. The discussion in Section F.5.1.3.7 of Grand Gulf SAMA 59 indicates that, except for the third non-safety centrifugal charging pump, high head injection and low pressure pumps are dependent on the component cooling water (CCW) system. Also Figure F.2-1 indicates that loss of the CCW leads to 13 percent of the internal events CDF. Consider a SAMA similar to Grand Gulf's SAMA 59, Increase operator training for alternating operation of the injection and low pressure pumps for loss of CCW scenarios in addition to the alternate means described for DCP.
 - d. For SAMA 10, provide an alternate DC generator, discuss the availability of such a generator as part of other programs such as B.5.b and Diverse and Flexible Coping Capability (FLEX).
 - e. For a number of the Phase I SAMAs included in Table F.5-3, the statement "This SAMA is addressed by elements of the DCP FLEX strategy." Discuss the implications of this relative to the inclusion of credit for this in the DCP PRA, the cost of and further consideration of the associated SAMAs.
 - f. The table in Section F.5.1.7 (page F-91) uses the term "site" in the column headings. Explain the use of "site" in this table.
6. Provide the following information with regard to the Phase II cost-benefit evaluations. Basis: Applicants for license renewal are required by 10 CFR 51.53(c)(3)(ii)(L) to consider SAMAs if not previously considered in an environmental impact assessment, related supplement, or environmental assessment for the plant. As part of its review of the DCP SAMA analysis, the NRC staff is evaluating PG&E's cost-benefit analysis of Phase II SAMAs. The requested information is needed in order for the NRC staff to reach a conclusion on the acceptability of PG&E's cost estimations for individual SAMAs and cost-benefit evaluation.
- a. Provide further information regarding the RISKMAN software quantification options mentioned on page 4 of PG&E Letter DCL-15-080, including the option originally used for SAMAs 2, 9, 10 and 12 and the option used in the updated results.
 - b. PG&E Letter DCL-15-080, describes a revised evaluation of the benefit of SAMA 8 "Protect RHR cables in fire areas 6-A-2 and 6-A-3." It is understood that the revised evaluation eliminates credit taken in the original evaluation for preventing damage to equipment not protected by SAMA 8. It is noted that the revised evaluation appears to include additional fire impact deletions from the base case model (changes to ELECPWR and FELECPWR) than the original analysis. This would be expected to increase rather than decrease the averted cost-risk. Provide a further discussion of the revised evaluation including the differences in model changes that lead to the reduced credit.
 - c. Section F.6.3 of the ER indicates that SAMA 5 reduces the CDF by 0.7 percent. This SAMA is identified in Table F.5-1 (p. F-178) to mitigate Event ZTDPHD which has a risk

reduction worth (RRW) of 1.05. Since this RRW corresponds to a CDF reduction of approximately 5%, SAMA 5 would appear to not be very effective in mitigating this event. Discuss the reasons for this benefit quantification result and the potential for more effective SAMAs for this event.

- d. The evaluation of SAMA 9 in Section F.7.2.1.4 (p. F-119) of the ER indicates that protecting the pumps is simulated by removing the fire initiators from the impacted areas. Discuss how this simulates providing spray barriers and waterproof pumps. If this is due to flooding due to fire protection system initiation in response to a fire, discuss the potential for flooding due to fire protection system ruptures in these areas.
- e. Section F.7.4 of the ER states "In order to assess the impact on the Phase 2 screening, the truncated frequency was assumed to be proportional to the CDF, and for each SAMA quantification, the truncated frequency was likewise binned to the ST5 release category." Provide further information on this process including the assumed reduction in ST5 release category frequency caused by a SAMA. Illustrate with a numerical example.
- f. As indicated in ER, Amendment 2, Section 4.20, the original SAMA found that when the 95th percentile PRA results were considered, SAMAs 12, 13, 24, and 25 were potentially cost beneficial. These original analysis SAMAs are:
 - SAMA 12: Improve fire barriers for auxiliary saltwater and component cooling water equipment in the Cable Spreading Room
 - SAMA 13: Improve cable wrap for the power operated relief valves in the Cable Spreading Room
 - SAMA 24: Prevent clearing of reactor coolant system Cold Leg Water Seals
 - SAMA 25: Fill or maintain filled the Steam Generators to scrub fission products

Discuss the current relevance of these SAMAs and their potential for being cost-beneficial in the updated analysis. If appropriate, identify plant or modeling changes that made these SAMAs no longer applicable.

- g. Section F.6 of the ER states that plant personnel developed DCPD-specific implementation cost estimates for each of the SAMAs. Address the following:
 - i. Provide a description of: the process PG&E used to develop the SAMA implementation costs, the level of detail used to develop the cost estimates (e.g., general cost categories such as hardware design, procurement, installation, and testing, as well as procedure development, quality assurance and licensing support, etc.), and how the calculations are documented.
 - ii. Provide the details of the cost estimates for SAMAs 5, 10, 12, and 22.
7. For certain SAMAs considered in the DCPD Environmental Report, there may be lower cost or more effective alternatives that could achieve much of the risk reduction. In this regard,

provide an evaluation of the following SAMAs. Basis: Applicants for license renewal are required by 10 CFR 51.53(c)(3)(ii)(L) to consider SAMAs if not previously considered in an environmental impact assessment, related supplement, or environmental assessment for the plant. As part of its review of the DCCP SAMA analysis, the NRC staff is evaluating additional SAMAs that may be more effective or have lower implementation costs than the SAMAs evaluated by PG&E. The requested information is needed in order for the NRC staff to reach a conclusion on the adequacy of PG&E's determination of cost-beneficial SAMAs.

- a. For SAMA 1, install a Minimum CCW Cooling Flow Line around the RHR Heat Exchanger Outlet Valve, consider a modification to the outlet valve internals to allow a minimum CCW flow even when the valve is closed.
- b. SAMA 2, provide an engine-driven SG makeup pump, is proposed to mitigate event AWR1, Failure to supply water from fire water storage tank or raw water reservoir (non-seismic). This SAMA is screened in Phase I as having a cost well in excess of Maximum Averted Cost-Risk (MACR). Discuss the potential for less expensive SAMAs such as procedure changes, automating the backup water supply or increasing the capacity of the condensate storage tank (CST).
- c. SAMA 4, provide a seismically qualified response system, is proposed to mitigate a number of sequences involving seismic Alternating Current (AC) and/or Direct Current (DC) system failures. Consider the potential for strengthening the weakest link in these systems to provide at least one source of AC and/or DC power at a considerably lower cost than SAMA 4.
- d. SAMAs 9 and 17, install spray barriers to protect the TD AFW pump and install a waterproof AFW pump, and install flood sensors are proposed to mitigate fire protection system pipe breaks. As a low cost alternative for flooding in general, discuss the potential for using mobile sump pumps (including hose/pipes and power supplies).

From: Wentzel, Michael
Sent: Wednesday, August 19, 2015 2:12 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Draft SAMA Audit Needs List
Attachments: LR Env Site SAMA Audit Regarding DCCP, Units 1 and 2-DRAFT.docx

Terry,

Attached is a draft of the audit needs letter for the September SAMA audit. Please note that some items may change as the letter makes its way through the concurrence process. I will let you know if there are any substantive changes (e.g., additions, deletions, etc.) made to the list.

For your awareness, I will have a draft of the environmental audit needs to share with you next week.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
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**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

**SUBJECT: LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT REGARDING DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 – SEVERE ACCIDENT
MITIGATION ALTERNATIVES (TAC NOS. MF4019 AND MF4020)**

Dear Mr. Halpin:

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing Pacific Gas and Electric Company's license renewal application for Diablo Canyon Power Plant, Units 1 and 2. The environmental site audit for the severe accident mitigation alternatives review will be conducted at Diablo Canyon Power Plant, Units 1 and 2, during the week of September 21, 2015, by NRC staff and its contractors. The environmental audit activities will be conducted in accordance with the environmental audit plan (Enclosure 1).

To develop the Supplemental Environmental Impact Statement, the NRC staff requests the information described in the environmental audit needs list (Enclosure 2) be made available, to the extent possible, during the environmental site audit. The NRC staff informally transmitted this information to your staff (Terry Grebel) by e-mail on August 19, 2015.

If you have any questions, please contact me by telephone at 301-415-6459, or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323
Enclosure: As stated
cc w/encl: Listserv

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

**SUBJECT: LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT REGARDING DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 – SEVERE ACCIDENT
MITIGATION ALTERNATIVES (TAC NOS. MF4019 AND MF4020)**

Dear Mr. Halpin:

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing Pacific Gas and Electric Company's license renewal application for Diablo Canyon Power Plant, Units 1 and 2. The environmental site audit for the severe accident mitigation alternatives review will be conducted at Diablo Canyon Power Plant, Units 1 and 2, during the week of September 21, 2015, by NRC staff and its contractors. The environmental audit activities will be conducted in accordance with the environmental audit plan (Enclosure 1).

To develop the Supplemental Environmental Impact Statement, the NRC staff requests the information described in the environmental audit needs list (Enclosure 2) be made available, to the extent possible, during the environmental site audit. The NRC staff informally transmitted this information to your staff (Terry Grebel) by e-mail on August 19, 2015.

If you have any questions, please contact me by telephone at 301-415-6459, or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323
Enclosure: As stated
cc w/encl: Listserv
DISTRIBUTION: See next page

ADAMS Accession No.:

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NAME		MWentzel	UShoop		JDanna	MWentzel
DATE						

OFFICIAL RECORD COPY

Letter from M. Wentzel to E. Halpin dated XXXX

SUBJECT: LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT REGARDING DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 – SEVERE ACCIDENT
MITIGATION ALTERNATIVES (TAC NOS. MF4019 AND MF4020)

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MWaters, EDO

**LICENSE RENEWAL ENVIRONMENTAL AUDIT PLAN
SEVERE ACCIDENT MITIGATION ALTERNATIVES
DIABLO CANYON POWER PLANT, UNITS 1 AND 2**

1. Background

By letter dated November 24, 2009, Pacific Gas and Electric Company (PG&E or applicant) submitted to the U.S. Nuclear Regulatory Commission (NRC) an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54 (10 CFR Part 54) to renew the operating licenses for Diablo Canyon Power Plant, Units 1 and 2 (DCPP). In accordance with the requirements of 10 CFR Part 51, the NRC staff is reviewing the information contained in the environmental report (ER) submitted in conjunction with the license renewal application (LRA).

As part of its review of the ER, the NRC staff's will perform an environmental audit in San Luis Obispo. The purpose of this audit is to gain understanding, to verify information, and to identify information pertaining to the review of severe accident mitigation alternatives (SAMAs) that will require docketing to support the basis of the licensing or regulatory decision. Specifically, the NRC staff will identify pertinent data and obtain clarifications regarding information provided in the ER.

Per NRC guidance, the NRC staff prepares a regulatory audit plan that provides a clear overview of audit activities, scope, and team assignments.

2. Environmental Audit Bases

License renewal requirements are specified in 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." Licensees are required by 10 CFR 54.23 to submit an ER that complies with the requirements in 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," as part of the LRA. Review guidance for the NRC staff is provided in NUREG-1555, "Standard Review Plans for Environmental Reviews for Nuclear Power Plants: Supplement 1 – Operating License Renewal."

The NRC staff is required to prepare a site-specific supplement to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants." During the scoping process required in 10 CFR Part 51, the NRC staff is required to define the proposed action, identify significant issues which must be studied in depth, and to identify those issues that can be eliminated from further study.

3. Environmental Audit Scope

The scope of this environmental audit for the DCPP license renewal review is to discuss NRC staff's specific questions regarding the SAMA analysis and results documented in ER. Audit team members will focus on reviewing the documents and requested information listed in the Environmental Audit Needs List (Enclosure 2) and discussing the information with PG&E's subject matter experts. Additional questions may develop during the audit.

4. Information and Other Material Necessary for the Environmental Audit

As described in the Environmental Audit Needs List (Enclosure 2).

ENCLOSURE 1

5. Tentative Team Assignments Area of Review Assigned Auditor

The environmental audit team members for the SAMA review are shown in Table 1. Those members of the team who are contractors from Pacific Northwest National Laboratory will have PNNL after their name.

Table 1 Environmental Audit Team Members and Resource Assignments

Discipline	Team Members
Environmental Project Manager	Michael Wentzel, NRC
SAMA	Jerry Dozier, NRC Bob Schmidt, PNNL Bruce Schmidt, PNNL

6. Logistics

The environmental audit for SAMA will be conducted in San Luis Obispo from September 21-23, 2015. An entrance meeting will be held with plant management at the beginning of the audit. An exit meeting will be held at the end of this audit.

7. Special Requests

The staff requests the applicant make available the information identified on the Environmental Audit Needs List (Enclosure 2). Additionally, staff request to interview knowledgeable PG&E staff or contractors on Levels 1, 2, and 3 probabilistic risk assessment (PRA) developments and results, as well as SAMA identification and evaluation. The interviews will discuss the information on the Environmental Audit Needs List (Enclosure 2) and any other questions that may arise from the review of material at the onsite audit.

8. Deliverables

An audit summary report is scheduled to be issued by NRC staff within 90 days from the end of the environmental audit.

**DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT NEEDS LIST
SEVERE ACCIDENT MITIGATION ALTERNATIVES**

Please be prepared to discuss the following issues and make the following available during the environmental site audit.

Provide copies of the following documents for the NRC staff to review:

1. The most recent PRA Peer Review and/or self-assessment reports for all hazards.
2. Documentation associated with other more recent reviews particularly of the Level 2 or and 3 PRAs for Diablo Canyon Power Plant (DCPP).
3. Supporting documentation for the core inventory calculation.
4. Windows based Methods for Estimation of Leakages and Consequences of Releases (MELCOR) Accident Consequence Code System (WinMACCS) calculation documentation.

SAMA Audit Questions:

1. Level 1 PRA

a. Section F.2 (p. F-12) states

"The CDF values for the models presented in Section F.2.1 are all point estimate values. The evaluation of base case benefits was based on point estimate values."

The CDF values given for a number of the PRA models in subsequent subsections (F.2.1.6, p. F-23; F.2.1.7, p. F-26; F.2.1.8, p. F-29; F.2.1.9, p. F-32; and F.2.1.10, p. F-36) are indicated to be mean values. Please clarify. (Note that a similar question was asked and responded to in PG&E letter of 8/27/2010, Request for additional information (RAI) 1.n)

b. Section F.2.1 describes the shared systems and/or the systems that can be cross-tied between Units 1 and 2. Discuss the treatment of the unavailability of Unit 2 components due to test, maintenance and refueling in the Unit 1 model. Discuss the potential for and the modeling of initiating events that can impact both units 1 and 2. (Note that this was answered in the 8/27/2010 and the 12/6/2010 PG&E responses to RAI 1.f.)

c. Section F.2.1.10 indicates that the DC03 Fire PRA includes the Westinghouse low leakage shutdown seals and an upgrade of the hot shutdown panel that are to be implemented in the future. Table 4 of the 7/1/2015 submittal (p. 34) indicates that the seals are not credited in the DC03 internal events model. Provide the status of the hot shutdown panel in all of the DC03SA models and of

ENCLOSURE 2

the low leakage seals in the internal flooding and seismic models. Describe the differences between the current and new seals and the features of the hot shutdown panel upgrade and their impact on the PRA models, the identification and scope of relevant potential SAMAs, and the SAMA cost-benefit analysis.

- d. The original 2009 SAMA analysis submittal and responses to NRC Staff RAIs were based on PRA models DC01A and DC01B. These two models are not described in Section F.2.1, but the seismic initiating event frequencies are cited in the discussion of the DC03 interim model. Briefly discuss these models and clarify any differences between their descriptions and/or results and that provided in the 2009/2010 submittals and the current models such as the statement in the 2009 ER Section F.2.1.9 that the charging pumps were replaced with centrifugal pumps, which is not mentioned in the current submittal.
- e. The initiating event contributors to the internal events core damage frequency (CDF) shown in Figure F.2-1 do not include loss of offsite power (LOOP). Provide the CDF due to LOOP initiators. If included in the "others" category (which would appear to indicate that LOOP contributes less than 2% to the total internal events CDF), explain why it is so low. Note that the 2010 LRA indicated that the CDF due to grid related LOOP was $8.9\text{E-}07/\text{year}$ which corresponds to 8% of the current internal events CDF (excluding internal flooding).
- f. Provide the station blackout (SBO) and anticipated transient without scram (ATWS) contributions to the internal events and total CDF.
- g. Provide the "freeze date" or the date which corresponds to the DCCP design and operation incorporated into the DCCP PRA used for the SAMA analysis. Identify any design or operational (including fuel cycle) changes that have or, are planned, since this freeze date that might impact the SAMA analysis.
- h. The discussion in Section F.2.3.1 (p. F-47) regarding the PRA maintenance and update procedures states:

"These procedures delineate the responsibilities and guidelines for updating the full power internal events PRA models at the Diablo Canyon Power Plant."

Although guidelines for full power, internal and external events are mentioned, it is not clear whether these are included in the cited procedures or other documentation. Clarify the applicability of the cited procedures to other than internal events PRA models and if not applicable, identify the procedures that are applicable.

- i. Section F.3.2.2 (p. F-48) lists the dates of the peer reviews of the various DCCP PRAs. Identify the specific model revisions listed in Section 2.1 reviewed by each of the peer reviews, the scope of each review and the number of findings (or Level A and B Facts and Observations (F&Os)) where Capability Category II or better is not met resulting from each review. (Note that except for the fire and

seismic model revision that was peer reviewed, this information is available in Attachments U and V of DCPN NFPA 805 LAR.)

- j. Confirm that no changes have been made to the DCPN PRA model used in the SAMA analysis since the Peer Reviews that would constitute an upgrade as defined by ASME/ANS RA-Sa-2009, as endorsed by RG 1.200, Revision 2.
- k. Section F.2.3.5, CONCLUSION REGARDING PRA CAPABILITY FOR SAMA IDENTIFICATION AND EVALUATION, discusses and concludes that the DCPN PRA Model DC03 results are suitable for use as a resource in the SAMA identification process. Clarify why the discussion and conclusions does not address the suitability for the SAMA cost-benefit evaluation process.
- l. With regard to Addendum 1:
 - i. For the first item " Internal flooding -NRC IN 98-31 ISER 3-98, A0468801" confirm that this has not been closed in the DC02 update of internal flooding and if not provide more information on the basis for the conclusion that no direct impact on the current model is anticipated.
 - ii. For the fourth item, "Address anchorage of relay panels in cable spreading rooms," confirm that the requested analysis has been performed or otherwise justify that this is only a documentation issue.
 - iii. For the fifth item, "Address potential for d/g lockout from cardox," provide the basis for the conclusion that the impact of this issue is expected to be minor.

2. Level 2 PRA

- a. Section F.2.2 describes the Level 1 to Level 2 mapping and the need for plant damage states (PDSs) and key plant damage states (KPDSs). Is the transfer of information from Level 1 to Level 2 done directly in the logic models or are the numerical PDS frequency results of the Level 1 analysis added and input into the Level 2 analysis (the CETs) as a frequency?
- b. Section F.2.2.3 discusses the development of the KPDSs and Table F.2-3. This table presents the ranking of PDSs based on PRA model DCPRA-1991 and states that the relative ranking of PDSs and states that "the relative ranking of PDSs and therefore the definition of KPDSs is not expected to change significantly from DCPRA-1991 to DC03." Provide further support for the final statement and discuss the role of relative ranking in the definition of KPDSs. Are all PDSs that result from the Level 1 analysis assigned to a KPDS or are some grouped together as a remainder group and if so how is the remainder considered in the Level 2 analysis?
- c. The discussion of release category binning in Section F.2.2.4.1 includes the statement:

"For early-small containment failures, the medium pressure sequences are binned with the high pressure sequences because containment pressures may be greater later in the event and high RCS retention then becomes a liability."

Table F.2-5 indicates that for small early release categories, the medium pressure sequences are binned with the low pressure sequences. In addition, Table F.3-11 describes the MAAP case RC16U as low pressure core melt while the description of the small early release category in Section F.2.2.4.2 states "Other cases within this release category group would either have medium to low RCS pressure..." Explain this binning and the selection of the representative MAAP case for the small early release category.

- d. Table F.3-11 identifies the representative MAAP case for ST3 as RC10 and describes it to include "CS OK". RC10 is indicated in Table F.2-5 to not have containment sprays available. The Section F.2.2.4.2 description of ST3 indicates that containment fails due to prolonged core-concrete interaction, while RC10 is indicated to have coolable debris. Please clarify.
- e. Section F.2.2.4.2 provides a discussion of assigning non-isolated steam generator tube rupture (SGTRN) with Auxiliary Feedwater (AFW) success to the interfacing system loss of cooling accident (ISLOCA) release category. Provide a further discussion of these sequences and the basis for this assignment. The discussion includes the statement "RC18 was reviewed to see if there are any sequences with AFW successful that should be allocated to the Containment Bypass group. None were found." Since RC18 is composed of ISLOCAs it is not clear why AFW availability is relevant. Explain.
- f. Table F.2-7 gives the frequency of RC17 as $3.59\text{E-}06/\text{year}$ and the frequency of RC18 as $1.28\text{E-}08/\text{year}$. Fifty percent of RC17 yields $1.79\text{E-}06/\text{year}$ for the frequency of ST4, in agreement with the frequency for ST4 in Table F.3-13. Fifty percent of RC17 added to the above value for RC18 yields $1.8\text{E-}06/\text{year}$ which is different from the value for ST5 given in Table F.3-13 of $2.97\text{E-}06/\text{year}$. Explain.
- g. Provide an updated version of Table F.2-7 based on the results of the DC03SA PRA.
- h. Table F.3-11 provides the MAAP run times for each of the release category source term cases. Justify that the source term release fractions from these run durations represents the maximum release whenever the run end time is less than 48 hours after the declaration of general emergency.
- i. It is noted that the sum of DC03 model release categories ST1 and ST5, both leading to a large early release, is $1.02\text{E-}05$ per year while the quoted value for Large Early Release Frequency (LERF) for unit 1 is $1.20\text{E-}05$ per year. Explain the reasons for the difference. If this is due to Level 2 model changes compared

to a LERF only model, describe the changes from the peer reviewed LERF model to the current full Level 2 model.

- j. Provide a discussion of the development of the Level 2 model, particularly the containment event trees (CET), the basis for the CET split fractions, and updates since the Individual Plant Examination (IPE) to represent the current state of the art. (Note the PG&E response to 2010 SAMA RAI 2.a provides the requested information.)

3. External events

- a. Provide the seismic CDF for the DC03SA model and the contribution to the seismic CDF by initiating event. Include the contribution from the new initiating event for ground motion accelerations greater than 4.0g for both the DC03 as well as DC03SA models.
- b. Section F.2.3.2 indicates that a peer review of the seismic events model was conducted in January 2013 and states:

"The update of the seismic fragilities of PRA SSCs is currently in progress. Once the update is completed in 2015, the seismic F&Os will be resolved followed by the update of the Seismic model."

Page 1 of the 7/1/2015 submittal states

"The DC03SA model uses the same fragilities as the DC03 model. The Long Term Seismic Program (LTSP) fragility curves are acceptable for use in DC03SA because no scaling is necessary for use with the updated hazard spectral information from the March 2015 50.54(f) response."

- i. The first statement indicates that changes to seismic fragilities were being made subsequent to the DC03 (interim) model, yet the second statement indicates that no changes were made from those used in the LTSP. Explain.
- ii. The first statement implies that the only seismic F&Os unresolved involve the seismic fragilities. Confirm that all the findings from the 2013 peer review have been resolved.
- iii. Page 1 of the 7/1/2015 submittal provides a comparison of the LTSP uniform hazard spectrum with the updated spectral information indicating that in one frequency range the shapes may differ by plus or minus 14%. Provide an additional discussion of this comparison and of the potential impact of a 14% difference in spectral shapes on seismic risk in general and the SAMA analysis in particular.
- iv. The 7/1/2015 page 1 discussion indicates that at other hazard levels relevant to the PRA model (1E-03 to 1E-05) the shape does not differ

significantly from the shape at 1E-04 hazard level. Since the new (greater than 4.0 g) seismic initiating event has a frequency on the order of 1E-06, are the conclusions in the ER concerning the spectral shape at this lower hazard level?

- c. Provide a further description of the development of the current fire PRA, including its relationship to the Individual Plant Examination – External Events (IPEEE) model and the model revision(s) that incorporated the guidance of NUREG/CR-6850.
- d. Does the fire PRA include the changes resulting from and/or required by the NRC review of transition to NFPA 805 application? If not, provide the CDF and LERF results by hazard class from PG&E's response to the NFPA 805 transition integrated analysis RAI.

4. Level 3 PRA

- a. In Section F.3.1 it is stated that "The MACCS2 code is being used in a slightly updated fashion ..." Clarify what is meant by 'updated fashion'.
- b. In Section F.3.1, uncertainty is discussed. Briefly describe/expand why the mean consequence is expected to be minor (e.g., there are no single contributing effects that could significantly impact the mean).
- c. In Section F.3.2, it is stated that "Individual growth rates were calculated for each grid element based on the county growth rate and the proportion of land in each grid element associated with the applicable counties." Clarify that this is the county population averaged over the county area, and the population is then partitioned to the spatial elements by the land fraction? Also, address whether there were any high population density regions near the edges of a spatial element that could distort the spatial assessment.
- d. In Section F.3.3, what is the "year 2012 CPI"?
- e. In Sections F.3.5 and F.4.5, the original SAMA analysis used an electrical net power output of 1138 MWe and thermal output of 3411 MWt. The current SAMA analysis uses an electrical net power output of 1180 MWe and thermal output of 3411 MWt. Discuss why the thermal power is not increased with the increased electrical output. If the thermal power should be increased, address the potential impact on the core inventory and the SAMA analysis results.
- f. In Section F.3.6, it is stated that "An additional 15 minutes is added to the ETE evacuation times to account for processing time by offsite officials." Briefly describe the processing required by offsite officials.

5. SAMA identification and Screening

- a. Section 5.1.2 indicates that the types of strategies called for in the DCPD Severe Accident Mitigation Guidelines to mitigate and recover from severe accidents are not included as SAMAs because they are already implemented at the site. Is credit for these strategies included in the current DCPD PRA model (DC03SA)?
- b. Review of Importance analysis
 - i. In a number of the discussions of potential SAMAs from review of importance lists, phrases such as "In most of the scenarios...", "The significant sequences..." or "Some of the larger contributors..." are used. Discuss in general terms what is meant by these phrases and the possibility of identifying potential SAMAs from the portion of the event impact that is not included in "most of the scenarios", "the significant sequences" or "some of the larger contributors".
 - ii. For events PRB1A and PRC1A (Table 4, pp. 10 and 19), both involving fire induced loss of cooling accidents (LOCAs), would additional fire barriers be a feasible SAMA to limit the impact of the relevant fires?
 - iii. For event RF3Z (Table 4, p. 12), Fire: switchover to recirculation after SLOCA degraded instrumentation, SAMA 7 to automate the swap is proposed. Discuss if the fire procedures provide guidance specific to these fires and if they do not, the potential for developing these procedures as a viable alternative SAMA?
 - iv. SAMA 9, identified to mitigate event AW4, support for both motor-driven (MD) pumps unavailable (Table 4, p. 14), includes spray barriers to protect the turbine-driven (TD) AFW pump as well as MD pumps that can operate submerged. Discuss the potential and effectiveness for a SAMA that would only include the TD pump spray barriers.
 - v. SAMA 11, to install a swing Residual Heat Removal (RHR) pump, is proposed to mitigate events LA1 and LB2 (Table 4, pp. 15 and 16), involving failure of RHR pumps to start and run which results in loss of recirculation capability and containment heat removal. Consider improvements in the feed and bleed capability and other, less expensive means for providing containment heat removal capability.
 - vi. SAMAs 2 and 18, both involving engine driven pumps, are identified to mitigate fire induced failures of 4 kV Bus F (event AZAF3, Table 4, p. 16). Discuss the potential for SAMAs to directly impact the causes or severity of the relevant fires.
 - vii. For event AWFZ (Table 4, p. 18), no support for AFWP2, AFWP3 and fire impacts AFWP1, would additional fire barriers be a feasible SAMA to limit the impact of the relevant fires?

- viii. For events SDS1, RCP shutdown seals fail to actuate (Table 4, p.23), SAMA 18, consisting of engine driven high pressure RCS and steam generator (SG) injection pumps is evaluated. For event SPCET3 (Table 5, p. 35), RCP seal cooling unavailable, SAMA 2, an engine driven SG injection pump is evaluated. Consider a SAMA that provides only alternative seal cooling.
- ix. Event OR1 (Table 4, p.23), operator cooldown and depressurize RCS, indicated to be associated with SGTRs combined with failure to isolate the ruptured SG, and Event OX1 (Table 5, p. 36), operator decides to isolate the ruptured SG, are both mitigated by SAMA 19 to install primary side SG isolation valves. Consider a SAMA for improving the procedures and training or automating the ruptured SG isolation function.
- x. The top contributor to Event CD1FL (Table 4, p. 31) is described as a flood sequence from RWST breaks in the fuel handling building. SAMA 18, portable engine driven high-pressure RCS and SG injection pumps, is identified to mitigate this event. Consider the potential for alternative SAMAs involving use of flood barriers and alternate supplies to make up for the loss of RWST.
- xi. The top contributors to Event GXH (Table 5, p. 48) are described as flooding events in the AFW rooms. Consider the potential for flood barriers to mitigate these floods.
- c. The discussion in Section F.5.1.3.7 of Grand Gulf SAMA 59 indicates that, except for the third non-safety centrifugal charging pump, high head injection and low pressure pumps are dependent on the component cooling water (CCW) system. Also Figure F.2-1 indicates that loss of the CCW leads to 13 percent of the internal events CDF. Consider a SAMA similar to Grand Gulf's SAMA 59, Increase operator training for alternating operation of the injection and low pressure pumps for loss of CCW scenarios in addition to the alternate means described for DCPD.
- d. For SAMA 10, provide an alternate DC generator, discuss the availability of such a generator as part of other programs such as B.5.b and Diverse and Flexible Coping Capability (FLEX).
- e. For a number of the Phase I SAMAs included in Table F.5-3, the statement "This SAMA is addressed by elements of the DCPD FLEX strategy." Discuss the implications of this relative to the inclusion of credit for this in the DCPD PRA, the cost of and further consideration of the associated SAMAs.

6. Cost-benefit Analysis

- a. Provide further information regarding the RISKMAN software quantification options mentioned on page 4 of the July 1, 2015 submittal including the option

originally used for SAMAs 2, 9, 10 and 12 and the option used in the updated results.

- b. The July 1, 2015 submittal describes a revised evaluation of the benefit of SAMA 8 "Protect RHR cables in fire areas 6-A-2 and 6-A-3." It is understood that the revised evaluation eliminates credit taken in the original evaluation for preventing damage to equipment not protected by SAMA 8. It is noted that the revised evaluation appears to include additional fire impact deletions from the base case model (changes to ELECPWR and FELECPWR) than the original analysis. This would be expected to increase rather than decrease the averted cost-risk. Provide a further discussion of the revised evaluation including the differences in model changes that lead to the reduced credit.
- c. Section F.6.3 indicates that SAMA 5 reduces the CDF by 0.7 percent. This SAMA is identified in Table F.5-1 (p. F-178) to mitigate Event ZTDPHD which has a risk reduction worth (RRW) of 1.05. Since this RRW corresponds to a CDF reduction of approximately 5%, SAMA 5 would appear to not be very effective in mitigating this event. Discuss the reasons for this benefit quantification result and the potential for more effective SAMAs for this event.
- d. The evaluation of SAMA 9 in Section F.7.2.1.4 (p. F-119) indicates that protecting the pumps is simulated by removing the fire initiators from the impacted areas. Discuss how this simulates providing spray barriers and waterproof pumps. If this is due to flooding due to fire protection system initiation in response to a fire, discuss the potential for flooding due to fire protection system ruptures in these areas.
- e. Section F.7.4 states "In order to assess the impact on the Phase 2 screening, the truncated frequency was assumed to be proportional to the CDF, and for each SAMA quantification, the truncated frequency was likewise binned to the ST5 release category." Provide further information on this process including the assumed reduction in ST5 release category frequency caused by a SAMA. Illustrate with a numerical example.
- f. Table 11 provides the averted cost risk for SAMA 17 with the DC03 model to be \$529,599 compared to that on page F-142 of \$1,091,397. Since both include the 95th percentile uncertainty and the impact of binning the truncated frequency to ST5, it is expected that the values would be identical (as they are for all the other SAMAs). Explain.
- g. As indicated in ER Section 4.20, the original SAMA found that when the 95th percentile PRA results were considered, SAMAs 12, 13, 24, and 25 were potentially cost beneficial. These original analysis SAMAs are:
 - SAMA 12: Improve fire barriers for auxiliary saltwater and component cooling water equipment in the Cable Spreading Room

- SAMA 13: Improve cable wrap for the power operated relief valves in the Cable Spreading Room
- SAMA 24: Prevent clearing of reactor coolant system Cold Leg Water Seals
- SAMA 25: Fill or maintain filled the Steam Generators to scrub fission products

Discuss the current relevance of these SAMAs and their potential for being cost-beneficial in the updated analysis. If appropriate, identify plant or modeling changes that made these SAMAs no longer applicable.

7. Potential Lower Cost Alternative SAMAs

- a. For SAMA 1, install a Minimum CCW Cooling Flow Line around the RHR Heat Exchanger Outlet Valve, consider a modification to the outlet valve internals to allow a minimum CCW flow even when the valve is closed.
- b. SAMA 2, provide an engine drive SG makeup pump, is proposed to mitigate event AWR1, Failure to supply water from fire water storage tank or raw water reservoir (non-seismic). This SAMA is screened in Phase I as having a cost well in excess of Maximum Averted Cost-Risk (MACR). Discuss the potential for less expensive SAMAs such as procedure changes, automating the backup water supply or increasing the capacity of the condensate storage tank (CST).
- c. SAMA 4, provide a seismically qualified response system, is proposed to mitigate a number of sequences involving seismic Alternating Current (AC) and/or Direct Current (DC) system failures. Consider the potential for strengthening the weakest link in these systems to provide at least one source of AC and/or DC power at a considerably lower cost than SAMA 4.
- d. SAMA 9 and 17, install spray barriers to protect the TD AFW pump and install a waterproof AFW pump, and install flood sensors to mitigate fire protection system pipe breaks. As a low cost alternative for flooding in general, discuss the potential for using mobile sump pumps (including hose/pipes and power supply).

FIG.

From: Wentzel, Michael
Sent: Monday, December 14, 2015 11:14 AM
To: Terrence Grebel (TLG1@pge.com)
Cc: Olsofsky, Michelle (MMA0@pge.com)
Subject: Draft Telephone Conference Call Summary
Attachments: 121015, Summary of Telephone Conference Call Held Between NRC and PG&E
Concerning the RAI Responses pertaining to the DCPD LRA Environmental Review.docx

Terry,

As promised, attached is a draft of the phone call summary from our call last Thursday. Please let me know if you have any comments.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

LICENSEE: Pacific Gas and Electric Co.

FACILITY: Diablo Canyon Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON DECEMBER 10, 2015, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Pacific Gas and Electric Co. (PG&E) held a telephone conference call on December 10, 2015, to discuss and clarify the PG&E's responses to the NRC staff's request for additional information (RAI) concerning the severe accident mitigation alternatives review of the Diablo Canyon Power Plant, Units 1 and 2, license renewal application.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the responses discussed with PG&E, including a brief description of the status.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosure: As stated

cc w/encl: Listserv

DISTRIBUTION:

See next page

ADAMS Accession No.:ML15310A069

*concurrence via email

OFFICE	LA:DLR*	PM:RPB2:DLR	BC:RPB2:DLR	PM:RPB2:DLR
NAME	IBetts	MWentzel	JDanna	MWentzel
DATE				

OFFICIAL RECORD COPY

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON DECEMBER 10, 2015, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

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RidsNrrDlrRarb Resource

RidsNrrDlrRasb Resource

RidsNrrDlrRsrg Resource

RidsNrrDraArcb Resource

RidsOgcMailCenter Resource

RidsNrrPMDiabloCanyon Resource

MWentzel

JDanna

RPlasse

JDozier

SLingam

CKanatas, OGC

JLindell, OGC

THipschman, SRI

JReynoso, RI

JGroom, RIV

DMcIntyre, OPA

LUselding, OPA

WMaier, RIV

AMoreno, OCA

TELEPHONE CONFERENCE CALL
DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

LIST OF PARTICIPANTS
DECEMBER 10, 2015

PARTICIPANTS

Jerry Dozier
Michael Wentzel
Bob Schmidt
Steve Short
Nathan Barber
Terry Grebel
Michelle Olsofsky
John Pyo
Philippe Soenen

ORGANIZATION

U.S. Nuclear Regulatory Commission
U.S. Nuclear Regulatory Commission
Pacific Northwest National Laboratory
Pacific Northwest National Laborator
Pacific Gas and Electric Co. (PG&E)
PG&E
PG&E
PG&E
PG&E

TELEPHONE CONFERENCE CALL CONCERNING THE
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
RELATED TO THE SEVERE ACCIDENT MITIGATION ALTERNATIVES REVIEW
OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

DECEMBER 10, 2015

By letter dated October 22, 2015, the U.S. Nuclear Regulatory Commission (NRC) staff issued a request for additional information (RAI) to Pacific Gas and Electric Co. (PG&E) related to the severe accident mitigation alternatives (SAMA) review of the Diablo Canyon Power Plant, Units 1 and 2, license renewal application. By letter dated November 12, 2015, PG&E submitted responses to NRC staff RAIs. On December 10, 2015, the NRC staff and representatives of PG&E held a telephone conference call to discuss and clarify the following RAI responses.

1. Response to RAI 1.c.

Discussion: *The NRC staff requested PG&E clarify what was meant by the statement "and of the reactor coolant system (RCS)" in item 1 on page 3 of the RAI responses. PG&E stated that the statement should be struck, as its inclusion was unintentional.*

2. Response to RAI 1.d.

Discussion: *The NRC staff requested that PG&E briefly describe the seismic hazard information used in probabilistic risk assessment (PRA) models DC02 and DC03, particularly in relation to the information provided in PG&E's 2010 RAI response, as discussed on pages F-34 and F-35 of PG&E's amended environmental report. PG&E stated that the 2010 RAI response incorporated the Shoreline fault seismic hazard into the model. PRA model DC03 also accounts for the Shoreline fault; however, it updates the seismic hazard from that provided in the 2010 RAI response.*

3. Response to RAI 1.i.

Discussion: *The NRC staff requested that PG&E identify the internal events model that was used as the basis for the interim fire PRA model that was peer reviewed in 2012 and provide the internal events core damage frequency (CDF). Additionally, the NRC staff requested PG&E to confirm that the fire PRA CDF given for DC02 was based on models predating PG&E's NFPA-805 revision and to provide the dates of models DC02 and DC02A.*

PG&E stated that the interim fire PRA was based on PRA model DC01 and that the internal events CDF was 1.08×10^{-5} . Relative to the fire CDF, PG&E stated that the fire PRA model developed for the NFPA-805 revisions was separated out from the plant model in December 2010. Finally, PG&E stated that the dates for models DC02 and DC02A are November 2012 and January 2013, respectively.

ENCLOSURE 2



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

**SUBJECT: PROJECT MANAGER CHANGE FOR THE LICENSE RENEWAL OF DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 (TAC NOS. MF4019 AND MF4020)**

Dear Mr. Halpin:

This letter provides notification of a change to the Environmental Project Manager assigned to the Diablo Canyon Power Plant, Units 1 and 2 license renewal review. Effective February 6, 2015, Mr. Michael Wentzel will be the Environmental Project Manager for Diablo Canyon Power Plant, Units 1 and 2.

All correspondence for the Project Manager associated with the environmental review for Diablo Canyon Power Plant, Units 1 and 2 license renewal should be sent to:

Mr. Michael Wentzel, Environmental Project Manager
Reactor Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop O-11F1
Washington, DC 20555

Mr. Wentzel may be reached at (301) 415-6459 or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Brian Wittick, Chief
Reactor Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275; 50-323

cc: Listserv

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

SUBJECT: PROJECT MANAGER CHANGE FOR THE LICENSE RENEWAL OF DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 (TAC NOS. MF4019 AND MF4020)

Dear Mr. Halpin:

This letter provides notification of a change to the Environmental Project Manager assigned to the Diablo Canyon Power Plant, Units 1 and 2 license renewal review. Effective February 6, 2015, Mr. Michael Wentzel will be the Environmental Project Manager for Diablo Canyon Power Plant, Units 1 and 2.

All correspondence for the Project Manager associated with the environmental review for Diablo Canyon Power Plant, Units 1 and 2 license renewal should be sent to:

Mr. Michael Wentzel, Environmental Project Manager
Reactor Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop O-11F1
Washington, DC 20555

Mr. Wentzel may be reached at (301) 415-6459 or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Brian Wittick, Chief
Reactor Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275; 50-323

cc: Listserv

ADAMS Accession No. ML

OFFICE	LA:DLR	PM:RPB2:DLR	BC:RPB2:DLR
NAME		MWentzel	BWittick
DATE	/ /	/ /	/ /

OFFICIAL RECORD COPY

Letter to E. Halpin from B. Wittick, dated Insert date

SUBJECT: PROJECT MANAGER CHANGE FOR THE LICENSE RENEWAL OF DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 (TAC NOS. MF4019 AND MF4020)

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RidsNrrDlrRerb Resource

RidsNrrDlrRarb Resource

RidsNrrDlrRasb Resource

RidsNrrDlrRsg Resource

RidsOgcMailCenter Resource

RidsNrrPMDiabloCanyon Resource

MWentzel

BWittick

RPlasse

YDiaz-Sanabria

SLingam

SUttal, OGC

YLindell, OGC

EWilliamson, OGC

THipschman, SRI

JReynoso, RI

GMiller, RIV

NO'Keefe, RIV

DMcIntyre, OPA

VDricks, OPA

WMaier, RIV

JWeil, OCA

RRihm, EDO

From: Wentzel, Michael
Sent: Thursday, November 05, 2015 1:03 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Environmental RAIs
Attachments: Requests for Additional Information Related to the Diablo Canyon LRA Environmental Review.pdf

This attachment is already publicly available as ML15295A373.

Terry,

Attached is an advanced copy of the final RAI letter. If you have any questions, please let me know.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RP82
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Tuesday, March 22, 2016 1:31 PM
To: Terrence Grebel (TLG1@pge.com); 'Soenen, Philippe R'
Subject: Environmental Scoping Summary Report Has Been Issued
Attachments: Issuance of Environmental Scoping Summary Report Associated with the Review of the Diablo Canyon Power Plant License Renewal Application.pdf

This attachment is already publicly available as ML16067A116.

Terry and Philippe,

Attached, please find the letter to PG&E regarding the issuance of the Scoping Summary Report for the DCPD LRA review. The letter and report are publicly available as of today. You can access the report via the link below. A hard copy of the letter and a CD with the report will be placed in the mail shortly. If you have any questions, please let me know.

Thanks,
Mike

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML16077A091>

Michael Wentzel
Project Manager
NRR/DLR/RERP
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Thursday, May 21, 2015 4:05 PM
To: Terrence Grebel (TLG1@pge.com); Olsofsky, Michelle (MMA0@pge.com)
Subject: Example Audit Needs Lists

Terry and Michelle,

Here are two recent examples of audit needs lists

Environmental: <http://pbadupws.nrc.gov/docs/ML1422/ML14224A353.pdf>

SAMA: <http://pbadupws.nrc.gov/docs/ML1425/ML14252A831.pdf>

If you have any questions, please let me know.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: VOSBURG, ALIA <AKV1@pge.com>
Sent: Thursday, September 17, 2015 6:58 PM
To: Wentzel, Michael
Cc: Grebel, Terence
Subject: [External_Sender] DCPD Environmental Audit Proposed Schedules
Attachments: General Tour Route and Itinerary_091715.pdf; Breakout Meetings Schedule.xlsx

Mike,

Please see the proposed general tour route which covers terrestrial, surface water, geology and soils, air quality, noise, and groundwater. Note a separate cultural resources tour (not shown) will be taking place simultaneously. We are proposing these tours start at 10:00am Tuesday, Sept. 29th, following an 8:00am entrance meeting.

Please also see the proposed schedule of breakout meetings for Wednesday Sept. 30, beginning at 8:00am.

Thanks,

Alia Vosburg
DCPD License Renewal
(805) 595-6467

	7	8	9	10	11	12	1	2	3	4	5	
Tank Farm Suite 200 Conference Room	DCPP LR Team Briefing (7:30 - 7:30) LR Team	Surface Water (8:00 - 9:00) Kevin Folk Bryan Cunningham Tom Kelly Alia Vosburg		Groundwater* (10:00 - 11:00) William Ford Bryan Cunningham Marty Wright Joseph Sun* Chris Madugo* Michelle Disofsky		LUNCH	Biology* (12:30 - 4:30) Michelle Moser Briana Grange Valerie Cullinan* Bryan Cunningham Sally Krenn Mike Fry Gina Morimoto John Steinbeck Alia Vosburg				DCPP LR Team Briefing (5:00 - 5:30) LR Team	
Tank Farm Suite 220 Spare Office		Waste Management* (8:00 - 9:00) Russell Chazell* Trevor Rebel Tom Esser Michelle Disofsky		Air Quality (9:30 - 11:30) Nancy Martinez Tom Esser Alia Vosburg		LUNCH	Cultural Resources (12:30 - 3:00) Tara O'Neill Jeffrey Rikhoff Mike Taggart Michelle Disofsky					

*Bridgetine
1.866.652.7690

(b)(6)

TERRESTRIAL RESOURCES, SURFACE WATER, GEOLOGY AND SOILS, AIR QUALITY, NOISE, AND GROUNDWATER TOUR

Stop	Time		Area / Subject	Discussion Lead	NRC
N/A	10:00	a.m.	Welcome and Safety Minute (10 mins – Broad)	T. Jones	
N/A	10:10	a.m.	Board DCPD Tour Vans / Depart for DCPD	T. Jones	
1	10:30	a.m.	Arrive at Avila Front Gate – Notify Security (x3330) that a tour will be taking place for the next X hours	T. Jones	
2	10:40	a.m.	South Ranch <ul style="list-style-type: none"> ▪ Pecho Coast Trail ▪ Agricultural Leases 	S. Krenn	Briana Grange Michelle Moser
3			Discharge 005 <ul style="list-style-type: none"> • Stormwater Management Plan • Stormwater Sampling 	B. Cunningham	Kevin Folk
4			Seawater Reverse Osmosis Desalination Plant <ul style="list-style-type: none"> • Surplus water supply to County • Brine discharge locations 	B. Cunningham	William Ford
5			Intake Structure	B. Cunningham	Kevin Folk
6			Meteorological Tower <ul style="list-style-type: none"> • Air emissions 	B. Cunningham	Nancy Martinez
7			Discharge Structure	B. Cunningham	Kevin Folk
8			Mouth of Diablo Creek The Obispo Formation from the shoreline along the Pacific Ocean. Terrace deposits on top of the wave-cut platform along the Pacific Ocean.	J. Kelly B. Cunningham	Kevin Folk William Ford
9			ISFSI Overlook Monitoring Wells GW-01 and GW-02 Soil Erosion Control	T. Grebel B. Cunningham	William Ford
10			Raw Water Reservoir <ul style="list-style-type: none"> ▪ Make-up water treatment 	B. Cunningham	Kevin Folk
11			500kV Switchyard <ul style="list-style-type: none"> • Major noise sources 	B. Cunningham	Nancy Martinez
12			DCPD Overlook <ul style="list-style-type: none"> ▪ Wildlands Fuel Management 	S. Krenn	Briana Grange Michelle Moser
13			Deep Well 0-2 <ul style="list-style-type: none"> ▪ Discussion of aquifer 	J. Kelly	Kevin Folk William Ford
14			Diablo Creek <ul style="list-style-type: none"> (1) Diablo Creek ecology (2) Old diversion point 1 	S. Krenn	Briana Grange Michelle Moser
15			Diablo Creek Culvert Abandoned well 0-1	J. Kelly	Kevin Folk
16			Point Buchon Trail and Coon Creek Beach (dotted route – walk loop trail) <ul style="list-style-type: none"> ▪ Trail Program ▪ Coon Creek Beach ▪ Sink hole 	S. Krenn	Briana Grange Michelle Moser
17			Coon Creek Bridge <ul style="list-style-type: none"> ▪ Riparian Corridor ▪ Coon Creek Culvert Removal and Steelhead Passage Enhancement Project Notify Security (x3330) that tour is complete	S. Krenn	Briana Grange Michelle Moser

Follow-up specialty tours (as requested by the NRC) can take place Wednesday and Thursday mornings

Water and Boxed lunches will be provided on tours

Van 1

PG&E Driver (TBD)

Kevin Folk

William Ford

Nancy Martinez

Bryan Cunningham

Mike Fry

Michelle Olsofsky

Van 2

Tom Jones (Driver)

Briana Grange

Michelle Moser

Sally Krenn

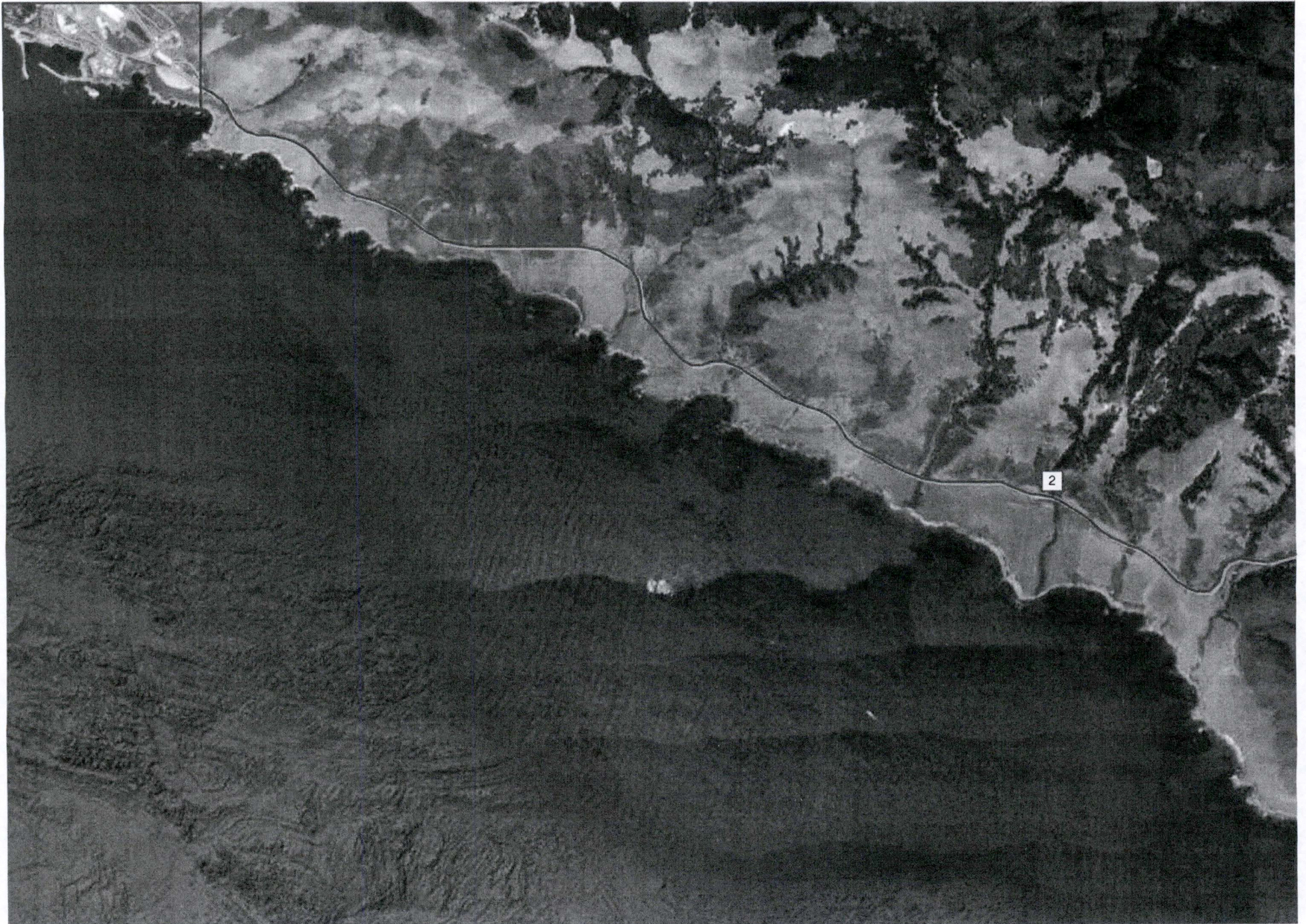
Kelly Kephart

Alia Vosburg

Resident Inspector

Mike Wentzel

Map 1



Map 2



Map 3



From: Soenen, Philippe R <PNS3@pge.com>
Sent: Monday, March 28, 2016 12:28 PM
To: Wentzel, Michael
Subject: [External_Sender] DCP ER Submittals

Mike,

In response to your voicemail, PG&E is planning to have the submittal with the three environmental reports signed and sent on March 30, 2016 with a commitment change to have the last report submitted to the NRC by August 1, 2016.

Regards,

Philippe Soenen

Office: 805.595.6461 | Cell: (b)(6) | Email: pns3@pge.com

From: VOSBURG, ALIA <AKV1@pge.com>
Sent: Thursday, June 25, 2015 12:02 PM
To: Wentzel, Michael
Cc: Grebel, Terence; Olsofsky, Michelle
Subject: [External_Sender] DCPD LR Environmental Audit Facilities
Attachments: DCPD LR Environmental Audit Facilities.docx

Mike,

Attached is the audit facilities document we reviewed yesterday. Thank you again for taking the time to meet with us.

Thank you,

Alia Vosburg
DCPD License Renewal Project
805 595-6467

PG&E is committed to protecting our customers' privacy.
To learn more, please visit <http://www.pge.com/about/company/privacy/customer/>

DCPP License Renewal Team Contact Information

Name	Position	Phone	Pager	Email
Terry Grebel	Project Manager	805-545-4160	(b)(6)	TLG1@pge.com
Michelle Olsofsky	LR Team	734-748-0084		MMA0@pge.com
Alia Vosburg	LR Team	805-260-5575		AKV1@pge.com
Greg Heggli	LR Team	805 595-6478		GWH2@pge.com
Kevin Petrones	LR Team	805-595-6482		KXPM@pge.com
Cindy Kaminski	Administrative Specialist	805-545-4515		CMSA@pge.com
Bridgeline		1-866-652-7690	(b)(6)	

Conduct of Audits/Inspections

Proposed daily meeting schedule:

<u>Time</u>	<u>Description</u>
8:00 am	Daily briefing with NRC team and DCPD LR Team First day of audit a more extensive entrance meeting will be held with introduction and explanation of logistics.
12:00 pm	Lunch
4:00 pm	Daily audit/inspection feedback meeting with NRC team and DCPD LR Team Last day of audit a more extensive exit meeting will be held.
4:30 pm	Daily DCPD LR team meeting

Exact schedules will be as agreed with the NRC team leader.

Facilities During NRC Visits

Below is a list of proposed rooms and their usage:

Room Number	Use	Needs	Size / Accommodations
Tank Farm Suite 220 Conference Room (Figure 1)	NRC Central	2 Computers 1 Local Printer 6 Phones 20 Verizon Air Cards 1 Polycom	7 – workstation seating 5 - additional seating
Tank Farm Suite 220 Library (Figure 1)	NRC Breakout	Library Roundtable	5 – Roundtable seating
Tank Farm Suite 220 Cubicle Pen (Figure 1)	LR Team Audit Central	3 Computers 1 Network Printer 3 Phones	5 – workstation seating
Tank Farm Suite 200 Conference Room (Figure 2)	LR Team Breakout	1 Computer 1 Projector 1 Polycom	7 – Roundtable seating
Tank Farm Suite 220 Cubicle Pen / Spare Office (Figure 1)	LR Team Audit Support	5 Computers 1 Network Printer 5 Phones	5 – workstation seating
Broad Suite 120 Conference Room (Figure 3)	Entrance and Exit Meetings	1 Computer 1 Large Projector 1 Polycom	30 – Classroom Seating
DCPP Room 533	Onsite Breakout/SME Interviews	1 Polycom	8 – Roundtable seating
TBD	Industry Workspace		

Figure 1: Tank Farm Suite 220 Floor Plan

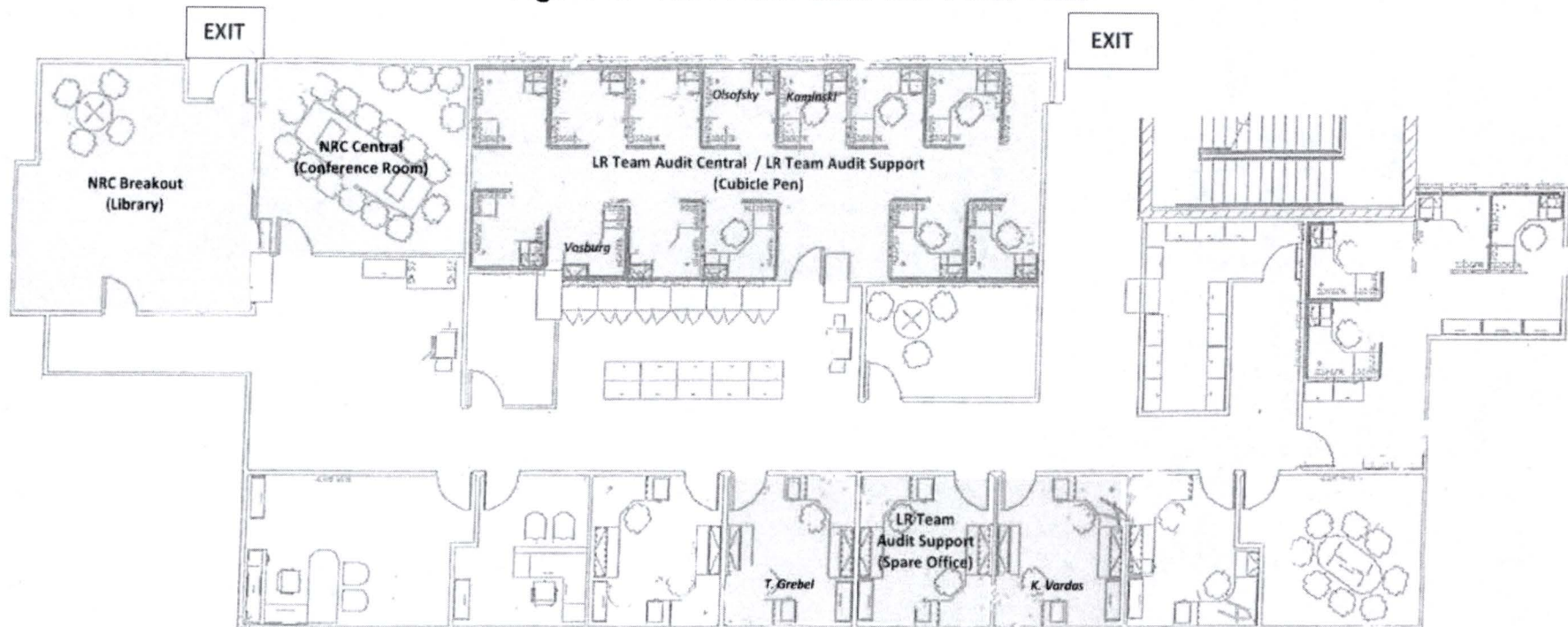
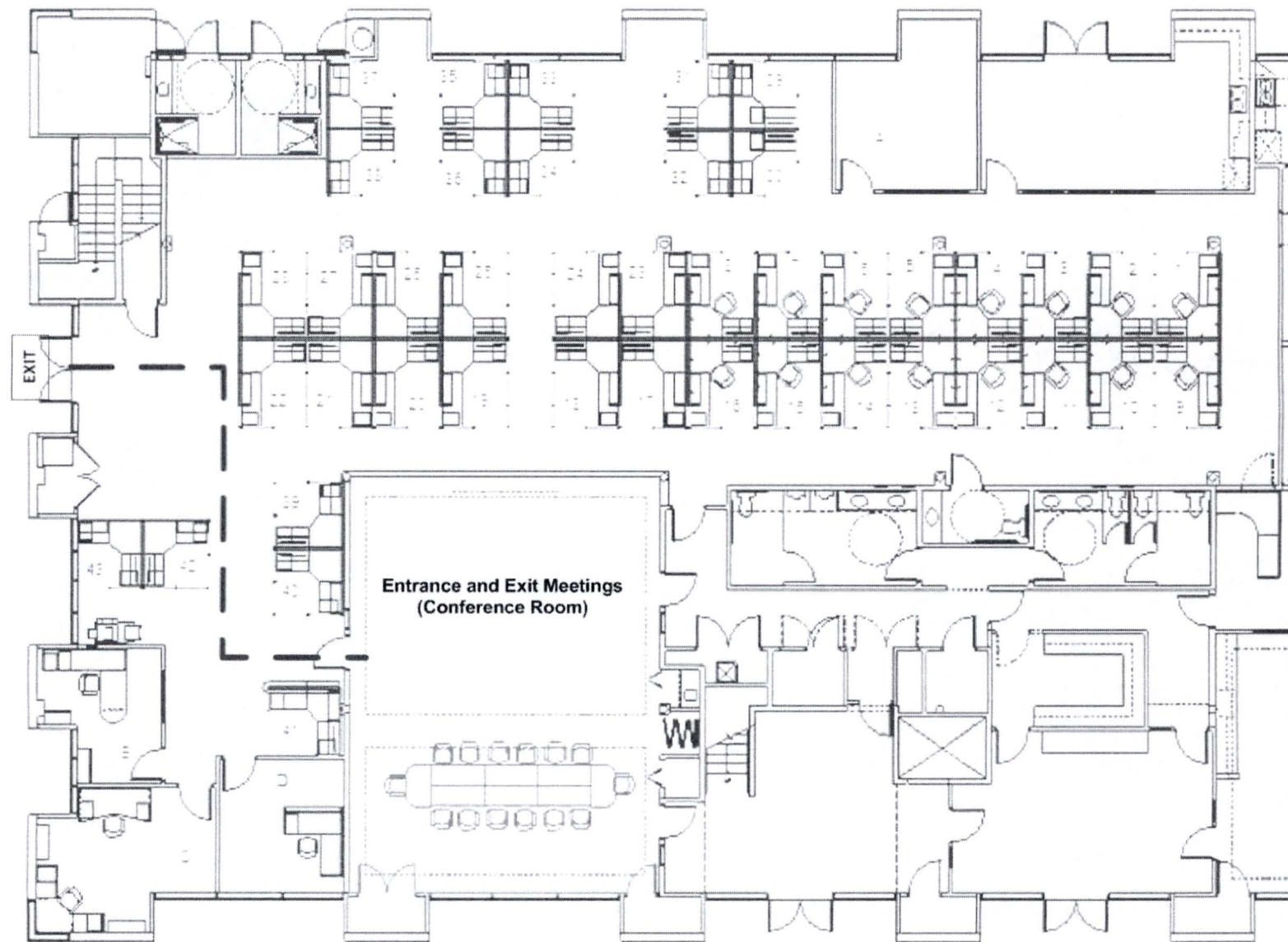


Figure 3: Broad Suite 120 Floor Plan

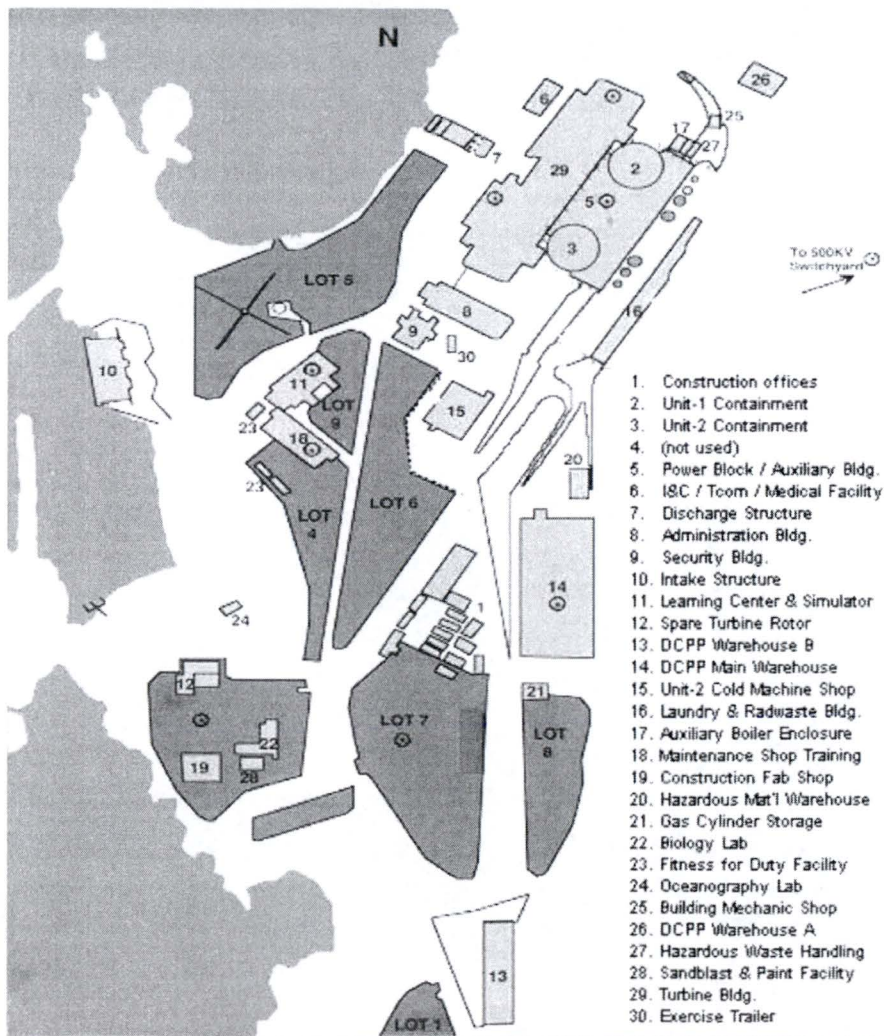


Transit / Parking Information:

- PG&E has 8 parking spaces designated in the Tank Farm parking lot. These spaces will be reserved for NRC during the audit.
- PG&E Tour Vans will be used for transportation to and from the DCPD site for any site tours or meetings.

Onsite (see diagram below)

- NRC has 6 reserved parking spaces in Lot #4
- All Visitors are required to park in Lot # 7 or 8
- Tour vans are located in Lot #4 and will be available to transport 10 to and from the site



Questions/Discussion topics

1. How many NRC personnel will be attending?
2. Do we want the NRC to park at our facilities and walk across to the Broad Street office for the entrance and exit?
3. How many parking spaces will the NRC like to have reserved at our facilities?
4. What does the NRC want to see at the plant?
5. Is one bus/van enough? How many teams?
6. Does the NRC want to get their own meals or have us provide? What is the reimbursement policy?
7. Should computers be provided/how many? How many Verizon air cards should be provided?
8. Does the NRC want to have plant security access for protected area?
9. Does the NRC want one or more bridgelines available for use?

From: Olsofsky, Michelle <MMA0@pge.com>
Sent: Monday, September 28, 2015 10:12 AM
To: Wentzel, Michael
Cc: Grebel, Terence
Subject: [External_Sender] DCPD SAMA Audit: NRC Question on Ship Impact

Mike,

As you recall, last Wednesday after the SAMA audit exit meeting, a question came up regarding the frequency of ship impact on the intake structure. Our team has looked into the question and I have posted the response on the portal:

LR Environmental Audit Binder > SAMA Audit Needs > Document Requests > "Ship Impacts"

Please let me know if there are any comments or questions.

Thanks in advance,
Michelle Olsofsky
DCPD License Renewal
734-748-0084

From: VOSBURG, ALIA <AKV1@pge.com>
Sent: Wednesday, September 30, 2015 8:11 PM
To: Wentzel, Michael
Subject: [External_Sender] Entrance Attendance Sheet
Attachments: Env Audit Entrance Attendance.pdf

Mike,

Please see the attached copy of the Environmental Audit Entrance Meeting attendance sheet.

Thanks,
Alia

Nuclear Regulatory Commission Environmental Site Audit Regarding
Diablo Canyon Power Plant License Renewal

Entrance Meeting Attendance
September 29, 2015

Name	Affiliation
Michael Wentzel	NRC
Michelle Moser	NRC
Briana Grange	NRC
Nancy Martinez	NRC
Kevin Folk	NRC
Mike Taggart	PG+E
Yvonne Miller	DGE
Kelly Kephart	PG+E
Sally Krenn	PG+E
Mike Fry	PG+E
JEFFREY RIKHOFF	NRC
Tara O'Neil	PNNL Support to NRC
Bryan Cunningham	PG+E
Terry Grebel	PG+E
Tom Jones	PG+E
Michelle Olsofsky	PG+E
Alla Vosburg	PG+E
William Ford	NRC
Tyson Smith	PG+E (phone)

From: VOSBURG, ALIA <AKV1@pge.com>
Sent: Wednesday, September 23, 2015 8:26 PM
To: Wentzel, Michael
Subject: [External_Sender] Env. Audit Schedule
Attachments: Overall Schedule.xlsx; General Tour Route and Itinerary_092315.pdf

Mike,

Please see attached...

Thank you,

Alia Vosburg
DCPP License Renewal Project
(805) 595-6467

Water and Boxed lunches will be provided on tours

Van 1

John Lindsey (Driver)
Kevin Folk
William Ford
Nancy Martinez
Bryan Cunningham
Mike Fry
Terry Grebel
Michelle Olsofsky

Van 2

Tom Jones (Driver)
Briana Grange
Michelle Moser
Sally Krenn
Kelly Kephart
Alia Vosburg
Resident Inspector
Mike Wentzel

NRC Onsite Environmental Audit
DCPP License Renewal
Overall Schedule

*Bridgeline
1-866-652-7690

(b)(6)

September 29, 2015		7	8	9	10	11	12	1	2	3	4	5
Tank Farm Suite 220 Library	DCPP LR Team Briefing (7:00 - 7:30)											
	LR Team											
4111 Broad Street Suite 120		Environmental Audit Entrance Meeting (8:00-10:00)										
		All										
DCPP Site					Environmental Audit Tours (see tour map/itinerary for breakdown) (10:00-5:00)							NRC DCPD Daily Debrief (5:00 - 5:30)
					Kevin Folk William Ford Nancy Martinez Briana Grange Michelle Moser Mike Wentzel Resident Inspector Tom Jones John Lindsey Terry Grabel Michelle Olshofsky	Alla Vosburg Bryan Cunningham Mike Taggart Sally Krenn Mike Fry Kelly Kephart Jim Kelly Dan Stocks Tara O'Neill Jeffrey Rukhoff						

September 30, 2015	Tank Farm Suite 220 Library	7	8	9	10	11	12	1	2	3	4	5
	DCPP LR Team Briefing (7:00 - 7:30) LR Team				Groundwater* (10:00 - 11:00) William Ford Bryan Cunningham Marty Wright Joseph Sun* Chris Maduga* Michelle Osofsky		LUNCH	Biology* (12:30 - 4:30) Michelle Moser Briana Grange Valerie Cullman* Bryan Cunningham Sally Krenn Mike Fry Gino Morimoto John Steinbeck Alia Vossburg				NRC DCPD Daily Debrief (4:30 - 5:00) DCPP LR Team Briefing* (5:00 - 5:30) LR Team
	Tank Farm Suite 200 Conference Room		Alternatives* (8:00 - 9:00) Robert Hoffman* Tyron Smith Michelle Osofsky				LUNCH	Cultural Resources (12:30 - 1:00) Tara O'Neill Jeffrey Rickhoff Mike Taggart Michelle Osofsky				

		7	8	9	10	11	12	1	2	3	4	5	
October 1, 2015	Tank Farm Suite 220 Library	DCPP LR Team Briefing (7:00 - 7:30) LR Team	Surface Water (8:00 - 9:00) Kevon Folk Bryan Cunningham Jim Kelly Alia Vosburg		Waste Management* (9:30 - 10:30) Russell Chazell* Bryan Cunningham Trevor Reber Tom Esser Michelle Olsufsky		LUNCH						
	Tank Farm Suite 200 Conference Room		Air Quality (8:30 - 10:00) Nancy Martinez Tom Esser Michelle Olsufsky				LUNCH						
	4111 Broad Street Suite 120						LUNCH				Environmental Audit Exit Meeting (3:30 - 4:30) All	DCPP LR Team Debrief* (4:30 - 5:00) LR Team	

...

From: Grebel, Terence <TLG1@pge.com>
Sent: Wednesday, September 09, 2015 3:58 PM
To: Wentzel, Michael
Cc: Olsofsky, Michelle; VOSBURG, ALIA
Subject: [External_Sender] FW: Draft SAMA Audit Schedule

Mike:

Please review and get back to us with any comments. We will develop a similar schedule for the environmental audit.

From: Olsofsky, Michelle
Sent: Wednesday, September 09, 2015 12:49 PM
To: Grebel, Terence
Subject: FW: Draft SAMA Audit Schedule

Terry,

Revised based on your phone call with Mike today. Do we want to send this to Mike for his awareness/concurrence?

Thanks,
Michelle

=====

Monday, Sept 21

7:00: DCPD Team meet at License Renewal offices; breakfast; overview of audit and expectations
7:45: Walk to Broad Street
8:00-8:30: NRC Entrance Meeting at Broad Street Conference Room
9:00: Assemble NRC and DCPD teams in LR Conference Room
9:00 – 11:30: Level 1 Audit Needs Questions (12 questions total)
11:30 – 12:00: LUNCH
12:00 – 1:30: Level 1 Audit Needs Questions (continued)
1:30 – 1:45: Break
1:45 – 3:45: Level 2 Audit Needs Questions (10 questions total)
3:45 – 5:00: Time for NRC to review requested documentation
4:30: NRC PM and DCPD PM Daily De-brief
5:00: DCPD Team Daily De-brief

Tuesday, Sept 22

8:00: DCPD Team meet at License Renewal offices; breakfast
8:00 – 9:45: Time for NRC to review requested documentation
9:45 – 10:00: Break
10:00 – 11:30: External Events Audit Needs Questions (7 questions total)
11:30 – 12:00: LUNCH
12:00 – 1:00: External Events Audit Needs Questions (continued)
1:00 – 1:15: Break
1:15 – 3:00: Level 3 Audit Needs Questions (6 questions total)
3:00 – 3:15: Break
3:15 – 4:30: Cost-Benefit Analysis Audit Needs Questions (16 questions total)
4:30: NRC PM and DCPD PM Daily De-brief

5:00: DCPD Team Daily De-brief

Wednesday, Sept 23

8:00: DCPD Team meet at License Renewal offices; breakfast

8:30 – 10:30: Cost-Benefit Analysis Audit Needs Questions (continued)

10:30 – 10:45: Break

10:45 – 11:30: Potential Lower Cost SAMAs Audit Needs Questions (4 questions total)

11:30 – 12:00: LUNCH

12:00 – 12:45: Potential Lower Cost SAMAs Audit Needs Questions (continued)

12:45 – 1:00: Break

1:00 – 3:00: Follow-up Discussions; Time for NRC to review requested documentation

3:30: NRC PM and DCPD PM Daily De-brief

4:15: Walk to Broad Street

4:30: NRC Exit Meeting at Broad Street Conference Room

5:00: DCPD Team Daily De-brief

From: Grebel, Terence <TLG1@pge.com>
Sent: Tuesday, October 20, 2015 9:44 AM
To: Wentzel, Michael
Subject: [External_Sender] FW: Env Audit Reference Request

Mike:

We would like to discuss the SAMA and ER audit responses/RAIs when you have a chance.

From: VOSBURG, ALIA
Sent: Monday, October 19, 2015 3:42 PM
To: Grebel, Terence
Subject: Env Audit Reference Request

During the Environmental Audit, NRC requested a copy of the following:

Stephens, B.T., D.C. Sommerville, S.J. Krenn, and D.W. Behrens. 1994. Observations of the gray whale migration in the vicinity of Diablo Canyon, California: 1981-1993 migrations. Unpublished doc. SC/46/AS11 submitted to Sci. Comm. of Int. Whal. Commn. 8 p.

The above report was not cited by PG&E in support of the response to SSH-6 but was requested independently by the NRC to supplement the NRC's review of PG&E's response to SSH-6.

PG&E was unable to locate this report. As noted in the reference above, the document was unpublished.

However, the following similar reports can be made available to supplement the NRC's review of PG&E's response to SSH-6.

Behrens, D.W. 1983. Observations of the gray whale migration in the vicinity of Diablo Canyon: 1981 - 1982 migration. Chapter XIII in Behrens, D.W. (ed.), Environmental investigations at Diablo Canyon. 1982. PG&E, Dept. Engr. Res. June, 1983. Publicly Available as ML16049A114

Behrens, D.W., D.J. Sommerville, and D.C. Sommerville. 1984. Observations of the gray whale migration in the vicinity of Diablo Canyon: 1982 - 1983 migration. Chapter VI in Behrens, D.W. and C.O. White (eds.), Environmental investigations at Diablo Canyon. 1983. PG&E, Dept. Engr. Res. August, 1984.

Behrens, D.W., P.A. Dunn, and D.C. Sommerville. 1985. Observations of the gray whale migration in the vicinity of Diablo Canyon: 1983 - 1984 migration. Chapter IX in Behrens, D.W. and C.O. White (eds.), Environmental investigations at Diablo Canyon. 1984. Volume I - Marine ecological studies. PG&E, Dept. Engr. Res. December, 1985. Publicly Available as ML16049A113

Behrens, D.W. and K.E. Shaffer. 1986. Observations of the gray whale migration in the vicinity of Diablo Canyon: 1984 - 1985 migration. Chapter VIII in Behrens, D.W. and C.O. White (eds.), Environmental investigations at Diablo Canyon. 1985. Volume I - Marine ecological studies. PG&E, Dept. Engr. Res. December 1986.

Behrens, D.W. 1987. Observations of the gray whale migration in the vicinity of Diablo Canyon: 1985 - 1986 migration. Chapter VI in Behrens, D.W. and White, C.O. (eds.), Environmental investigations at Diablo Canyon. 1986.

Publicly Available as ML16049A115

From: Grebel, Terence <TLG1@pge.com>
Sent: Wednesday, July 01, 2015 2:41 PM
To: Wentzel, Michael
Cc: Olsofsky, Michelle
Subject: [External_Sender] FW: NRC Submittal DCL-15-080, "Diablo Canyon Power Plant License Renewal Severe Accident Mitigation Alternatives Analysis Evaluation of the 2015 Seismic Hazard Results"
Attachments: DCL-15-080.pdf The attachment is publicly available as ML15182A425.

fyi

From: Mackey, Chuck
Sent: Wednesday, July 01, 2015 11:39 AM
To: DCPD BASES DD
Cc: 'dsneed@thetribunenews.com' (dsneed@thetribunenews.com); (b)(6)
Subject: NRC Submittal DCL-15-080, "Diablo Canyon Power Plant License Renewal Severe Accident Mitigation Alternatives Analysis Evaluation of the 2015 Seismic Hazard Results"

The electronic file of the following cover letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-15-080, "Diablo Canyon Power Plant License Renewal Severe Accident Mitigation Alternatives Analysis Evaluation of the 2015 Seismic Hazard Results"

Chuck Mackey

Diablo Canyon Power Plant
Regulatory Services
Senior Administrator - Nuclear
104/5/536A
P.O. Box 56
Avila Beach, CA 93424
Internal - 8-691-4444
External - (805) 545-4444

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From: Grebel, Terence <TLG1@pge.com>
Sent: Thursday, August 27, 2015 11:40 AM
To: Wentzel, Michael
Subject: [External_Sender] FW: Parking spaces reserved for NRC for Audits - September 21 - October 2

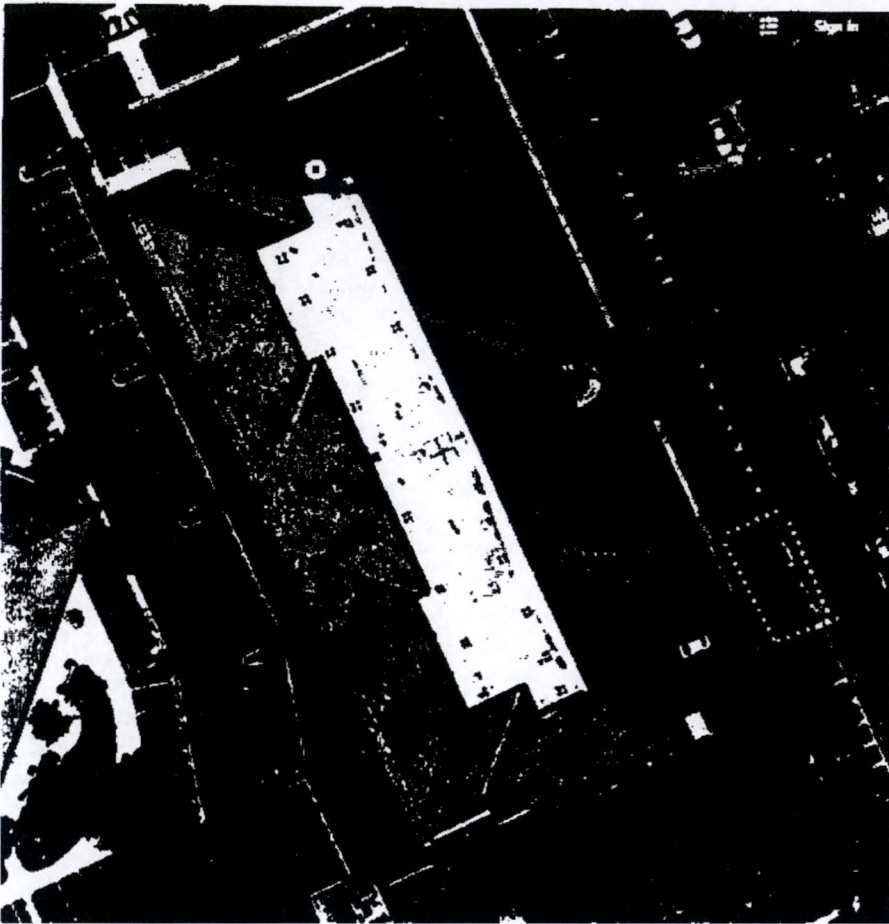
fyi

From: Kaminski, Cindy
Sent: Thursday, August 27, 2015 8:34 AM
To: DCPD License Renewal Team; DCPD ENG Seismic; Groff, Chris; Mayer, Mark; Efron, David; Waltos, Carol R; Rodriguez, Lorene; Eatherly, Sandra K; Haynie, James; Kilton, Joyce M
Subject: Parking spaces reserved for NRC for Audits - September 21 - October 2

I wanted to give you a heads up that the 4 PG&E parking spaces on the east side of the building will be reserved for the NRC starting September 21 through October 2. The NRC is conducting 2 audits during this time.

There will be orange stanchions with signs placed sometime on Friday, September 18 (You can use the spaces that day). Please see graphic below. The spaces that will be reserved are outlined in the yellow dotted line.

A reminder will be sent out the week of September 14. If you have any questions, please see myself, Terry Grebel or Alia Vosburg.



Thank you for cooperation,
Cindy Kaminski

PCed | | Dublin Canyon Licensing Basis Verification Project | License Renewal | 4111 Broad St., San Luis Obispo |
Phone 805-542-4515

From: Soenen, Philippe R <PNS3@pge.com>
Sent: Tuesday, January 12, 2016 5:20 PM
To: Wentzel, Michael
Subject: [External_Sender] FW: RE: RAI Telecon Draft Summary

Mike,

With the information below do you need this response docketed? We would like to get the letter with clarifications to the previous phone call submitted and wanted to make sure you didn't need the response below submitted in that same letter.

Thanks,

Philippe Soenen

Cell: (b)(6) Email: pns3@pge.com

From: Olsofsky, Michelle
Sent: Tuesday, January 12, 2016 2:16 PM
To: 'Wentzel, Michael'
Cc: Soenen, Philippe R; Grebel, Terence
Subject: RE: RE: RAI Telecon Draft Summary

Mike,

Our subject matter expert reviewed the aquatic question below and provided the following response:

The dashes indicate that a specific taxon was not observed. It is the same as zero.

Please let us know if you or the reviewer has any further questions on this topic.

Thanks you,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Grebel, Terence
Sent: Tuesday, January 12, 2016 1:24 PM
To: Olsofsky, Michelle
Cc: Soenen, Philippe R
Subject: FW: RE: RAI Telecon Draft Summary

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Tuesday, January 12, 2016 9:14 AM
To: Soenen, Philippe R; Grebel, Terence
Subject: RE: RE: RAI Telecon Draft Summary

Philippe,

I am still waiting to hear back from our contractor to confirm her availability for a phone call, but I wanted to pass on to you the main issue that we wanted to get clarified:

The data provided in RAI response AQ-1 include numbers or dashes. Does a dash indicate that the site was sampled, but the species was not observed (which would be equivalent to a zero)? If a species was not listed at a site, can we assume the value is zero because it was not observed?

I should be able to confirm availability soon and let you know.

On another note, I received two to the three packages with the paper copies of the RAI responses. Hopefully, the third will show up shortly. If not, I will let you know

Thanks,
Mike

From: Soenen, Philippe R [mailto:PNS3@pge.com]
Sent: Monday, January 11, 2016 9:58 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: RAI Telecon Draft Summary

Mike,

We have reviewed the draft telecom and we do not have any comments on it. Once you can get some of the specifics on the aquatic monitoring that requires follow up we will look for the PG&E availability to support a Wednesday or Thursday phone call.

Thanks,

Philippe Soenen

US 504.0451 | (b)(6) | pns3@pge.com

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Monday, January 11, 2016 4:54 AM
To: Soenen, Philippe R; Grebel, Terence
Subject: RAI Telecon Draft Summary

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Philippe/Terry,

Attached is a draft of the telecon summary from our phone call last week. Please let me know if you have any comments. Also, it looks like we are going to need one more phone call to clarify some of the aquatic monitoring data that was provided in the RAI responses. I hope to provide you with some of the issues that we need to get cleared up later today. Ideally, we would like to have a phone call either Wednesday or Thursday this week, depending on availability.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Hartwig, Adriana <ADH6@pge.com>
Sent: Wednesday, January 27, 2016 6:28 PM
To: Dapas, Marc; Lingam, Siva; Plasse, Richard; Tharakan, Binesh; Wentzel, Michael
Cc: "dcupdate@certrec.com" (dcupdate@certrec.com); Olsofsky, Michelle; Soenen, Philippe
R; Grebel, Terence; 'steve.coppock@starsalliance.com'; 'kefredr@WCNOC.com';
'Scott.Bauer@starsalliance.com'; 'thomas.n.weber@aps.com'
(thomas.n.weber@aps.com); 'Larry Parker' (larry.parker@starsalliance.com);
'steve.meyer@starsalliance.com' (steve.meyer@starsalliance.com);
'keith.mills@starsalliance.com' (keith.mills@starsalliance.com);
'david.heckman@aps.com'
Subject: [External Sender] NRC Submittal DCL-16-012, Clarifications to Env. RAI Responses for
Review of LRA
Attachments: DCL-16-012.pdf

The attachment is publicly available as ML16027A355.

The electronic file of the following letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-16-012, "Clarifications to Environmental Request for Additional Information Responses for the Review of the Diablo Canyon Power Plant, Units 1 and 2, License Renewal Application"

Signed by: Jearl Strickland – Director, Technical Services

If you do not wish to receive further e-mails such as this, please return this e-mail with your request.

Adriana Hartwig

PG&E | Diablo Canyon | Regulatory Services | 104/5/536B | Phone 805-545-3188

From: Mackey, Chuck <CJM2@pge.com>
Sent: Wednesday, March 30, 2016 4:56 PM
To: Singal, Balwant; Plasse, Richard; Tharakan, Binesh; Wentzel, Michael
Cc: 'dcupdate@certrec.com'; Steve.Coppock@starsalliance.com; Steve Meyer; kefredr@wcnoc.com; Scott Bauer; 'Tom Weber'; 'Larry Parker' (Larry.parker@starsalliance.com); 'Keith Mills' (Keith.mills@starsalliance.com); david.heckman@aps.com
Subject: [External_Sender] NRC Submittal DCL-16-034, Commitments Related to the Environmental Review of the Diablo Canyon Power Plan, Units 1 and 2, License Renewal Application
Attachments: DCL-16-034_Part3.pdf

This attachment is publicly available as ML16091A226.

The electronic file of the following letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information. Due to the file size, this document is being sent in 5 parts.

Part 3 of 5

NRC Submittal DCL-16-034, Commitments Related to the Environmental Review of the Diablo Canyon Power Plan, Units 1 and 2, License Renewal Application

Chuck Mackey

Diablo Canyon Power Plant
Regulatory Services
Senior Administrator - Nuclear
104/5/536A
P.O. Box 56
Avila Beach, CA 93424
Internal - 8-691-4444
External - (805) 545-4444

From: Mackey, Chuck <CJM2@pge.com>
Sent: Wednesday, March 30, 2016 4:57 PM
To: Singal, Balwant; Plasse, Richard; Tharakan, Binesh; Wentzel, Michael
Cc: 'dcupdate@certrec.com'; Steve.Coppock@starsalliance.com; Steve Meyer; kefredr@wcnoc.com; Scott Bauer; 'Tom Weber'; 'Larry Parker (Larry.parker@starsalliance.com)'; 'Keith Mills' (Keith.mills@starsalliance.com); david.heckman@aps.com
Subject: [External_Sender] NRC Submittal DCL 16-035, Commitments Related to the Environmental Review of the Diablo Canyon Power Plan, Units 1 and 2, License Renewal Application
Attachments: DCL-16-034_Part5.pdf

This attachment is publicly available as ML16090A305.

The electronic file of the following letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information. Due to the file size, this document is being sent in 5 parts.

Part 5 of 5

NRC Submittal DCL-16-034, Commitments Related to the Environmental Review of the Diablo Canyon Power Plan, Units 1 and 2, License Renewal Application

Chuck Mackey

Diablo Canyon Power Plant
Regulatory Services
Senior Administrator - Nuclear
104/5/536A
P.O. Box 56
Avila Beach, CA 93424
Internal - 8-691-4444
External - (805) 545-4444

From: Hartwig, Adriana <ADH6@pge.com>
Sent: Friday, December 04, 2015 5:08 PM
To: Wentzel, Michael
Cc: Soenen, Philippe R; Grebel, Terence
Subject: [External_Sender] NRC Sumibttal DCL-15-142, Response to RAI
Attachments: 151204, DCL-15-142.pdf

This attachment is publicly
available as ML16050A180.

From: Soenen, Philippe R <PNS3@pge.com>
Sent: Friday, February 05, 2016 8:14 PM
To: Wentzel, Michael
Subject: [External_Sender] Re: Contact Information

Mike,

I have a request in to Tom for this information. I'll pass it along once I get it from Tom.

Philippe Soenen

O - 805.595.6461

C (b)(6)

On Feb 4, 2016, at 3:53 AM, Wentzel, Michael
<Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>> wrote:

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Philippe,

When you and Tom came in for the drop-in, you had mentioned the possibility of using the county's facility for our eventual public meeting to discuss the draft SEIS. Can you provide me with the facility contact info? Obviously, there is some time between now and then, but I happened to think about it and wanted to ask for it while I had it on my mind.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov<mailto:michael.wentzel@nrc.gov>

From: Grebel, Terence <TLG1@pge.com>
Sent: Friday, September 11, 2015 1:34 PM
To: Wentzel, Michael
Cc: Olsofsky, Michelle; VOSBURG, ALIA; Jones, Thomas P.
Subject: [External_Sender] Re: Draft SAMA Audit Schedule

Mike:

We will get back to you by Monday afternoon or early Tuesday after we discuss with our team.

Sent from my iPhone

On Sep 11, 2015, at 9:20 AM, Wentzel, Michael
<Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>> wrote:

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Terry,

I have solicited some feedback from our SAMA staff and we would like to propose making a few changes to the schedule. Based on recent experiences, the staff feel pretty confident that we should be able to complete the audit in two days, with Wednesday available for close out and last-minute items. Also, we would like to pull forward the Level 3/External events discussion to Monday, if that will work for you. Once you've had a chance to review, please feel free to give me a call to discuss if you have any questions or concerns. I will be leaving the office early today, but I will be around all next week.

Thanks,
Mike

Monday, Sept 21

7:00: DCPD Team meet at License Renewal offices; breakfast; overview of audit and expectations
7:45: Walk to Broad Street
8:00-8:30: NRC Entrance Meeting at Broad Street Conference Room
9:00: Assemble NRC and DCPD teams in LR Conference Room
9:00 – 10:30: Level 3 Audit Needs Questions (6 questions total)
10:30-10:45 Break
10:45 – 11:30: External Events Audit Needs Questions (7 questions total)
11:30 – 12:00: LUNCH
12:00 – 1:00: External Events Audit Needs Questions, if needed or start Level 1 (continued)
1:00 – 1:15: Break
1:15 – 3:30: Level 1 Audit Needs Questions (12 questions total)
3:45 – 5:00: Time for NRC to review requested documentation
4:30: NRC PM and DCPD PM Daily De-brief
5:00: DCPD Team Daily De-brief

Tuesday, Sept 22

8:00: DCPD Team meet at License Renewal offices; breakfast
8:00-9:00 Time for NRC to review requested documentation
9:00 – 10:00: Level 1 or Level 2 Audit Needs Questions (continued)
10:00 – 10:15: Break
10:15 – 11:30: Level 2 Audit Needs Questions (10 questions total)

11:30 – 12:00: LUNCH
12:00 – 4:30: Cost-Benefit Analysis Audit Needs Questions and Potential Lower Cost SAMAs(20 questions total)
2:00 – 2:15: Break
4:30: NRC PM and DCPM PM Daily De-brief
5:00: DCPM Team Daily De-brief

Wednesday, Sept 23

8:00: DCPM Team meet at License Renewal offices; breakfast
8:00 – 8:30: Time for NRC to review any additional requested documentation
8:30 – 9:45 Any Follow Up Questions/Open items/Preliminary RAI discussion
9:45: Walk to Broad Street
10:00: NRC Exit Meeting at Broad Street Conference Room

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Wednesday, September 09, 2015 3:58 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>>
Cc: Olsofsky, Michelle <MMA0@pge.com<mailto:MMA0@pge.com>>; VOSBURG, ALIA <AKV1@pge.com<mailto:AKV1@pge.com>>
Subject: [External_Sender] FW: Draft SAMA Audit Schedule

Mike:

Please review and get back to us with any comments. We will develop a similar schedule for the environmental audit.

From: Olsofsky, Michelle
Sent: Wednesday, September 09, 2015 12:49 PM
To: Grebel, Terence
Subject: FW: Draft SAMA Audit Schedule

Terry,

Revised based on your phone call with Mike today. Do we want to send this to Mike for his awareness/concurrence?

Thanks,
Michelle

=====

Monday, Sept 21

7:00: DCPM Team meet at License Renewal offices; breakfast; overview of audit and expectations
7:45: Walk to Broad Street
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12:00 – 1:30: Level 1 Audit Needs Questions (continued)
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3:45 – 5:00: Time for NRC to review requested documentation
4:30: NRC PM and DCPM PM Daily De-brief
5:00: DCPM Team Daily De-brief

Tuesday, Sept 22

8:00: DCPM Team meet at License Renewal offices; breakfast

8:00 – 9:45: Time for NRC to review requested documentation
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12:00 – 1:00: External Events Audit Needs Questions (continued)
1:00 – 1:15: Break
1:15 – 3:00: Level 3 Audit Needs Questions (6 questions total)
3:00 – 3:15: Break
3:15 – 4:30: Cost-Benefit Analysis Audit Needs Questions (16 questions total)
4:30: NRC PM and DCPM PM Daily De-brief
5:00: DCPM Team Daily De-brief

Wednesday, Sept 23

8:00: DCPM Team meet at License Renewal offices; breakfast
8:30 – 10:30: Cost-Benefit Analysis Audit Needs Questions (continued)
10:30 – 10:45: Break
10:45 – 11:30: Potential Lower Cost SAMAs Audit Needs Questions (4 questions total)
11:30 – 12:00: LUNCH
12:00 – 12:45: Potential Lower Cost SAMAs Audit Needs Questions (continued)
12:45 – 1:00: Break
1:00 – 3:00: Follow-up Discussions; Time for NRC to review requested documentation
3:30: NRC PM and DCPM PM Daily De-brief
4:15: Walk to Broad Street
4:30: NRC Exit Meeting at Broad Street Conference Room
5:00: DCPM Team Daily De-brief

From: Grebel, Terence <T1G1@pge.com>
Sent: Wednesday, July 01, 2015 2:38 PM
To: Wentzel, Michael
Subject: [External_Sender] RE: Federal Register Notice Announcing Scoping

Thank you

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Wednesday, July 01, 2015 9:46 AM
To: Grebel, Terence
Subject: Federal Register Notice Announcing Scoping

Terry,

The Federal Register Notice announcing the start of the scoping period was issued today. I have attached a copy for your reference. The letter to PG&E announcing the start of scoping has been signed and should be issued later today. I will send a copy once it has been processed.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RP82
(301) 415-6459
michael.wentzel@nrc.gov

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From: Olsofsky, Michelle <MMA0@pge.com>
Sent: Friday, September 18, 2015 1:25 PM
To: Wentzel, Michael
Cc: Grebel, Terence
Subject: [External_Sender] RE: FW: DCPD SAMA Audit Document Location on DCPD Portal

Mike,

Good question – yes, it is viewable to all NRC/NRC contractors.

Thanks,

Michelle Olsofsky
DCPD License Renewal
734-748-0084

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Friday, September 18, 2015 12:24 PM
To: Olsofsky, Michelle
Cc: Grebel, Terence
Subject: RE: FW: DCPD SAMA Audit Document Location on DCPD Portal

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Thanks, Michelle. Just to confirm. has that been corrected for the other members of our team, as well?

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Friday, September 18, 2015 1:22 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] FW: DCPD SAMA Audit Document Location on DCPD Portal

Mike,

As we discussed on the phone call, our portal IT contact has updated your access. You should now be able to see the following 3 folders:

NRC Document Requests
NRC LR Correspondence
NRC Environmental Audit Binder

The SAMA references and audit needs are provided at the locations below.

Please let me know if there is anything else I can help with.

Thanks,

Michelle Olsofsky

DCPP License Renewal
734-748-0084

From: Olsofsky, Michelle
Sent: Friday, September 18, 2015 10:48 AM
To: Grebel, Terence
Subject: SAMA Audit Document Location on DCPP Portal

Terry,

I got your voicemail. All of completed responses and document requests were posted on the DCPP portal yesterday and are viewable to the NRC. The documents are in the following folders:

View: LR Environmental Audit Binder

- ER References, including SAMA
- SAMA References (Ref. 1.1.1)
- SAMA Audit Needs
- Document Requests
- Level 1 PRA
- Level 2 PRA
- External Events
- Level 3 PRA
- SAMA Identification and Screening
- Cost Benefit Analysis
- Potential Lower Cost SAMAs
- SAMA-Related Submittals

Thanks,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Grebel, Terence <TLG1@pge.com>
Sent: Monday, July 20, 2015 5:19 PM
To: Wentzel, Michael
Cc: Olsofsky, Michelle; VOSBURG, ALIA
Subject: [External_Sender] RE: Proposed Audit Dates

Dates look good to us.

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Friday, July 17, 2015 5:40 AM
To: Grebel, Terence
Subject: Proposed Audit Dates

Terry,

As I mentioned yesterday, I wanted to propose some specific dates for the SAMA and Environmental audits. The length of time I am proposing for both audits is consistent with recent audits. We can adjust, if necessary, once we've developed our audit needs, but I wanted to set up a timeframe now, so that we can start planning our travel.

For the SAMA audit, we would like to have the audit be Monday, September 21 through Wednesday, September 23. Our primary reviewer has to be back here by the 24th, so the 23rd is the latest we can be there that week.

For the environmental audit, I would like to propose Tuesday, September 29 through Thursday, October 1.

Please let me know if these dates will work with you and your team.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Soenen, Philippe R <PNS3@pge.com>
Sent: Monday, January 11, 2016 9:58 AM
To: Wentzel, Michael; Grebel, Terence
Subject: [External_Sender] RE: RAI Telecon Draft Summary

Mike,

We have reviewed the draft telecom and we do not have any comments on it. Once you can get some of the specifics on the aquatic monitoring that requires follow up we will look for the PG&E availability to support a Wednesday or Thursday phone call.

Thanks,

Philippe Soenen

Office: 305.595.6451 | Cell: (b)(6) | Email: pns3@pge.com

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Monday, January 11, 2016 4:54 AM
To: Soenen, Philippe R; Grebel, Terence
Subject: RAI Telecon Draft Summary

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Philippe/Terry,

Attached is a draft of the telecon summary from our phone call last week. Please let me know if you have any comments. Also, it looks like we are going to need one more phone call to clarify some of the aquatic monitoring data that was provided in the RAI responses. I hope to provide you with some of the issues that we need to get cleared up later today. Ideally, we would like to have a phone call either Wednesday or Thursday this week, depending on availability.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Kaminski, Cindy <CMSa@pge.com>
Sent: Monday, June 22, 2015 5:43 PM
To: Grebel, Terence; Wentzel, Michael
Cc: Olsofsky, Michelle; VOSBURG, ALIA
Subject: [External_Sender] RE: Tuesday Schedule
Attachments: 735 Tank Farm map.pdf; 4111Broad-BldgEntrance.pdf

Mike, attached please find maps to our offices. The meeting at 8:30 will be at 735 Tank Farm, Suite 220. If there is time, we will walk over to 4111 Broad Street, Suite 120 to show you the large conference room. This will be where the Audit Entrance and Exit Meetings will take place.

Thank you,
Cindy Kaminski

PG&E | Diablo Canyon Licensing Basis Verification Project/License Renewal | 4111 Broad St., San Luis Obispo |
Phone: 805-545-4515

From: Grebel, Terence
Sent: Friday, June 19, 2015 12:10 PM
To: Wentzel, Michael
Cc: Olsofsky, Michelle; Kaminski, Cindy; Bates, Al; Strickland, Jearl
Subject: Re: Tuesday Schedule

Mike:

8:30 am will work for us. We will send you a map on Monday. We look forward to seeing you at our offices on Tuesday.

Sent from my iPhone

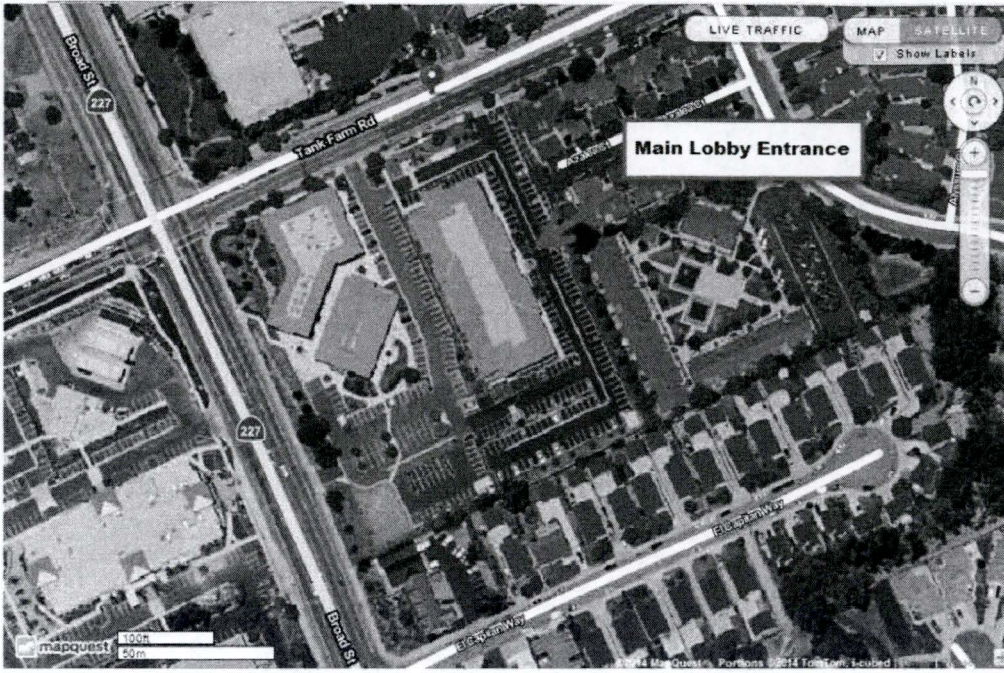
On Jun 19, 2015, at 11:28 AM, Wentzel, Michael <Michael.Wentzel@nrc.gov> wrote:

Terry,

Just wanted to touch base with you to let you know that all of my Tuesday annual assessment meeting obligations have not quite settled out, but I think I should be generally free before 10am that day. As far as meeting to tour the site audit location, do you think we could do that around 8 or 8:30am that morning? Hopefully, that should give us plenty of time before I have to be somewhere else, though I will only know that for sure once everything has been finalized.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov



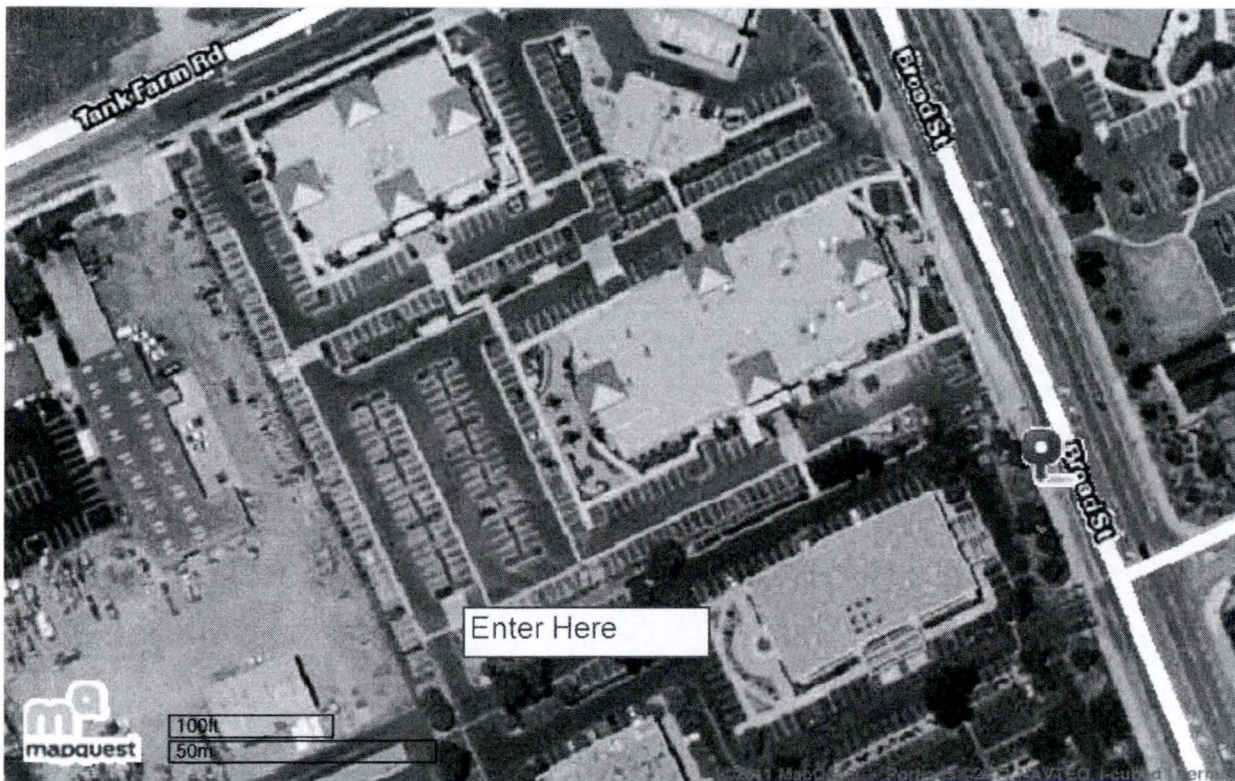


Notes

ENTER AT THE SIDE OF THE BUILDING
FACING AWAY FROM BROAD STREET

Map of:

4111 Broad St
San Luis Obispo, CA 93401-7903



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From: VOSBURG, ALIA <AKV1@pge.com>
Sent: Wednesday, September 30, 2015 12:06 AM
To: Wentzel, Michael
Subject: [External_Sender] Updated schedule
Attachments: Environmental Audit Schedule.xlsx

Mike,

Please see attached, updated schedule.

Thanks,
Alia

NRC Onsite Environmental Audit
 DCP License Renewal
 Overall Schedule

*Bridgeline
 1-866-652-7690 (b)(6)

September 28, 2015	Tank Farm Suite 220 Library	7	8	9	10	11	12	1	2	3	4	5
			Environmental Audit Entrance Meeting DRY-RUN (8:00 - 10:00)								DCPP Team Training* (4:00 - 5:00)	
			Tom Jones Terry Grebel Michelle Olschky Alia Vosburg Bryan Cunningham Mike Taggart Sally Krenn								Alia Vosburg Bryan Cunningham Mike Taggart Sally Krenn Mike Fry Kelly Kephart Jim Kelly Tom Jones Dan Stocks John Lindsey	
											Terry Grebel	
											Michelle Olschky Tom Esler	
	DCPP Site				Environmental Audit Tours DRY-RUN (See tour map/itinerary for breakdown) (10:00 - 4:00)							
					Tom Jones John Lindsey Terry Grebel Michelle Olschky Alia Vosburg Bryan Cunningham Mike Taggart Sally Krenn Mike Fry Kelly Kephart Dan Stocks Jim Kelly							

September 29, 2015		7	8	9	10	11	12	1	2	3	4	5
Tank Farm Suite 220 Library	DCPP IR Team Briefing (7:00 - 7:30)											
	IR Team											
4111 Broad Street Suite 120	Environmental Audit Entrance Meeting (8:00-10:00) All											
DCPP Site	Environmental Audit Tours (see tour map/itinerary for breakdown) (10:00-5:00) Kevin Falk William Ford Nancy Martinez Briana Granger Maribelto Mboer Mike Wintzel Resident Inspector Tom Jones John Lindsey Terry Grebel Michelle Oshafsky Alia Vinberg Bryan Cunningham Mike Taggart Sally Krenn Mike Fry Kelly Kephart Jon Kelly Dan Stocks Tara O'Neill Jeffrey Rishoff											NRC DCPP Daily Debrief (5:00 - 5:30)

September 30, 2015	Tank Farm Suite 220 Library	7	8	9	10	11	12	1	2	3	4	5
		DCPP LR Team Briefing (7:00 - 7:30) LR Team		Geologic Environment Tour (9:00 - 11:00) William Ford Kevin Folle Chris Maduga Joseph Sun Andrew Hothner			LUNCH	Biology* (12:30 - 4:30) Michelle Mauer Briana Grange Valerie Cullman* Bryan Cunningham Jim Kelly Kelly Kephart Sally Krome Mike Fry Gara Morimoto John Steinbeck Allie Veisberg				NRC DCP Daily Debrief (4:30 - 5:00) DCPP LR Team Briefing* (5:00 - 5:30) LR Team
	Tank Farm Suite 200 Conference Room		Alternatives* (8:00 - 9:00) Robert Hoffman* Tyson Smith Mike Wenzel Michelle Osofsky	Cultural Resources (9:00 - 11:30) Tara O'Neill Jeffrey Rinkoff Mike Taggart Michelle Osofsky			LUNCH	Geology and Soils (12:30 - 1:30) William Ford Kevin Folle Chris Maduga Joseph Sun Terry Grebel				Marine Resources - Tidpool tour (4:30 - 6:00) Michelle Mauer Briana Grange Sally Krome Kelly Kephart

October 1, 2015												
	7	8	9	10	11	12	1	2	3	4	5	
Tank Farm Suite 220 Library	DCPP LR Team Briefing (7:00 - 7:30) LR Team	Groundwater* (8:00 - 9:00) William Ford Bryan Cunningham Marty Wright Alia Vonburg		Waste Management* (9:30 - 10:30) Russell Chazell* Bryan Cunningham Trevor Rebel Tom Esser Michelle Olshofsky		LUNCH						
Tank Farm Suite 200 Conference Room		Air Quality (8:00 - 9:30) Nancy Martinez Tom Esser Michelle Olshofsky				LUNCH	Surface Water (12:30 - 1:30) Kevin Folk Bryan Cunningham Jim Kelly Michelle Olshofsky					
4111 Broad Street Suite 120						LUNCH				Environmental Audit Exit Meeting (3:30 - 4:30) All	DCPP LR Team Debrief* (4:30 - 5:00) LR Team	

From: Wentzel, Michael
Sent: Wednesday, July 01, 2015 12:46 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Federal Register Notice Announcing Scoping
Attachments: 2015-15921.pdf

This attachment is publicly available as
ML15182A424.

Terry,

The Federal Register Notice announcing the start of the scoping period was issued today. I have attached a copy for your reference. The letter to PG&E announcing the start of scoping has been signed and should be issued later today. I will send a copy once it has been processed.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Thursday, September 10, 2015 3:59 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Final Environmental Site Audit Needs Letter
Attachments: License Renewal Environmental Site Audit Regarding Diablo Canyon Power Plant, Units 1 and 2 (ML15243A582).pdf

This attachment is publicly available as ML15243A582.

Terry,

Attached is a copy of the final environmental site audit needs letter. There were no substantive changes from the last draft version I sent you.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Friday, August 28, 2015 1:54 PM
To: Terrence Grebel (TLG1@pge.com)
Cc: Olsofsky, Michelle (MMA0@pge.com); 'VOSBURG, ALIA'
Subject: Follow-up to our 8/27 phone call re: site audit logistics

Terry,

I was thinking some more about our phone call yesterday and a few things came to mind that I wanted to pass on.

First, though we didn't explicitly request it in the draft letter, it would be helpful if you could make available all of the references in the ER. Electronic copies are fine. If this will be an issue, please let me know. Related to this, we had discussed having hard copies of responses available. I think I had said 1-2 copies. Just to be clear, we would only need 1 copy. If you could break it up by resource area, that would be great. Also, we do not need hard copies for alternatives, cumulative impacts, or waste management. Related to documents, we will likely not be taking any documentation back with us. This is because, were we to take anything back with us from the audit, we would need to treat it as an official agency record.

One thing that I meant to bring up yesterday was you and I (and whomever else you feel should be included) should check-in once a day, maybe at the end of the day, to go over the status of the needs and any other issues that may come up. Of course, we can also do that periodically throughout the day, but it would be helpful to set aside some time at the end of the day to touch base.

That's all I have right now. I am going to be heading out soon and, as I mentioned yesterday, I will be out of the office though next week, though I will be checking email periodically.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Wednesday, September 30, 2015 4:47 PM
To: Olsofsky, Michelle (MMA0@pge.com)
Cc: Terrence Grebel (TLG1@pge.com)
Subject: Follow-ups for Air Quality

Michelle,

In preparation for the air quality breakout session tomorrow, we have the following additional questions based on our review of the information provided:

Follow-up to MET 1: Permit to Operate (PTO) 49-1, 338-1, 415-3, and 546-2, was provided for review. According to the ER the permit was issued July 2014 and expired 6/2015. PTO 886-2 and 1820-1 was issued in June 2014 and expired March 2015. PTO 533-2, 886-2, 919-3, 1065-6, and 1845-1, was issued in June 2013 and expired June 2014. 1944-1 was issued Sept 2014 and expired June 2015. PTO 1946-1 was issued in Sept 2014 and expired August 2015. Have these permits been renewed?

Follow-up to MET-5: Clarify if GHG emissions included in e-GERT and Cal-eGCRT annual reports include SF6 emissions, only, or internal combustion equipment emissions as well.

Follow-up to MET-10: What is the approximate distance from turbine building to site boundary? What is the distance from DCP to the nearest off-site permanent resident?

Thanks,
Mike

From: Plasse, Richard
Sent: Wednesday, May 04, 2016 1:40 PM
To: Billoch, Araceli
Subject: FW: NRC Submittal, DCL-15-027, Update to LRA Amendment 49 and LRA Appendix E Part 2 of 8
Attachments: DCL-15-027 Part 2.pdf

This attachment is publicly available
as ML15062A261.

From: Hartwig, Adriana [mailto:ADH6@pge.com]
Sent: Wednesday, February 25, 2015 6:43 PM
To: Dapas, Marc <Marc.Dapas@nrc.gov>; Hipschman, Thomas <Thomas.Hipschman@nrc.gov>; Keegan, Elaine <Elaine.Keegan@nrc.gov>; Lingam, Siva <Siva.Lingam@nrc.gov>; Plasse, Richard <Richard.Plasse@nrc.gov>
Cc: 'dcupdate@certrec.com' <dcupdate@certrec.com>; Heggli, Gregory W <GWH2@pge.com>; Olsofsky, Michelle <MMA0@pge.com>; 'Madden, Fred (Fred.Madden@luminant.com)' <Fred.Madden@luminant.com>; 'kefredr@WCNOC.com' <kefredr@WCNOC.com>; 'Scott.Bauer@starsalliance.com' <Scott.Bauer@starsalliance.com>; 'keith.mills@starsalliance.com' <keith.mills@starsalliance.com>; 'james.becker@starsalliance.com' <james.becker@starsalliance.com>; 'Larry Parker' <larry.parker@starsalliance.com>; 'steve.meyer@starsalliance.com' <steve.meyer@starsalliance.com>; 'thomas.n.weber@aps.com' <thomas.n.weber@aps.com>; 'david.heckman@aps.com' <david.heckman@aps.com>
Subject: NRC Submittal, DCL-15-027, Update to LRA Amendment 49 and LRA Appendix E Part 2 of 8

The electronic file of the following letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-15-027, "Update to the Diablo Canyon Power Plant License Renewal Application (LRA), Amendment 49 and LRA Appendix E, "Applicant's Environmental Report – Operating License Renewal Stage," Amendment 2"

Signed by: Barry S. Allen – Vice President, Nuclear Services

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Adriana Hartwig

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Francis, Lezlie

From: Plasse, Richard
Sent: Wednesday, May 04, 2016 1:39 PM
To: Billoch, Araceli
Subject: FW: NRC Submittal, DCL-15-027, Update to LRA Amendment 49 and LRA Appendix E Part 3 of 8
Attachments: DCL 15-027 Part 3.pdf This attachment is publicly available as ML15062A266.

From: Hartwig, Adriana [mailto:ADH6@pge.com]
Sent: Wednesday, February 25, 2015 6:46 PM
To: Dapas, Marc <Marc.Dapas@nrc.gov>; Hipschman, Thomas <Thomas.Hipschman@nrc.gov>; Keegan, Elaine <Elaine.Keegan@nrc.gov>; Lingam, Siva <Siva.Lingam@nrc.gov>; Plasse, Richard <Richard.Plasse@nrc.gov>
Cc: 'dcupdate@certrec.com' <dcupdate@certrec.com>; Heggli, Gregory W <GWH2@pge.com>; Olsofsky, Michelle <MMA0@pge.com>; 'Madden, Fred (Fred.Madden@luminant.com)' <Fred.Madden@luminant.com>; 'kefredr@WCNOC.com' <kefredr@WCNOC.com>; 'Scott.Bauer@starsalliance.com' <Scott.Bauer@starsalliance.com>; 'keith.mills@starsalliance.com' <keith.mills@starsalliance.com>; 'james.becker@starsalliance.com' <james.becker@starsalliance.com>; 'Larry Parker' <larry.parker@starsalliance.com>; 'steve.meyer@starsalliance.com' <steve.meyer@starsalliance.com>; 'thomas.n.weber@aps.com' <thomas.n.weber@aps.com>; 'david.heckman@aps.com' <david.heckman@aps.com>
Subject: NRC Submittal, DCL-15-027, Update to LRA Amendment 49 and LRA Appendix E Part 3 of 8

The electronic file of the following letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-15-027, "Update to the Diablo Canyon Power Plant License Renewal Application (LRA), Amendment 49 and LRA Appendix E, "Applicant's Environmental Report – Operating License Renewal Stage," Amendment 2"

Signed by: Barry S. Allen – Vice President, Nuclear Services

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Adriana Hartwig

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From: Plasse, Richard
Sent: Wednesday, May 04, 2016 1:36 PM
To: Billoch, Araceli
Subject: FW: NRC Submittal DCL-13-119, "10 CFR 54.21(b) Annual Update to the Diablo Canyon Power Plant License Renewal Application Amendment Number 47"
Attachments: DCL 13-119b.pdf

This attachment is publicly available as ML13357A759.

From: Hartwig, Adriana [mailto:ADH6@pge.com]
Sent: Monday, December 23, 2013 4:18 PM
To: Benney, Brian <Brian.Benney@nrc.gov>; Dapas, Marc <Marc.Dapas@nrc.gov>; Hipschman, Thomas <Thomas.Hipschman@nrc.gov>; Plasse, Richard <Richard.Plasse@nrc.gov>
Subject: NRC Submittal DCL-13-119, "10 CFR 54.21(b) Annual Update to the Diablo Canyon Power Plant License Renewal Application Amendment Number 47"

The electronic file of the following cover letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-13-119, "10 CFR 54.21(b) Annual Update to the Diablo Canyon Power Plant License Renewal Application Amendment Number 47"

Signed by: Barry S. Allen – Site Vice President

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Adriana Hartwig

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From: Plasse, Richard
Sent: Wednesday, May 04, 2016 1:36 PM
To: Billoch, Araceli
Subject: FW: NRC Submittal DCL-14-043, Status of LRA of DCPD U1 and U2
Attachments: DCL-14-043.pdf

This attachment is publicly available as ML14155A231.

From: Hartwig, Adriana [mailto:ADH6@pge.com]
Sent: Wednesday, June 04, 2014 1:00 PM
To: Bamford, Peter <Peter.Bamford@nrc.gov>; Dapas, Marc <Marc.Dapas@nrc.gov>; Hipschman, Thomas <Thomas.Hipschman@nrc.gov>; Keegan, Elaine <Elaine.Keegan@nrc.gov>; Plasse, Richard <Richard.Plasse@nrc.gov>
Cc: 'dcupdate@certrec.com' <dcupdate@certrec.com>; 'Madden, Fred (Fred.Madden@luminant.com)' <Fred.Madden@luminant.com>; 'kefredr@wcnoc.com' <kefredr@wcnoc.com>; 'Scott.Bauer@starsalliance.com' <Scott.Bauer@starsalliance.com>; 'keith.mills@starsalliance.com' <keith.mills@starsalliance.com>; 'james.becker@starsalliance.com' <james.becker@starsalliance.com>; 'Larry Parker' <larry.parker@starsalliance.com>; 'steve.meyer@starsalliance.com' <steve.meyer@starsalliance.com>; 'thomas.n.weber@aps.com' <thomas.n.weber@aps.com>; 'timothy.hope@luminant.com' <timothy.hope@luminant.com>; 'david.heckman@aps.com' <david.heckman@aps.com>; DCPD BASES DD <DCPDBASESDD@exchange.pge.com>; 'dsneed@thetribunenews.com' (dsneed@thetribunenews.com) <dsneed@thetribunenews.com>; 'janeslo@kcbx.net' (janeslo@kcbx.net) <janeslo@kcbx.net>
Subject: NRC Submittal DCL-14-043, Status of LRA of DCPD U1 and U2

The electronic file of the following letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-14-043, "Status of the License Renewal Application of the Diablo Canyon Nuclear Power Plant, Units 1 and 2"

Signed by: Edward D. Halpin – Senior Vice President, Nuclear Generation and Chief Nuclear Officer

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From: Plasse, Richard
Sent: Wednesday, May 04, 2016 1:39 PM
To: Billoch, Araceli
Subject: FW: NRC Submittal DCL-15-121, Response to RAI for Review of LRA - Set 38 Part 1 of 2
Attachments: 151021, DCL-15-121_Part1.pdf

This attachment is publicly available as ML15294A437.

From: Hartwig, Adriana [mailto:ADH6@pge.com]
Sent: Wednesday, October 21, 2015 3:24 PM
To: Hipschman, Thomas <Thomas.Hipschman@nrc.gov>; Lingam, Siva <Siva.Lingam@nrc.gov>; Plasse, Richard <Richard.Plasse@nrc.gov>; Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: 'dcupdate@certrec.com' <dcupdate@certrec.com>; Grebel, Terence <TLG1@pge.com>; Olsofsky, Michelle <MMA0@pge.com>; 'steve.coppock@starsalliance.com' <steve.coppock@starsalliance.com>; 'kefredr@WCNOC.com' <kefredr@WCNOC.com>; 'Scott.Bauer@starsalliance.com' <Scott.Bauer@starsalliance.com>; 'thomas.n.weber@aps.com' <thomas.n.weber@aps.com>; 'Larry Parker' <larry.parker@starsalliance.com>; 'steve.meyer@starsalliance.com' <steve.meyer@starsalliance.com>; 'keith.mills@starsalliance.com' <keith.mills@starsalliance.com>; 'david.heckman@aps.com' <david.heckman@aps.com>; Soenen, Philippe R <PNS3@pge.com>
Subject: [External_Sender] NRC Submittal DCL-15-121, Response to RAI for Review of LRA - Set 38 Part 1 of 2

The electronic file of the following letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-15-121, "Response to NRC Letter dated September 24, 2015, Request for Additional Information for the Review of the Diablo Canyon Power Plant, Units 1 and 2, License Renewal Application - Set 38"

Signed by: Barry Allen – Vice President, Nuclear Services

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Adriana Hartwig

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From: Plasse, Richard
Sent: Wednesday, May 04, 2016 1:40 PM
To: Billoch, Araceli
Subject: FW: NRC Submittal, DCL-15-027, Update to LRA Amendment 49 and LRA Appendix E Part 5 of 8
Attachments: DCL-15-027 Part 5.pdf

This attachment is publicly available as ML15062A249.

From: Hartwig, Adriana [mailto:ADH6@pge.com]
Sent: Wednesday, February 25, 2015 6:50 PM
To: Dapas, Marc <Marc.Dapas@nrc.gov>; Hipschman, Thomas <Thomas.Hipschman@nrc.gov>; Keegan, Elaine <Elaine.Keegan@nrc.gov>; Lingam, Siva <Siva.Lingam@nrc.gov>; Plasse, Richard <Richard.Plasse@nrc.gov>
Cc: 'dcupdate@certrec.com' <dcupdate@certrec.com>; Heggli, Gregory W <GWH2@pge.com>; Olsofsky, Michelle <MMA0@pge.com>; 'Madden, Fred (Fred.Madden@luminant.com)' <Fred.Madden@luminant.com>; 'kefredr@WCNOC.com' <kefredr@WCNOC.com>; 'Scott.Bauer@starsalliance.com' <Scott.Bauer@starsalliance.com>; 'keith.mills@starsalliance.com' <keith.mills@starsalliance.com>; 'james.becker@starsalliance.com' <james.becker@starsalliance.com>; 'Larry Parker' <larry.parker@starsalliance.com>; 'steve.meyer@starsalliance.com' <steve.meyer@starsalliance.com>; 'thomas.n.weber@aps.com' <thomas.n.weber@aps.com>; 'david.heckman@aps.com' <david.heckman@aps.com>
Subject: NRC Submittal, DCL-15-027, Update to LRA Amendment 49 and LRA Appendix E Part 5 of 8

The electronic file of the following letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-15-027, "Update to the Diablo Canyon Power Plant License Renewal Application (LRA), Amendment 49 and LRA Appendix E, "Applicant's Environmental Report – Operating License Renewal Stage," Amendment 2"

Signed by: Barry S. Allen – Vice President, Nuclear Services

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Adriana Hartwig

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From: Wentzel, Michael
Sent: Thursday, July 02, 2015 5:52 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: FW: NRC Submittal DCL-15-080, "Diablo Canyon Power Plant License Renewal Severe Accident Mitigation Alternatives Analysis Evaluation of the 2015 Seismic Hazard Results"

Hi Terry,

Can you replace Elaine with me on the cc list?

Thanks
Mike

From: Mackey, Chuck [<mailto:CJM2@pge.com>]
Sent: Wednesday, July 01, 2015 2:37 PM
To: Hipschman, Thomas; Keegan, Elaine; Lingam, Siva; Plasse, Richard
Cc: 'fred.madden@luminant.com'; kefredr@wcnoc.com; Scott Bauer; Keith Mills; 'Steve.Coppock@starsalliance.com'; Larry Parker (Larry.parker@starsalliance.com); Tom Weber; 'timothy.hope@luminant.com'; david.heckman@aps.com; 'dupdate@certrec.com'
Subject: [External_Sender] NRC Submittal DCL-15-080, "Diablo Canyon Power Plant License Renewal Severe Accident Mitigation Alternatives Analysis Evaluation of the 2015 Seismic Hazard Results"

The electronic file of the following letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-15-080, "Diablo Canyon Power Plant License Renewal Severe Accident Mitigation Alternatives Analysis Evaluation of the 2015 Seismic Hazard Results"

Chuck Mackey

Diablo Canyon Power Plant
Regulatory Services
Senior Administrator - Nuclear
104/5/536A
P.O. Box 56
Avila Beach, CA 93424
Internal - 8-691-4444
External - (805) 545-4444

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From: Grebel, Terence <TLG1@pge.com>
Sent: Monday, March 30, 2015 3:52 PM
To: Wentzel, Michael
Subject: Fwd: Plant event calendar for September

It would appear that the last two weeks of September would be best for the proposed audit meeting.

Sent from my iPhone

Begin forwarded message:

From: "Johnston, Kenneth" <KEJ5@pge.com<mailto:KEJ5@pge.com>>
Date: March 30, 2015 at 11:14:09 AM PDT
To: "Grebel, Terence" <TLG1@pge.com<mailto:TLG1@pge.com>>
Cc: "Strickland, Jearl" <LJS2@pge.com<mailto:LJS2@pge.com>>, "Bates, Al" <AEBF@pge.com<mailto:AEBF@pge.com>>
Subject: RE: Plant event calendar for September

Terry

Follow your heart. (? Or was that iPhone spell check on Jearl?)

Here's what I know for September -
8/31-9/4 is the second week of the WANO peer review
9/7 is Labor day
9/9 is a full scope training drill.
9/14-18 is the INPO ATV pre-visit.
We roll into the outage on Sunday 10/4.

-----Original Message-----

From: Grebel, Terence
Sent: Monday, March 30, 2015 10:19 AM
To: Johnston, Kenneth
Cc: Strickland, Jearl; Bates, Al
Subject: Plant event calendar for September

Ken:

I understand from heart that you putting together a calendar. Do we have any inpo, nrc or other major events for September? We may be having a nrc license renewal environmental audit in September.

Sent from my iPhone

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From: Wentzel, Michael
Sent: Wednesday, September 16, 2015 8:00 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: My Schedule

Terry,

I can't remember when you said that you were planning to call me to discuss logistics. For your awareness, I will be available today between 12:00-1:00pm, and from around 3:00-4:15pm. I should be pretty available on Thursday and until around 3:00pm on Friday. All times are East Coast time.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Thursday, October 08, 2015 10:59 AM
To: 'VOSBURG, ALIA'
Subject: RE: DCPD ER Audit Responses

Great Thanks. Alia.

From: VOSBURG, ALIA [mailto:AKV1@pge.com]
Sent: Thursday, October 08, 2015 10:52 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Subject: [External_Sender] DCPD ER Audit Responses

Mike,

Responses to audit questions TER-8 and AQ-5 have been posted to the portal. In addition, a response to the new question, regarding a GHG Emissions Reduction Program, has been posted to the portal under the title MET-5-A.

Thanks,

Alia Vosburg
DCPD License Renewal Project
(805)595-6467

From: Wentzel, Michael
Sent: Monday, August 03, 2015 6:08 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: Participation of the Resident for the Site Tour

Terry,

Got your message. I let the Resident know that he was free to participate in the tour, but I have not hear affirmatively one way or the other if he actually intends to participate. I will ask him and let you know what I hear.

Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Thursday, November 05, 2015 7:53 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: Phone Call Summary
Attachments: 110415, Summary of Telephone Conference Call Held Between NRC and PG&E Concerning the RAIs pertaining to the DCPD LRA Environmental Review.docx

Terry,

I signed the environmental RAIs this morning, so the letter will be dated today. I will forward an electronic copy once it is available. I've attached a draft phone call summary. Please let me know if you have any comments.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

LICENSEE: Pacific Gas and Electric Co.

FACILITY: Diablo Canyon Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON NOVEMBER 4, 2015, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE DRAFT REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Pacific Gas and Electric Co. (PG&E) held a telephone conference call on November 4, 2015, to discuss and clarify the NRC staff's request for additional information (RAI) concerning the Diablo Canyon Power Plant, Units 1 and 2, license renewal application environmental review. The draft RAI was transmitted to PG&E by email dated October 21, 2015.

The following draft RAIs were discussed during the call:

SSH-13(g) – PG&E stated that the document requested in draft RAI SSH-13(g), "Observations of the gray whale migration in the vicinity of Diablo Canyon, California: 1981-1994 migrations" is not available. As such, the NRC staff agreed to delete the request.

SWR-1 – PG&E stated that the annual environmental reports submitted to the California Energy Commission are transmitted electronically; therefore, the correspondence requested in draft RAI SWR-1 is not available. The NRC staff agreed to delete "Include associated transmittal correspondence with the CEC" from the request.

SWR-13 – PG&E stated that the portion of the RAI requesting an evaluation of trends in the frequency of operating with two auxiliary saltwater pump trains is incorrect in that the plant does not operate with two auxiliary saltwater pumps. Rather, in accordance with Technical Specification Limiting Conditions for Operation 3.7.9, a second heat exchanger is placed in service when inlet temperature exceeds 64 degrees Fahrenheit. As such, the NRC staff modified the statement to read, "As part of the response address whether there is any apparent trend in the frequency or annual hours of operation in accordance with Technical Specifications Limiting Conditions for Operation 3.7.9, Condition A."

Enclosure 1 provides a listing of the participants.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosure: As stated

cc w/encl: Listserv

Enclosure 1 provides a listing of the participants.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosure: As stated

cc w/encl: Listserv

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*concurrence via email

OFFICE	LA:DLR*	PM:RPB2:DLR	BC:RPB2:DLR	PM:RPB2:DLR
NAME	IBetts	MWentzel	JDanna	MWentzel
DATE				

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SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON NOVEMBER 4, 2015, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE DRAFT REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

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RidsNrrDlrRasb Resource

RidsNrrDlrRsrg Resource

RidsOgcMailCenter Resource

RidsNrrPMDiabloCanyon Resource

MWentzel

JDanna

RPlasse

DWrona

SLingam

CKanatas, OGC

JLindell, OGC

THipschman, SRI

JReynoso, RI

GMiller, RIV

DMcIntyre, OPA

LUselding, OPA

WMaier, RIV

AMoreno, OCA

TELEPHONE CONFERENCE CALL
DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

LIST OF PARTICIPANTS
NOVEMBER 4, 2015

PARTICIPANTS

Michael Wentzel
Terry Grebel
Michelle Olsofsky

ORGANIZATION

U.S. Nuclear Regulatory Commission
Pacific Gas and Electric Co.
Pacific Gas and Electric Co.

ENCLOSURE

From: Wentzel, Michael
Sent: Friday, August 14, 2015 8:32 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: Portal Access For NRC Contractors

Terry,

I wanted to see if I could access to the DCPD portal for a few of our contractors. Their information is below. If this is any issues with this, please let me know.

<u>Name</u>	<u>Email Address</u>	<u>Telephone Number</u>
Tara O'Neill	tara.oneil@pnnl.gov	541-738-0362
Ellen Kennedy	ellen.kennedy@pnnl.gov	509-375-2838
Valerie Cullinan	valerie.cullinan@pnnl.gov	360-681-3662

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Thursday, September 10, 2015 4:14 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Portal Access

Terry,

Can you grant portal access for our SAMA contractors? Their info is below:

<u>Name</u>	<u>Email Address</u>	<u>Telephone Number</u>
Bob Schmidt	(b)(6)	301-473-7010
Bruce Schmitt	bruce.schmitt@pnri.gov	(b)(6)

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Friday, September 18, 2015 2:07 PM
To: 'Olsofsky, Michelle'
Cc: 'Grebel, Terence'
Subject: Portal Question

Michelle.

One other issue. When I click on any of the Word documents, Microsoft Word Viewer opens, but no documents actually open. However, when I click on a PDF the file opens. Any advice?

Thanks.
Mike

From: Wentzel, Michael
Sent: Friday, July 17, 2015 8:40 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: Proposed Audit Dates

Terry,

As I mentioned yesterday, I wanted to propose some specific dates for the SAMA and Environmental audits. The length of time I am proposing for both audits is consistent with recent audits. We can adjust, if necessary, once we've developed our audit needs, but I wanted to set up a timeframe now, so that we can start planning our travel.

For the SAMA audit, we would like to have the audit be Monday, September 21 through Wednesday, September 23. Our primary reviewer has to be back here by the 24th, so the 23rd is the latest we can be there that week.

For the environmental audit, I would like to propose Tuesday, September 29 through Thursday, October 1.

Please let me know if these dates will work with you and your team.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Monday, January 11, 2016 7:54 AM
To: 'Soenen, Philippe R'; Terrence Grebel (TLG1@pge.com)
Subject: RAI Telecon Draft Summary
Attachments: 010715, Summary of Telephone Conference Call Held Between NRC and PG&E
Concerning the RAI Responses pertaining to the DCPD LRA Environmental Review.docx

Philippe/Terry,

Attached is a draft of the telecon summary from our phone call last week. Please let me know if you have any comments. Also, it looks like we are going to need one more phone call to clarify some of the aquatic monitoring data that was provided in the RAI responses. I hope to provide you with some of the issues that we need to get cleared up later today. Ideally, we would like to have a phone call either Wednesday or Thursday this week, depending on availability.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

LICENSEE: Pacific Gas and Electric Co.

FACILITY: Diablo Canyon Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 7, 2016, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Pacific Gas and Electric Co. (PG&E) held a telephone conference call on January 7, 2016, to discuss and clarify the PG&E's December 4, 2015, responses to the NRC staff's request for additional information (RAI) concerning the environmental review of the Diablo Canyon Power Plant, Units 1 and 2, license renewal application.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the responses discussed with PG&E, including a brief description of the status.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosure: As stated

cc w/encl: Listserv

LICENSEE: Pacific Gas and Electric Co.

FACILITY: Diablo Canyon Power Plant, Units 1 and 2

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 7, 2016, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

The U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Pacific Gas and Electric Co. (PG&E) held a telephone conference call on January 7, 2016, to discuss and clarify the PG&E's December 4, 2015, responses to the NRC staff's request for additional information (RAI) concerning the environmental review of the Diablo Canyon Power Plant, Units 1 and 2, license renewal application.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a listing of the responses discussed with PG&E, including a brief description of the status.

PG&E had an opportunity to comment on this summary.

Michael Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323

Enclosure: As stated

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NAME	IBetts	MWentzel	JDanna	MWentzel
DATE				

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SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 7, 2016, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND PACIFIC GAS AND ELECTRIC CO. CONCERNING THE RESPONSES TO A REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (CAC NOS. MF4019 AND MF4020)

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RidsNrrDlrRasb Resource

RidsNrrDlrRsrg Resource

RidsNrrDraArcb Resource

RidsOgcMailCenter Resource

RidsNrrPMDiabloCanyon Resource

MWentzel

JDanna

RPlasse

KFolk

NMartinez

SLingam

CKanatas, OGC

JLindell, OGC

THipschman, SRI

JReynoso, RI

JGroom, RIV

DMcIntyre, OPA

LUselding, OPA

WMaier, RIV

AMoreno, OCA

TELEPHONE CONFERENCE CALL
DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

LIST OF PARTICIPANTS
JANUARY 7, 2016

PARTICIPANTS

Kevin Folk
Nancy Martinez
Michael Wentzel
Bryan Cunningham
Terry Grebel
Michelle Olsofsky
Philippe Soenen

ORGANIZATION

U.S. Nuclear Regulatory Commission (NRC)
NRC
NRC
Pacific Gas and Electric Co. (PG&E)
PG&E
PG&E
PG&E

TELEPHONE CONFERENCE CALL CONCERNING THE
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
RELATED TO THE SEVERE ACCIDENT MITIGATION ALTERNATIVES REVIEW
OF THE DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL APPLICATION

JANUARY 7, 2016

By letter dated November 5, 2015, the U.S. Nuclear Regulatory Commission (NRC) staff issued a request for additional information (RAI) to Pacific Gas and Electric Co. (PG&E) related to the environmental review of the Diablo Canyon Power Plant, Units 1 and 2 (DCPP), license renewal application. By letter dated December 4, 2015, PG&E submitted responses to NRC staff RAIs. On January 7, 2016, the NRC staff and representatives of PG&E held a telephone conference call to discuss and clarify the following RAI responses.

Response to RAI-AIR-5(c).

Discussion: The NRC staff requested PG&E clarify whether there is a greenhouse gas emissions reduction program implemented specifically at DCPP. PG&E stated that it would provide an amended response to the RAI to provide the necessary clarification.

Response to RAI-SWR-1.

Discussion: The NRC staff requested that PG&E clarify how total surface water withdrawals at DCPP could be determined using the spreadsheets that were provided in response to this RAI. PG&E stated that it would provide an amended response to the RAI to provide the necessary clarification.

Response to RAI-SWR-10.

Discussion: The NRC staff requested that PG&E resolve the apparent discrepancy between this RAI response, which states that the DCPP desalination facility is licensed to produce 1.5 million gallons per day (gpd) and Section 3.1.2 of the environmental report, which states that the desalination facility has the capacity to produce 450 gallons per minute (648,000 gpd). PG&E stated that it would provide an amended response to the RAI to provide the necessary clarification.

ENCLOSURE 2

From: Wentzel, Michael
Sent: Thursday, October 01, 2015 1:27 PM
To: 'VOSBURG, ALIA'
Subject: RE: AQ-1 reference

Thanks. Alia. Will do.

From: VOSBURG, ALIA [mailto:AKV1@pge.com]
Sent: Thursday, October 01, 2015 10:26 AM
To: Wentzel, Michael
Subject: [External_Sender] AQ-1 reference

Mike,

Yesterday in our Biology breakout meeting Michelle Moser had asked if the NRC had received the 2014 Receiving Water Monitoring Program Annual Report referenced in DCPD response to AQ-1. The NRC was copied on that report; the ADAMS accession number is ML15146A168. Could you please pass this along to Michelle?

Thanks,

Alia Vosburg
DCPD License Renewal Project
(805) 595-6467

From: Wentzel, Michael
Sent: Wednesday, November 18, 2015 10:13 AM
To: Grebel, Terence
Cc: Olsofsky, Michelle
Subject: RE: Are you available today for a phone call?

Terry,

I am supporting a hearing today, so it is kind of hard to nail down a specific time. That having been said, I should be free around lunchtime. Can we shoot for 12:45 my time? If you don't need a set time, I can just call when I get some free time.

From: Grebel, Terence [TLG1@pge.com]
Sent: Wednesday, November 18, 2015 9:58 AM
To: Wentzel, Michael
Cc: Olsofsky, Michelle
Subject: [External_Sender] Are you available today for a phone call?

Mike:

We would like to discuss what documents that need to have docketed as part of the RAIs.

From: Wentzel, Michael
Sent: Monday, January 04, 2016 10:51 AM
To: 'Soenen, Philippe R'
Cc: 'Strickland, Jearl'; 'Jones, Thomas P.'; 'Grebel, Terence'
Subject: RE: Availability for Status Update

Philippe.

I am available at that time

From: Soenen, Philippe R [mailto:PNS3@pge.com]
Sent: Monday, January 04, 2016 10:35 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Strickland, Jearl <JS2@pge.com>; Jones, Thomas P. <TPJ2@pge.com>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] Availability for Status Update

Mike,

I was wondering if you would be available on Tuesday January 5, 2016 at 1300 Eastern for us to provide you with a status update of the renewal process for the DCPD intake and discharge channel structures leases?

Regards,

Philippe Soenen

Phone: 704.543.6444 | ext. (b)(6) | email: pns3@pge.com

From: Wentzel, Michael
Sent: Wednesday, September 30, 2015 8:57 PM
To: 'Olsofsky, Michelle'
Cc: 'Grebel, Terence'
Subject: RE: Copies of Cultural Resources "on CD" items

Thanks. Michelle.

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Wednesday, September 30, 2015 5:53 PM
To: Wentzel, Michael
Cc: Grebel, Terence
Subject: [External_Sender] Copies of Cultural Resources "on CD" items

Mike,

Since Tara will not be in the office tomorrow, I wanted to pass along that I uploaded two documents onto the portal for her. She identified these in the ER Reference binder and they said "on CD".

They are at the following location on the portal:

LR Environmental Audit Binder > ER References, including SAMA

File 1: "(Ref. 2.121) Cultural Resources TDR App B, NRHP Nomination Pkg.pdf"

File 2: "(Ref. 2.121) Cultural Resources TDR App C, Records Search Results"

Please let me know if there is anything else that I can load for cultural resources.

Thanks,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael
Sent: Tuesday, October 20, 2015 4:28 PM
To: 'VOSBURG, ALIA'
Cc: 'Grebel, Terence'; 'Olsofsky, Michelle'
Subject: RE: DCPD Env Audit Portal Update

Thanks. Alia.

From: VOSBURG, ALIA [mailto:AKV1@pge.com]
Sent: Tuesday, October 20, 2015 4:10 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Grebel, Terence <TLG1@pge.com>; Olsofsky, Michelle <MMA0@pge.com>
Subject: [External_Sender] DCPD Env Audit Portal Update

Mike,

The table below provides a list of items added to the portal since October 1, 2015.

AQ-Response: AQ-5	10/19/15
AQ-Reference: OTC Policy Amendment – Track 2	10/07/15
MET-Response: MET-10	10/05/15
MET-Response: MET-5-A	10/08/15
SW-Response: SW-5	10/19/15
TER-Response: TER-8	10/08/15
TER-Reference: AD7.ID6 (R12) Supplemental Interface A2 pgs. 25-26 (Env Risk)	10/07/15
TER-Reference: AD7.DC8 (R46) Work Planning pg-36 (8.26 Excavation)	10/07/15
TER-Reference: CF3.ID9 (R49A) Design Change Development Pgs. 113-114 (Env Quality)	10/07/15
TER-Reference: TS3.ID2 (R39) Licensing Basis Impact Eval Pgs. 56-57 (Env Pre-Screen)	10/07/15
WM-Response: WM-2	10/05/15
WM-Response: WM-5	10/05/15
WM-Response: WM-1	10/05/15
WM-Reference: DCPD (2012) HazWaste Annual Facility Report GM-Forms	10/05/15
WM-Reference: DCPD (2013) HazWaste Annual Facility Report GM-Forms	10/05/15
WM-Reference: DCPD (2014) HazWaste Annual Facility Report GM-Forms	10/05/15
WM-Reference: USEPA Fact Sheet LLMW Conditional RCRA Exemption.pdf	10/05/15

Thanks,

Alia Vosburg
DCPD License Renewal Project
(805) 595-6467

From: Wentzel, Michael
Sent: Friday, September 18, 2015 6:46 AM
To: 'VOSBURG, ALIA'
Cc: 'Grebel, Terence'
Subject: RE: DCPD Environmental Audit Proposed Schedules

Alia,

Thanks for passing this on. I'm going to circulate it to my team and ask for feedback by Monday (half of the team is out on travel today). One thing I did notice is that we had requested a breakout session for alternatives, but that was not on the list. Can we add that to the list? One other thing to note is that we may not need the waste management breakout (we had noted in the request "if necessary"). After our reviewer looks over the information you provide, he may not need to meet with your team to discuss. Rather than keep everybody waiting in limbo, if you can make the information available on the portal as soon as you have it, I can ask him to take a look at it and let me know if he will need to meet.

Thanks,
Mike

From: VOSBURG, ALIA [mailto:AKV1@pge.com]
Sent: Thursday, September 17, 2015 6:58 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] DCPD Environmental Audit Proposed Schedules

Mike,

Please see the proposed general tour route which covers terrestrial, surface water, geology and soils, air quality, noise, and groundwater. Note a separate cultural resources tour (not shown) will be taking place simultaneously. We are proposing these tours start at 10:00am Tuesday, Sept. 29th, following an 8:00am entrance meeting.

Please also see the proposed schedule of breakout meetings for Wednesday Sept. 30, beginning at 8:00am.

Thanks,

Alia Vosburg
DCPD License Renewal
(805) 595-6467

From: Wentzel, Michael
Sent: Tuesday, March 22, 2016 1:49 PM
To: Terrence Grebel (TLG1@pge.com); 'Soenen, Philippe R'
Subject: RE: Environmental Scoping Summary Report Has Been Issued

If you encounter any difficulties accessing the report via the link below, please try this one <http://pbadupws.nrc.gov/docs/ML1607/ML16077A091.pdf>.

From: Wentzel, Michael
Sent: Tuesday, March 22, 2016 1:31 PM
To: Terrence Grebel (TLG1@pge.com) <TLG1@pge.com>; 'Soenen, Philippe R' <PNS3@pge.com>
Subject: Environmental Scoping Summary Report Has Been Issued

Terry and Philippe,

Attached, please find the letter to PG&E regarding the issuance of the Scoping Summary Report for the DCPD LRA review. The letter and report are publicly available as of today. You can access the report via the link below. A hard copy of the letter and a CD with the report will be placed in the mail shortly. If you have any questions, please let me know.

Thanks,
Mike

<https://adamswebsearch2.nrc.gov/webSearch2/main.jsp?AccessionNumber=ML16077A091>

Michael Wentzel
Project Manager
NRR/DLR/RERP
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Monday, March 28, 2016 12:37 PM
To: 'Soenen, Philippe R'
Subject: RE: DCPD ER Submittals

Thanks, Philippe

From: Soenen, Philippe R [mailto:PNS3@pge.com]
Sent: Monday, March 28, 2016 12:28 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Subject: [External_Sender] DCPD ER Submittals

Mike,

In response to your voicemail, PG&E is planning to have the submittal with the three environmental reports signed and sent on March 30, 2016 with a commitment change to have the last report submitted to the NRC by August 1, 2016.

Regards,

Philippe Soenen

Phone: (503) 395-6461 | Cell: (b)(6) | Email: pns3@pge.com

From: Wentzel, Michael
Sent: Tuesday, October 06, 2015 1:18 PM
To: 'VOSBURG, ALIA'
Subject: RE: DCPD LR Env Audit Responses

< Thanks. Alia.

From: VOSBURG, ALIA [mailto:AKV1@pge.com]
Sent: Tuesday, October 06, 2015 12:16 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Subject: [External_Sender] DCPD LR Env Audit Responses

Mike.

In response to additional questions or clarification received last week during our onsite environmental audit, responses WM-2, WM-5, and MET-10 (and associated references) have been updated and added to the portal for review.

In addition, DCPD response to WM-1 has been finalized and uploaded to the portal.

Thank you,

Alia Vosburg
DCPD License Renewal Project
(805) 595-6467

From: Wentzel, Michael
Sent: Monday, July 06, 2015 8:28 AM
To: 'VOSBURG, ALIA'
Cc: 'Grebel, Terence'; 'Olsofsky, Michelle'
Subject: RE: DCPD LR Environmental Audit Facilities

One other point about lunches that I forgot to make. One of our staff members is a vegetarian, so if that could be taken into consideration, it would be appreciated.

From: Wentzel, Michael
Sent: Thursday, July 02, 2015 2:49 PM
To: 'VOSBURG, ALIA'
Cc: Grebel, Terence; Olsofsky, Michelle
Subject: RE: DCPD LR Environmental Audit Facilities

Hello,

I wanted to circle back on a few of the outstanding questions that I can provide answers to. These responses only apply for the environmental audit. We have not worked out the number of people travelling for the SAMA audit.

1. How many NRC personnel will be attending? Currently, we plan to bring 9 total.
3. How many parking spaces will the NRC like to have reserved at our facilities? We have not worked out travel logistics, but it would be safe to assume we will need no more than 4. We could probably get by with fewer, if needed.
6. Does the NRC want to get their own meals or have us provide? What is the reimbursement policy? I have heard back from most of the staff and they would be interested in having lunch catered. However, NRC staff interested in participating in the catered lunch will need to contribute their fair share towards the cost of any meals.
7. Should computers be provided/how many? How many Verizon air cards should be provided? No computers are necessary specifically for NRC staff use, beyond those that you had described as being available with portal access. Similarly, if Wi-Fi is not available in the building, it is not necessary to provide air cards. One or more staff will be travelling with NRC-issued air cards.
9. Does the NRC want one or more bridgelines available for use? Yes. I don't think we need more than 1, though.

If you have any questions about my responses, or need any additional information, please let me know.

Thanks,
Mike

From: VOSBURG, ALIA [<mailto:AKV1@pge.com>]
Sent: Thursday, June 25, 2015 12:02 PM
To: Wentzel, Michael
Cc: Grebel, Terence; Olsofsky, Michelle
Subject: [External_Sender] DCPD LR Environmental Audit Facilities

Mike,

Attached is the audit facilities document we reviewed yesterday. Thank you again for taking the time to meet with us.

Thank you,

Alia Vosburg
DCPP License Renewal Project
805 595-6467

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From: Wentzel, Michael
Sent: Monday, November 02, 2015 1:35 PM
To: 'Olsofsky, Michelle'
Cc: 'Grebel, Terence'
Subject: RE: Diablo Canyon LR Env RAI SW-1

Hi Michelle,

What you provided as an attachment is the type of information we need. As I'm sure you can appreciate different utilities transmit this information to their appropriate regulators different ways. Since you do not transmit this info via a formal submittal, I will strike "Include associated transmittal correspondence with the CEC" from SW-1.

Thanks
Mike

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Monday, November 02, 2015 1:06 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] Diablo Canyon LR Env RAI SW-1

Mike,

Terry asked that I forward you the below based on your conversation with him this morning. In response to the revised RAI SW-1, our Environmental Operations supervisor indicated that we do not have official transmittal correspondence to the CEC (his explanation is shown below). Instead, the information is provided via emails.

An example of the entire CEC-Form Schedule 3 (Parts A, B, C) Environmental Report for Calendar Year 2014 is attached to give you an idea of what we do provide to the CEC and what we can provide to the NRC.

Please let me know if you have any questions or comments.

Thanks in advance,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Cunningham, Bryan K
Sent: Thursday, October 29, 2015 4:30 PM
To: VOSBURG, ALIA
Cc: Olsofsky, Michelle; Grebel, Terence
Subject: RE: LR Env RAIs

Alia,
DCPP does not have the "associated transmittal correspondence" for these CEC submittals as the package is consolidated for all utility power plants & sent via e-mail transmission by state agency relations. Additionally, a large portion of the overall CEC Form-1304 (Form CEC-1304 Schedule 1, 2, and 3 - Power Plant Generation and

Fuel Quarterly Reports with Annual Environmental Information) ... is related to generation and fuel use, i.e. net generation output, fossil-fuel combustion etc.

Therefore, I am hoping what they really want is limited to the entire Schedule-3 (Power Plant Annual Environmental Report) specific to DCP. The full report (Schedule-3) for each year sent to utility state agency relations can be provided.

For 2015, the Schedule-3 Environmental Report for DCP will not be available before mid-February.

From: VOSBURG, ALIA
Sent: Thursday, October 29, 2015 1:19 PM
To: Cunningham, Bryan K
Subject: LR Env RAIs

Bryan,

One last thing, for SW-1 the NRC edited the question to specify providing associated transmittal correspondence with the CEC. We had previously only given them the CEC Form-1304 Schedule 3 Part-A Supporting Data Sheets; sounds like they want the whole submittal. Can you provide these? I've copied the question below for reference.

SW-1: Summarize reported water withdrawals via the intake structure over the last 5 years (2010-2014 and 2015 year-to-date) and associated return discharges (via National Pollution Discharge Elimination System (NPDES) Outfall 001) and provide copies of the annual environmental reports filed with the California Energy Commission (CEC) reflecting the requested information. Include associated transmittal correspondence with the CEC. When available, also provide the 2015 annual environmental report for the docket.

Thanks,
Alia

From: Wentzel, Michael
Sent: Friday, July 17, 2015 8:50 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: RE: Diablo Canyon Tour

Terry,

As promised, here is the updated list of NRC staff that are planning on participating in the site tour. I've also included their site access training status. For your awareness, being current in site access training is a requirement to be added to the region's access letter. For those that need to have their training updated, I will coordinate with the regional staff once they have done so to make sure that they have the necessary information. I've asked that they complete their refresher training by next week. We will have one person in the group, David McIntyre, that will not be able to complete the training before the site tour and will not be able to be added to the letter.

<u>Name</u>	<u>Training Status</u>
Michele Evans	Current
Jane Marshall	Current
Yaira Diaz-Sanabria	Need to update
James Danna	Need to update
David McIntyre	N/A

If you have any questions, or need any additional information, please let me know.

Thanks,
Mike

From: Wentzel, Michael
Sent: Thursday, July 02, 2015 12:28 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Diablo Canyon Tour

Terry,

In conjunction with our August 5 public meetings for license renewal, a few of my managers were interested in trying to set up a tour of the site. The group would consist of Michele Evans, the Deputy Office Director for NRR, Jane Marshall, the Deputy Director for license renewal, and two of the license renewal branch chiefs. Ideally, they were hoping to set something up for 9am on August 5. Can you let me know if it would be possible to set something up and what information we would need to provide in order to facilitate that?

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RP82
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Wednesday, December 09, 2015 11:25 AM
To: Soenen, Philippe R
Subject: RE: Email addresses for attendees

Philippe,

I have your cell phone number from this morning. Is there a better number for me to get in touch with you (i.e., office phone), or is that the best one?

Thanks,
Mike

From: Plasse, Richard
Sent: Wednesday, December 09, 2015 10:19 AM
To: Soenen, Philippe R <PNS3@pge.com>
Cc: Wentzel, Michael <Michael.Wentzel@nrc.gov>; Miller, Chris <Chris.Miller@nrc.gov>; Diaz-Sanabria, Yaira <Yaira.Diaz-Sanabria@nrc.gov>; Marshall, Jane <Jane.Marshall@nrc.gov>
Subject: RE: Email addresses for attendees

Attached are email links as requested.

From: Soenen, Philippe R [<mailto:PNS3@pge.com>]
Sent: Wednesday, December 09, 2015 10:08 AM
To: Plasse, Richard <Richard.Plasse@nrc.gov>
Subject: [External_Sender] Email addresses for attendees

Rick,

Could you provide me with the email addresses of the NRC attendees from this morning's meeting? I have Mike's and your email addresses, but I'm not the others. Tom Jones would like to copy everyone on the information that we said we would provide back to you.

Thanks,

Philippe Soenen

From: Wentzel, Michael
Sent: Wednesday, September 30, 2015 8:50 PM
To: 'VOSBURG, ALIA'
Subject: RE: Entrance Attendance Sheet

Thanks. Alia.

From: VOSBURG, ALIA [mailto:AKV1@pge.com]
Sent: Wednesday, September 30, 2015 5:11 PM
To: Wentzel, Michael
Subject: [External_Sender] Entrance Attendance Sheet

Mike,

Please see the attached copy of the Environmental Audit Entrance Meeting attendance sheet.

Thanks,
Alia

From: Wentzel, Michael
Sent: Wednesday, September 23, 2015 10:24 PM
To: 'VOSBURG, ALIA'
Subject: RE: Env. Audit Schedule

Thanks. Alia.

From: VOSBURG, ALIA [mailto:AKV1@pge.com]
Sent: Wednesday, September 23, 2015 5:26 PM
To: Wentzel, Michael
Subject: [External_Sender] Env. Audit Schedule

Mike,

Please see attached...

Thank you,

Alia Vosburg
DCPP License Renewal Project
(805) 595-6467

From: Wentzel, Michael
Sent: Thursday, November 12, 2015 7:54 AM
To: 'Grebel, Terence'
Subject: RE: FW: PG&E Drop In Visit on December 8-9, 2015

Terry.

Sorry for the iteration. Would Tom and Philippe be able to meet at 8:00am. There is a meeting that our Division Director has to attend at 10:00am that I was not aware of. He is available between 8:00-8:45am. but then not again until the afternoon.

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, November 10, 2015 5:26 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Jones, Thomas P. <TPJ2@pge.com>; Soenen, Philippe R <PNS3@pge.com>
Subject: [External_Sender] FW: PG&E Drop In Visit on December 8-9, 2015

Mike:

Can they meet with you and Rick at 10 AM and then with your management for one hour? That would get Tom's travel needs.

From: Jones, Thomas P.
Sent: Tuesday, November 10, 2015 2:10 PM
To: Soenen, Philippe R; Grebel, Terence
Subject: RE: PG&E Drop In Visit on December 8-9, 2015

That will work just fine if it is an hour or so- I fly out that date and have check out of hotel and transit to airport. 10 AM would be preferable. What is the protocol and expected time to do it right?

Regards,
Tom Jones

Director, Government Relations
Pacific Gas & Electric Company

Office: 805.595.6340
Mobile: (b)(6)

From: Soenen, Philippe R
Sent: Tuesday, November 10, 2015 1:36 PM
To: Grebel, Terence; Jones, Thomas P.
Subject: RE: PG&E Drop In Visit on December 8-9, 2015

That date and time works for me.

Philippe Soenen

Regulatory Services

Office - 805.545.6984

Cell - (b)(6)

From: Grebel, Terence

Sent: Tuesday, November 10, 2015 1:32 PM

To: Jones, Thomas P.; Soenen, Philippe R

Subject: Fwd: PG&E Drop In Visit on December 8-9, 2015

Tom and Philippe:

Does this time and date work for you?

Sent from my iPhone

Begin forwarded message:

From: "Wentzel, Michael" <Michael.Wentzel@nrc.gov>

Date: November 10, 2015 at 1:22:16 PM PST

To: "Grebel, Terence" <TLG1@pge.com>, "Plasse, Richard" <Richard.Plasse@nrc.gov>

Cc: "Jones, Thomas P." <TPJ2@pge.com>, "Soenen, Philippe R" <PNS3@pge.com>

Subject: RE: RE: PG&E Drop In Visit on December 8-9, 2015

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

It looks like 11am may be better on our part. If that works. I can confirm that with our admin. If that doesn't work, are any schedule constraints on your director's part that we would need to work around?

From: Grebel, Terence [mailto:TLG1@pge.com]

Sent: Tuesday, November 10, 2015 4:08 PM

To: Wentzel, Michael <Michael.Wentzel@nrc.gov>; Plasse, Richard <Richard.Plasse@nrc.gov>

Cc: Jones, Thomas P. <TPJ2@pge.com>; Soenen, Philippe R <PNS3@pge.com>

Subject: [External_Sender] RE: PG&E Drop In Visit on December 8-9, 2015

What would you recommend? 9AM?

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]

Sent: Tuesday, November 10, 2015 12:59 PM

To: Grebel, Terence; Plasse, Richard

Cc: Jones, Thomas P.; Soenen, Philippe R

Subject: RE: PG&E Drop In Visit on December 8-9, 2015

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Terry,

It looks like December 9th would be best for us. Do you have a timeframe in mind?

Thanks.

Mike

From: Grebel, Terence [<mailto:TLG1@pge.com>]

Sent: Tuesday, November 10, 2015 1:23 PM

To: Plasse, Richard <Richard.Plasse@nrc.gov>; Wentzel, Michael <Michael.Wentzel@nrc.gov>

Cc: Jones, Thomas P. <TPJ2@pge.com>; Soenen, Philippe R <PNS3@pge.com>

Subject: [External_Sender] PG&E Drop In Visit on December 8-9, 2015

Rick and Mike:

Our new Director of Strategic Projects will be coming to Washington, D.C. on 12/8-9. I suggested that he meet with youall and perhaps some of your License Renewal management. This will just be an introduction visit. Can you please check your availability and your management?

From: Wentzel, Michael
Sent: Wednesday, September 09, 2015 11:36 AM
To: 'Grebel, Terence'
Cc: 'Olsofsky, Michelle'
Subject: RE: FW: Question for M. Wentzel on SAMA Document Request

Terry..

I just wanted to let you know that I am still working on getting this clarified for you. I hope to have something later today.

Thanks,
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, September 08, 2015 11:32 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Olsofsky, Michelle <MMA0@pge.com>
Subject: [External_Sender] FW: Question for M. Wentzel on SAMA Document Request

Mike:

Can you please get back to us on the question below?

From: Olsofsky, Michelle
Sent: Tuesday, September 08, 2015 7:35 AM
To: Grebel, Terence
Subject: Question for M. Wentzel on SAMA Document Request

Terry,

Our technical team has the following question for Mike Wentzel regarding SAMA General RAI #4 (Doc request for Windows based Methods for Estimation of Leakages and Consequences of Releases (MELCOR) Accident Consequence Code System (WinMACCS) calculation documentation) –

- WinMACCS documentation is currently available on the NRC website:
<http://pbadupws.nrc.gov/docs/ML0723/ML072350221.pdf>
- However, the DCPD Level 3 model *does not use WinMACCS* and *does not reference the above WinMACCS document*.
- DCPD used MACCS2. Volume 1 of the MACCS2 User's Guide is on the NRC website (<http://pbadupws.nrc.gov/docs/ML1100/ML110030976.pdf>). DCPD can provide Volume 2 if necessary.

Is it acceptable to provide the NRC with the MACCS2 Vols 1 & 2 User's Guides for the SAMA Audit?

Thanks in advance,
Michelle Olsofsky
DCPD License Renewal
734 748-0084

From: Wentzel, Michael
Sent: Wednesday, July 29, 2015 1:28 PM
To: 'Hartwig, Adriana'
Subject: RE: FW: RE: RE: RE: Diablo Canyon Tour

Adriana,

I just heard back from Jane Marshall. She will not be able to call to provide you the information you need until Monday. Hopefully, this will not be an issue for you.

Thanks,
Mike

From: Wentzel, Michael
Sent: Tuesday, July 28, 2015 3:02 PM
To: 'Hartwig, Adriana'
Subject: RE: FW: RE: RE: RE: Diablo Canyon Tour

Adriana,

I will not be on the tour. I will forward on your contact info to Jane and Michele. I spoke with Michele yesterday and she had some reservation about emailing her info, so you providing your phone number may help with that. Jane is on leave until Monday. I am hoping she will check her email before then and provide you her info.

Thanks,
Mike

From: Hartwig, Adriana [<mailto:ADH6@pge.com>]
Sent: Tuesday, July 28, 2015 1:47 PM
To: Wentzel, Michael
Subject: [External_Sender] FW: RE: RE: RE: Diablo Canyon Tour

Good afternoon Mike,

Will you be attending the tour as well? I will need the information requested below for Jane Marshall and Michele Evans to put in our Access database.

Full name
Date of Birth
Social Security Number
US Citizen: Yes or No
Address
Phone Number
Male or Female

If they would prefer not to provide the personal information via e-mail, they are welcome to contact me at 805-545-3188.

Thank you,

Adriana Hartwig

PG&E | Diablo Canyon | Regulatory Services | 104/5/536B | Phone 805-545-3188

From: Grebel, Terence
Sent: Tuesday, July 28, 2015 9:47 AM
To: Hartwig, Adriana
Subject: FW: RE: RE: RE: Diablo Canyon Tour

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Monday, July 27, 2015 5:40 AM
To: Grebel, Terence
Subject: RE: RE: RE: RE: Diablo Canyon Tour

Terry

I've made a couple of minor edits to the list of attendees. As far as access goes, all but Dave McIntyre will have their site access training current as of today. Dave will not be able to complete his training in time for the trip. I will work with the region to get the others added to the good guy letter. Should I put Dave, or any of the others, in touch with someone at PG&E to pass along whatever personal info is needed to get access?

Thanks,
Mike

From: Grebel, Terence [<mailto:TLG1@pge.com>]
Sent: Thursday, July 23, 2015 4:55 PM
To: Wentzel, Michael
Cc: Jones, Thomas P.; Grebel, Terence
Subject: [External_Sender] RE: RE: RE: Diablo Canyon Tour

Mike:

Attached is the updated proposed itinerary. Sorry for taking so long to get it to you. If it changes I will send you an updated copy.

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Thursday, July 23, 2015 8:26 AM
To: Grebel, Terence
Subject: RE: RE: RE: Diablo Canyon Tour

Terry,

You had mentioned last week that you thought you would have a draft of the itinerary that you would be able to share with me this week. Is that still the case and, if so, do you have an idea of when you'll be able to share it with me?

Thanks,
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Monday, July 06, 2015 12:23 PM
To: Wentzel, Michael
Subject: [External_Sender] RE: RE: Diablo Canyon Tour

If we include radiation areas it will take some time for training, etc. Given the two hour tour time, I would suggest no going in radiation areas.

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Monday, July 06, 2015 8:40 AM
To: Grebel, Terence
Subject: RE: RE: Diablo Canyon Tour

Terry.

I have solicited input as to as to any specific areas of interest they may have. So far, what I've gotten back is they are interested in a general site tour and any particular points of interest that may be relevant or interesting to license renewal (e.g. any degraded SSCs, etc.). Also, since Michele Evans is planning to be there if there are any particular areas outside of license renewal that PG&E may want to show the group (e.g. FLEX equipment?), that would work, as well. Also, I've heard that the tour does not need to include the spent fuel pool.

As far as how long, I think ideally it would be ideal to start around 9am and last no longer than 2 hours. They need to have enough time to grab lunch and make it to the public meeting location. I would agree with you that they would probably like to meet your senior management, if available.

Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Monday, July 06, 2015 10:29 AM
To: Wentzel, Michael
Subject: [External_Sender] RE: Diablo Canyon Tour

Mike:

Can you provide any information on what they may like to see and how long a tour. I assume tha they may like to meet our senior management if they are available.

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Thursday, July 02, 2015 9:28 AM
To: Grebel, Terence
Subject: Diablo Canyon Tour

Terry,

In conjunction with our August 5 public meetings for license renewal, a few of my managers were interested in trying to set up a tour of the site. The group would consist of Michele Evans, the Deputy Office Director for NRR, Jane Marshall, the Deputy Director for license renewal, and two of the license renewal branch chiefs. Ideally, they were hoping to set something up for 9am on August 5. Can you let me know if it would be possible to something up and what information we would need to provide in order to facilitate that?

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

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From: Wentzel, Michael
Sent: Monday, September 14, 2015 12:42 PM
To: 'Grebel, Terence'
Cc: 'Soenen, Philippe R'; 'Olsofsky, Michelle'
Subject: RE: FW: Request for DCPD Environmental Audit Attendees Information

Terry,

For your awareness all of the NRC staff members have provided their info to Adriana. One of our contractors that will be participating in the audit has been on travel recently and has not had a chance to provide her info. She should be doing so soon.

Thanks.
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Thursday, September 03, 2015 3:24 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Soenen, Philippe R <PNS3@pge.com>; Olsofsky, Michelle <MMA0@pge.com>
Subject: [External_Sender] FW: Request for DCPD Environmental Audit Attendees Information

Mike:

Can you please take a look at the information provided below and get back to us on what you would like to do.

From: Olsofsky, Michelle
Sent: Thursday, September 03, 2015 11:48 AM
To: Grebel, Terence
Subject: Request for DCPD Environmental Audit Attendees Information

Terry,

Although we have previously discussed that the NRC/NRC contractors attending the upcoming environmental audit will not need protected area access, DCPD Regulatory Services has requested that we get access for each of the attendees. That way, they will be on the list to (1) enter the DCPD property in general and (2) will be on the list for protected area escorted access if a need arises.

Unless there is a concern otherwise, can we please obtain the following information for each individual who willing be attending the audit?

Full name
Date of Birth
Social Security Number
US Citizen: Yes or No
Address
Phone Number

If you would prefer not to provide the personal information via e-mail, please feel free to contact Adrian Hartwig at 805-545-3188.

Thanks in advance,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael
Sent: Thursday, July 02, 2015 6:07 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: RE: Federal Register Notice Announcing Scoping
Attachments: ML15140A564.pdf

This attachment is publicly
available at ML15140A564.

Here is a copy of the letter.

From: Wentzel, Michael
Sent: Wednesday, July 01, 2015 12:46 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: Federal Register Notice Announcing Scoping

Terry,

The Federal Register Notice announcing the start of the scoping period was issued today. I have attached a copy for your reference. The letter to PG&E announcing the start of scoping has been signed and should be issued later today. I will send a copy once it has been processed.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Tuesday, September 01, 2015 6:27 PM
To: 'Grebel, Terence'
Cc: 'VOSBURG, ALIA'; 'Jones, Blair'
Subject: RE: Forecast for NRC state and local consultation letters
Attachments: Scoping Letters to CA State Agencies (ML15142A541).pdf; Scoping Letter to CA SHPO (ML15155B157).pdf

These attachments are publicly available as ML15155B157 and ML15142A541.

Terry.

We issued the letters on July 1 with the other scoping letters. I've attached the letters we issued to CA agencies. The balance of the scoping letters issued include the letters to Federal agencies and the tribal letters.

Thanks.
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, September 01, 2015 5:19 PM
To: Wentzel, Michael
Cc: VOSBURG, ALIA; Jones, Blair
Subject: [External_Sender] Forecast for NRC state and local consultation letters

Mike:

Do you have a forecasted date for issuing the consultation letters to state and local agencies? In addition, we would like to know the agencies if possible.

From: Wentzel, Michael
Sent: Sunday, September 27, 2015 4:29 PM
To: 'VOSBURG, ALIA'
Subject: RE: FW: DCPD Env Audit Update

Thanks, Alia.

From: VOSBURG, ALIA [mailto:AKV1@pge.com]
Sent: Saturday, September 26, 2015 9:48 PM
To: Wentzel, Michael
Cc: Grebel, Terence; Olsofsky, Michelle; Cunningham, Bryan K; Jones, Thomas P.
Subject: [External_Sender] FW: DCPD Env Audit Update

Mike,

The following responses have been uploaded to the portal and are ready for review.

ALT	AQ	CI	HC	HH	MET	SOC	SSH	GW	SW
1	1	1	1	1	3	1	1	1	1
2	2		2	2	4	2	2	2	2
3	3		3		5	3	3		3
4	4		4		7		4		4
5	6		5		8		5		6
6	7		6		9		7		7
7	9		7				11		8
			8				12		
			9						
			10						
			11						
			12						
			13						
			14						
			15						
			16						
			17						

I will continue to provide updates on what has been uploaded and is ready for review through Monday.

Thank you,

Alia Vosburg
DCPD License Renewal Project
(805)595-6467

From: Wentzel, Michael
Sent: Friday, July 31, 2015 6:05 AM
To: 'Hartwig, Adriana'
Cc: 'Grebel, Terence'
Subject: RE: FW: Diablo Canyon Tour

Thanks. Adriana and Terry

From: Hartwig, Adriana [mailto:ADH6@pge.com]
Sent: Thursday, July 30, 2015 4:36 PM
To: Wentzel, Michael
Cc: Grebel, Terence
Subject: [External_Sender] FW: Diablo Canyon Tour

Good afternoon Mike,

Please see below for answers to your questions regarding clothing requirements at Diablo Canyon.

Thank you.

Adriana Hartwig

PG&E | Diablo Canyon | Regulatory Services | 104/5/5368 | Phone 805-545-3188

From: "Soenen, Philippe R" <PNS3@pge.com>
Date: July 29, 2015 at 1:41:46 PM PDT
To: "Grebel, Terence" <TLG1@pge.com>
Subject: RE: Re: Diablo Canyon Tour

Footwear:

Shoes/boots made with leather uppers, non-slip soles, enclosing the heel, toe, and instep. Heel shall not be higher than 2 inches.

Clothing:

Must wear long pants or jeans and sleeved-shirts. Shorts, tank tops and open toed shoes are not permitted in the power block.

Philippe Soenen

Regulatory Services
Office - 805 545 6984
Cell - (b)(6)

-----Original Message-----

From: Grebel, Terence
Sent: Wednesday, July 29, 2015 10:52 AM
To: Soenen, Philippe R

Subject: FW: Re: Diablo Canyon Tour

Can you please address these questions?

-----Original Message-----

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]

Sent: Wednesday, July 29, 2015 10:31 AM

To: Grebel, Terence

Cc: Kaminski, Cindy

Subject: RE: Re: Diablo Canyon Tour

Terry,

Is there any special clothing requirements for the site tour? Specifically, I was thinking of footwear, but if there are any others, please let me know. I want to make sure everyone is properly prepared.

Thanks,
Mike

-----Original Message-----

From: Grebel, Terence [<mailto:TLGI@pge.com>]

Sent: Monday, July 27, 2015 12:58 PM

To: Kaminski, Cindy

Cc: Wentzel, Michael

Subject: [External_Sender] Re: Diablo Canyon Tour

They will be escorted.

Sent from my iPhone

On Jul 27, 2015, at 9:54 AM, Kaminski, Cindy <CMSa@pge.com> wrote:

Michael, please supply the following information:

Full name

Date of Birth

Social Security Number

US Citizen: Yes or No

Address

Phone Number

Male or Female

Will the individuals be keycarded, or is the plan to escort them?

Thank you,

Cindy Kaminski

PG&E | Diablo Canyon Licensing Basis Verification Project/License
Renewal | 4111 Broad St., San Luis Obispo | Phone 805-545-4515

-----Original Message-----

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]

Sent: Monday, July 27, 2015 9:25 AM

To: Grebel, Terence

Cc: Jones, Thomas P.; Soenen, Philippe R; Kaminski, Cindy

Subject: RE: Re: Diablo Canyon Tour

Terry,

I assume you will need their names, DOBs, and SSNs, correct? Any additional information?

-----Original Message-----

From: Grebel, Terence [<mailto:TLGI@pge.com>]

Sent: Monday, July 27, 2015 10:32 AM

To: Wentzel, Michael

Cc: Jones, Thomas P.; Soenen, Philippe R; Kaminski, Cindy

Subject: [External_Sender] Re: Diablo Canyon Tour

Mike:

Please have them send their information to me with a copy to Cindy Kaminski. Cindy will enter their information into our access system so all they will need to do is show identification.

Sent from my iPhone

On Jul 27, 2015, at 5:40 AM, Wentzel, Michael
<Michael.Wentzel@nrc.gov<<mailto:Michael.Wentzel@nrc.gov>>> wrote:

Terry,

I've made a couple of minor edits to the list of attendees. As far as access goes, all but Dave McIntyre will have their site access training current as of today. Dave will not be able to complete his training in time for the trip. I will work with the region to get the others added to the good guy letter. Should I put

Dave, or any of the others, in touch with someone at PG&E to pass along whatever personal info is needed to get access?

Thanks,
Mike

From: Grebel, Terence [<mailto:TLG1@pge.com>]
Sent: Thursday, July 23, 2015 4:55 PM
To: Wentzel, Michael
Cc: Jones, Thomas P.; Grebel, Terence
Subject: [External_Sender] RE: RE: RE: Diablo Canyon Tour

Mike:

Attached is the updated proposed itinerary. Sorry for taking so long to get it to you. If it changes I will send you an updated copy.

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Thursday, July 23, 2015 8:26 AM
To: Grebel, Terence
Subject: RE: RE: RE: Diablo Canyon Tour

Terry.

You had mentioned last week that you thought you would have a draft of the itinerary that you would be able to share with me this week. Is that still the case and, if so, do you have an idea of when you'll be able to share it with me?

Thanks,
Mike

From: Grebel, Terence [<mailto:TLG1@pge.com>]
Sent: Monday, July 06, 2015 12:23 PM
To: Wentzel, Michael
Subject: [External_Sender] RE: RE: Diablo Canyon Tour

If we include radiation areas it will take some time for training, etc. Given the two hour tour time, I would suggest no going in radiation areas.

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Monday, July 06, 2015 8:40 AM
To: Grebel, Terence
Subject: RE: RE: Diablo Canyon Tour

Terry,

I have solicited input as to as to any specific areas of interest they may have. So far, what I've gotten back is they are interested in a general site tour and any particular points of interest that may be relevant or interesting to license renewal (e.g., any degraded SSCs, etc.). Also, since Michele Evans is planning to be there, if there are any particular areas outside of license renewal that PG&E may want to show the group (e.g., FLEX equipment?), that would work, as well. Also, I've heard that the tour does not need to include the spent fuel pool.

As far as how long, I think ideally it would be ideal to start around 9am and last no longer than 2 hours. They need to have enough time to grab lunch and make it to the public meeting location. I would agree with you that they would probably like to meet your senior management, if available.

Mike

From: Grebel, Terence [<mailto:Tl.Gl@pge.com>]
Sent: Monday, July 06, 2015 10:29 AM
To: Wentzel, Michael
Subject: [External_Sender] RE: Diablo Canyon Tour

Mike:

Can you provide any information on what they may like to see and how long a tour. I assume tha they may like to meet our senior management if they are available.

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Thursday, July 02, 2015 9:28 AM
To: Grebel, Terence
Subject: Diablo Canyon Tour

Terry,

In conjunction with our August 5 public meetings for license renewal, a few of my managers were interested in trying to set up a tour of the site. The group would consist of Michele Evans, the Deputy Office Director for NRR, Jane Marshall, the Deputy Director for license renewal, and two of the license renewal branch chiefs. Ideally, they were hoping to set something up for 9am on August 5. Can you let me know if it would be possible to something up and what information we would need to provide in order to facilitate that?

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov<<mailto:michael.wentzel@nrc.gov>>

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To learn more, please visit
<http://www.pge.com/about/company/privacy/customer/>

<08052015 NRC (3).docx>

From: Wentzel, Michael
Sent: Tuesday, July 14, 2015 1:48 PM
To: 'Grebel, Terence'
Subject: RE: FW: Map to Energy Information Center

Thanks, Terry. On a related note. I spoke with my management about what you had proposed for the site visit and they were agreeable to the proposal.

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, July 14, 2015 1:43 PM
To: Wentzel, Michael
Subject: [External_Sender] FW: Map to Energy Information Center

fyi

From: Olsofsky, Michelle
Sent: Tuesday, July 14, 2015 10:31 AM
To: Grebel, Terence
Subject: FW: Map to Energy Information Center

From Cindy.

Michelle Olsofsky
DCPP License Renewal
734 748-0084

From: Kaminski, Cindy
Sent: Tuesday, July 14, 2015 12:24 PM
To: Olsofsky, Michelle
Subject: FW: Map to Energy Information Center

Here you are ☺

From: Turk, Diana K
Sent: Tuesday, July 14, 2015 10:22 AM
To: Kaminski, Cindy
Subject: RE: Map to Energy Information Center

Diana Turk
805-540-1314

Sent: Tuesday, July 14, 2015 8:03 AM
To: Kaminski, Cindy
Subject: May to Energy Information Center

Hi Cindy!

Do you happen to have a map for the Energy Information Center (visitors center) similar to what you send out to visitors for Broad/Tank Farm?

Thanks in advance for your help,

Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael
Sent: Monday, December 07, 2015 11:41 AM
To: 'Grebel, Terence'
Subject: RE: FW: NRC Submittal, DCL-15-142, Response to Environmental Review LRA RAIs

Thanks. Terry

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Monday, December 07, 2015 11:36 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Subject: [External_Sender] FW: NRC Submittal, DCL-15-142, Response to Environmental Review LRA RAIs

fyi

From: Hartwig, Adriana
Sent: Monday, December 07, 2015 8:01 AM
To: 'dcupdate@certrec.com'; 'steve.coppock@starsalliance.com'; 'kefredr@WCNOC.com'; 'Scott.Bauer@starsalliance.com'; 'thomas.n.weber@aps.com'; 'Larry Parker'; 'steve.meyer@starsalliance.com'; 'keith.mills@starsalliance.com'; 'david.heckman@aps.com'; DCCP BASES DD; "dsneed@thetribunenews.com" (dsneed@thetribunenews.com); (b)(6)
Subject: NRC Submittal, DCL-15-142, Response to Environmental Review LRA RAIs

The electronic file of the following cover letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-15-142, "Response to NRC Letter dated November 5, 2015, 'Request for Additional Information Related to the Environmental Review of the Diablo Canyon Power Plant, Units 1 and 2, License Renewal Application (CAC Nos. MF4019 and MF4020)'"

Signed by: Ed Halpin – Senior Vice President, Power Generation and Chief Nuclear Officer

If you do not wish to receive further e-mails such as this, please return this e-mail with your request.

Adriana Hartwig

PG&E | Diablo Canyon | Regulatory Services | 104/5/536B | Phone 805-545-3188

From: Wentzel, Michael
Sent: Thursday, January 28, 2016 5:39 AM
To: 'Hartwig, Adriana'
Subject: RE: NRC Submittal DCL-16-012, Clarifications to Env. RAI Responses for Review of LRA

Thanks. Adriana.

From: Hartwig, Adriana [mailto:ADH6@pge.com]
Sent: Wednesday, January 27, 2016 6:28 PM
To: Dapas, Marc; Lingam, Siva; Plasse, Richard; Tharakan, Binesh; Wentzel, Michael
Cc: "dcupdate@certrec.com" (dcupdate@certrec.com); Olsofsky, Michelle; Soenen, Philippe R; Grebel, Terence; 'steve.coppock@starsalliance.com'; 'kefredr@WCNOC.com'; 'Scott.Bauer@starsalliance.com'; "thomas.n.weber@aps.com" (thomas.n.weber@aps.com); "Larry Parker" (larry.parker@starsalliance.com); "steve.meyer@starsalliance.com" (steve.meyer@starsalliance.com); "keith.mills@starsalliance.com" (keith.mills@starsalliance.com); 'david.heckman@aps.com'
Subject: [External_Sender] NRC Submittal DCL-16-012, Clarifications to Env. RAI Responses for Review of LRA

The electronic file of the following letter that was recently sent to the Nuclear Regulatory Commission is attached to this e-mail and is being routed for your information.

NRC Submittal DCL-16-012, "Clarifications to Environmental Request for Additional Information Responses for the Review of the Diablo Canyon Power Plant, Units 1 and 2, License Renewal Application"

Signed by: Jearl Strickland – Director, Technical Services

If you do not wish to receive further e-mails such as this, please return this e-mail with your request.

Adriana Hartwig

PG&E | Diablo Canyon | Regulatory Services | 104/5/536B | Phone 805-545-3188

From: Wentzel, Michael
Sent: Monday, December 07, 2015 6:41 AM
To: 'Hartwig, Adriana'
Subject: RE: NRC Sumibttal DCL-15-142, Response to RAI

Thanks. Adriana.

From: Hartwig, Adriana [mailto:ADH6@pge.com]
Sent: Friday, December 04, 2015 5:08 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Soenen, Philippe R <PNS3@pge.com>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] NRC Sumibttal DCL-15-142, Response to RAI

From: Wentzel, Michael
Sent: Monday, August 03, 2015 2:48 PM
To: Terrence Grebel (TLG1@pge.com)
Subject: RE: Participation of the Resident for the Site Tour

Terry.

If you haven't already, you will probably get a call from the acting Senior Resident, John Reynoso. He said they will participate, but will follow in their own vehicles. If you need anything else, please let me know

Thanks.
Mike

From: Wentzel, Michael
Sent: Monday, August 03, 2015 6:08 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: Participation of the Resident for the Site Tour

Terry,

Got your message. I let the Resident know that he was free to participate in the tour, but I have not heard affirmatively one way or the other if he actually intends to participate. I will ask him and let you know what I hear.

Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Tuesday, October 06, 2015 5:42 AM
To: 'Grebel, Terence'
Cc: 'VOSBURG, ALIA'; 'Olsofsky, Michelle'
Subject: RE: Fwd: Audit Request

Terry,

It would be great if you could mail it to me. You can send it directly to me, rather than through the document control desk.

Thanks,
Mike

-----Original Message-----

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Monday, October 05, 2015 5:40 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: VOSBURG, ALIA <AKV1@pge.com>; Olsofsky, Michelle <MMA0@pge.com>
Subject: [External_Sender] Fwd: Audit Request

Mike:

What are your desires?

Sent from my iPhone

Begin forwarded message:

From: "VOSBURG, ALIA" <AKV1@pge.com<mailto:AKV1@pge.com>>
Date: October 5, 2015 at 12:34:12 PM PDT
To: "Grebel, Terence" <TLG1@pge.com<mailto:TLG1@pge.com>>
Subject: Audit Request

Terry,

Last week during our biology breakout meeting Michelle Moser asked if we could provide the CD that was originally provided to the NRC in 2000 by PG&E letter DCL-2000-515 (attached), as their copy was misplaced over time.

John Steinbeck left a copy of the CD on my desk over the weekend.
What is contained on the CD is too large to email and, because they are excel files, cannot be added to the portal.

I am happy to have the CD mailed to Mike Wentzel if that's what you would like. Please advise.

Thanks,
Alia

From: Wentzel, Michael
Sent: Tuesday, August 18, 2015 5:53 AM
To: 'Grebel, Terence'
Subject: RE: Fwd: DCPD Portal Access For NRC Contractors

Thanks, Terry.

-----Original Message-----

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Monday, August 17, 2015 8:22 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Subject: [External_Sender] Fwd: DCPD Portal Access For NRC Contractors

Dying

Sent from my iPhone

Begin forwarded message:

From: "Olsofsky, Michelle" <MMA0@pge.com<mailto:MMA0@pge.com>>
Date: August 17, 2015 at 5:20:16 PM PDT
To: "Grebel, Terence" <TLG1@pge.com<mailto:TLG1@pge.com>>
Subject: FW: DCPD Portal Access For NRC Contractors

FYI – NRC access to the DCPD portal has been completed for the most recent list that Mike sent for the NRC contractors.

Thanks,
Michelle

From: Adam Alberty [mailto:adam.alberty@starsalliance.com]
Sent: Monday, August 17, 2015 5:05 PM
To: Olsofsky, Michelle
Subject: RE: DCPD Portal Access For NRC Contractors

The welcome emails have been sent.

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Saturday, August 15, 2015 7:17 PM
To: Adam Alberty <adam.alberty@starsalliance.com<mailto:adam.alberty@starsalliance.com>>
Subject: DCPD Portal Access For NRC Contractors

Adam,

Can you please initiate DCPD portal access for the below list of NRC contractors?
Name

Email Address

Telephone Number

Tara O'Neill

tara.oneil@pnnl.gov<mailto:taraoneil@pnnl.gov>

541-738-0362

Ellen Kennedy

ellen.kennedy@pnnl.gov<mailto:ellen.kennedy@pnnl.gov>

509-375-2838

Valerie Cullinan

valerie.cullinan@pnnl.gov<mailto:valerie.cullinan@pnnl.gov>

360-681-3662

Please let me know if there are any comments or questions. Thanks in advance!

Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael
Sent: Thursday, September 17, 2015 6:15 AM
To: 'Grebel, Terence'
Subject: RE: Fwd: Federal Shutdown

Terry,

I didn't get any clarity on this until the end of the day yesterday, which is why I haven't been able to get back to you until now. The message that I got from management was that even if there was a government shutdown, it is highly unlikely that we would have to shut down before the end of the week (i.e., before October 2). That being the case, we will leave our travel plans as-is to avoid the added expense and hassle of trying to rebook everything. Given the options below, our preference would be the first one.

Thanks,
Mike

-----Original Message-----

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Wednesday, September 16, 2015 8:57 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Subject: [External_Sender] Fwd: Federal Shutdown

Mike:

Any update on the federal shutdown and potential contingent plans?

Sent from my iPhone

Begin forwarded message:

From: "Olsofsky, Michelle" <MMA0@pge.com<mailto:MMA0@pge.com>>
Date: September 16, 2015 at 4:54:28 PM PDT
To: "Grebel, Terence" <TLG1@pge.com<mailto:TLG1@pge.com>>
Subject: Federal Shutdown

Terry,

This email is to remind you to talk to Mike Wentzel regarding Tom's proposal re: the Federal Shutdown.

Tom is proposing that we provide the NRC with two potential audit schedules:

1. Tuesday –Thursday, exit meeting on Thursday
2. Monday – Wednesday, exit meeting on Wednesday

Alternatively, another option could be to have the NRC start on Tuesday, do the exit on Wednesday evening, and leave Thursday for follow-ups if needed...

Thanks,
Michelle

From: Grebel, Terence <TLG1@pge.com>
Sent: Wednesday, February 04, 2015 5:53 PM
To: Keegan, Elaine
Cc: Wentzel, Michael
Subject: RE: Mike Wentzel's email address

Thank you.

From: Keegan, Elaine [mailto:Elaine.Keegan@nrc.gov]
Sent: Wednesday, February 04, 2015 2:45 PM
To: Grebel, Terence
Cc: Wentzel, Michael
Subject: RE: Mike Wentzel's email address

Mike's address is Michael.wentzel@nrc.gov. I've cc'ed him so that he will have your e-mail address

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Wednesday, February 04, 2015 5:43 PM
To: Keegan, Elaine
Subject: Mike Wentzel's email address

Elaine:

Can you please send me Mike's email address?

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To learn more, please visit <http://www.pge.com/about/company/privacy/customer/>

PG&E is committed to protecting our customers' privacy.
To learn more, please visit <http://www.pge.com/about/company/privacy/customer/>

From: Grebel, Terence <TLG1@pge.com>
Sent: Thursday, March 12, 2015 8:42 AM
To: Plasse, Richard
Cc: Wentzel, Michael; Olsofsky, Michelle
Subject: Re: Mtg w/ DC

Michelle and I are at nei now. We are planning on seeing youall at 3pm.

Sent from my iPhone

On Mar 9, 2015, at 1:26 PM, Plasse, Richard <Richard.Plasse@nrc.gov<mailto:Richard.Plasse@nrc.gov>> wrote:

Hey, Rick. I was on the other line when you called just now. Yes, I can meet at 3pm Thursday.

PG&E is committed to protecting our customers' privacy.

To learn more, please visit <http://www.pge.com/about/company/privacy/customer/>

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From: Wentzel, Michael
Sent: Tuesday, September 01, 2015 6:23 PM
To: 'Grebel, Terence'
Cc: 'VOSBURG, ALIA'
Subject: RE: NRC Audit Team Members Special Needs

Terry.

Nobody on the team has special needs.

Thanks,
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, September 01, 2015 5:13 PM
To: Wentzel, Michael
Cc: VOSBURG, ALIA
Subject: [External_Sender] NRC Audit Team Members Special Needs

Mike:

Is there anyone on your environmental team that has special needs?

From: Wentzel, Michael
Sent: Monday, December 07, 2015 10:57 AM
To: 'Olsofsky, Michelle'
Cc: 'Soenen, Philippe R'; 'Grebel, Terence'
Subject: RE: NRC Phone Call on SAMA RAIs

Hi Michelle.

I have another meeting that I have to attend at this same time. Do you have another time when everyone is available? If so, let me know and I can check with my staff to confirm their availability.

Thanks.
Mike

-----Original Appointment-----

From: Olsofsky, Michelle [mailto:MMAO@pge.com]
Sent: Monday, December 07, 2015 10:52 AM
To: Soenen, Philippe R; Grebel, Terence; Pyo, John; Barber, Nathan R; Wentzel, Michael
Subject: [External_Sender] NRC Phone Call on SAMA RAIs
When: Wednesday, December 09, 2015 1:00 PM-1:30 PM (UTC-06:00) Central Time (US & Canada).
Where: Bridgeline 1-866-652-7690 participant code (b)(6)

All,

The meeting is to discuss NRC questions on the submitted DCPD SAMA RAIs.

Please confirm your availability:

Thanks you,
Michelle Olsofsky
DCPD License Renewal
734-748-0084

From: Wentzel, Michael
Sent: Tuesday, November 10, 2015 4:22 PM
To: Grebel, Terence; Plasse, Richard
Cc: Jones, Thomas P.; Soenen, Philippe R
Subject: RE: RE: PG&E Drop In Visit on December 8-9, 2015

It looks like 11am may be better on our part. If that works, I can confirm that with our admin. If that doesn't work, are any schedule constraints on your director's part that we would need to work around?

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, November 10, 2015 4:08 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>; Plasse, Richard <Richard.Plasse@nrc.gov>
Cc: Jones, Thomas P. <TPJ2@pge.com>; Soenen, Philippe R <PNS3@pge.com>
Subject: [External_Sender] RE: PG&E Drop In Visit on December 8-9, 2015

What would you recommend? 9AM?

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Tuesday, November 10, 2015 12:59 PM
To: Grebel, Terence; Plasse, Richard
Cc: Jones, Thomas P.; Soenen, Philippe R
Subject: RE: PG&E Drop In Visit on December 8-9, 2015

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Terry,

It looks like December 9th would be best for us. Do you have a timeframe in mind?

Thanks
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, November 10, 2015 1:23 PM
To: Plasse, Richard <Richard.Plasse@nrc.gov>; Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Jones, Thomas P. <TPJ2@pge.com>; Soenen, Philippe R <PNS3@pge.com>
Subject: [External_Sender] PG&E Drop In Visit on December 8-9, 2015

Rick and Mike:

Our new Director of Strategic Projects will be coming to Washington, D.C. on 12/8-9. I suggested that he meet with you all and perhaps some of your License Renewal management. This will just be an introduction visit. Can you please check your availability and your management?

From: Wentzel, Michael
Sent: Wednesday, November 18, 2015 2:53 PM
To: Grebel, Terence
Cc: Olsofsky, Michelle
Subject: RE: RE: Are you available today for a phone call?

Terry,

Should I call you, out do you have a conference line I can call?

From: Wentzel, Michael
Sent: Wednesday, November 18, 2015 10:25 AM
To: Grebel, Terence
Cc: Olsofsky, Michelle
Subject: RE: RE: Are you available today for a phone call?

OK, I can try to get free at 12 your time.

From: Grebel, Terence [TLG1@pge.com]
Sent: Wednesday, November 18, 2015 10:20 AM
To: Wentzel, Michael
Cc: Olsofsky, Michelle
Subject: [External_Sender] RE: Are you available today for a phone call?

I am only available from 12 to 2PM PST.

-----Original Message-----

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Wednesday, November 18, 2015 7:13 AM
To: Grebel, Terence
Cc: Olsofsky, Michelle
Subject: RE: Are you available today for a phone call?

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Terry,

I am supporting a hearing today, so it is kind of hard to nail down a specific time. That having been said, I should be free around lunchtime. Can we shoot for 12:45 my time? If you don't need a set time, I can just call when I get some free time.

From: Grebel, Terence [TLG1@pge.com]
Sent: Wednesday, November 18, 2015 9:58 AM
To: Wentzel, Michael
Cc: Olsofsky, Michelle
Subject: [External_Sender] Are you available today for a phone call?

Mike:

We would like to discuss what documents that need to have docketed as part of the RAIs.

From: Wentzel, Michael
Sent: Tuesday, October 06, 2015 10:42 AM
To: 'Grebel, Terence'
Cc: 'VOSBURG, ALIA'; 'Olsofsky, Michelle'
Subject: RE: Re: Audit Request

Thanks for sending. I just noticed that I must have accidently deleted a space before I hit send. The mailstop should be on a separate line:

Michael Wentzel
U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation, DLR/RPB2 Mailstop OWFN-11F1
11555 Rockville Pike
Rockville, MD 20852

-----Original Message-----

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, October 06, 2015 10:40 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: VOSBURG, ALIA <AKV1@pge.com>; Olsofsky, Michelle <MMA0@pge.com>
Subject: [External_Sender] Re: Audit Request

Thank you

Sent from my iPhone

> On Oct 6, 2015, at 7:39 AM, Wentzel, Michael <Michael.Wentzel@nrc.gov> wrote:

>

> Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

> *****

>

>

> Michael Wentzel
> U.S. Nuclear Regulatory Commission
> Office of Nuclear Reactor Regulation, DLR/RPB2 Mailstop OWFN-11F1
> 11555 Rockville Pike
> Rockville, MD 20852

>

>

> -----Original Message-----

> From: Grebel, Terence [mailto:TLG1@pge.com]
> Sent: Tuesday, October 06, 2015 10:37 AM
> To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
> Cc: VOSBURG, ALIA <AKV1@pge.com>; Olsofsky, Michelle <MMA0@pge.com>
> Subject: [External_Sender] Re: Audit Request

>

> What is your mailing address?

>

> Sent from my iPhone

>

>> On Oct 6, 2015, at 2:41 AM, Wentzel, Michael <Michael.Wentzel@nrc.gov> wrote:
>>
>> Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or
responding to requests for information.
>> *****
>>
>>
>> Terry,
>>
>> It would be great if you could mail it to me. You can send it directly to me, rather than through the
document control desk.
>>
>> Thanks,
>> Mike
>>
>>
>>
>> -----Original Message-----
>> From: Grebel, Terence [mailto:TLG1@pge.com]
>> Sent: Monday, October 05, 2015 5:40 PM
>> To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
>> Cc: VOSBURG, ALIA <AKV1@pge.com>; Olsofsky, Michelle <MMA0@pge.com>
>> Subject: [External_Sender] Fwd: Audit Request
>>
>> Mike:
>>
>> What are your desires?
>>
>> Sent from my iPhone
>>
>> Begin forwarded message:
>>
>> From: "VOSBURG, ALIA" <AKV1@pge.com<mailto:AKV1@pge.com>>
>> Date: October 5, 2015 at 12:34:12 PM PDT
>> To: "Grebel, Terence" <TLG1@pge.com<mailto:TLG1@pge.com>>
>> Subject: Audit Request
>>
>> Terry,
>>
>> Last week during our biology breakout meeting Michelle Moser asked if we could provide the CD that was
originally provided to the NRC in 2000 by PG&E letter DCL-2000-515 (attached), as their copy was misplaced
over time.
>>
>> John Steinbeck left a copy of the CD on my desk over the weekend.
>> What is contained on the CD is too large to email and, because they are excel files, cannot be added to the
portal.
>>
>> I am happy to have the CD mailed to Mike Wentzel if that's what you would like. Please advise.
>>
>> Thanks,
>> Alia

From: Wentzel, Michael
Sent: Thursday, February 11, 2016 5:46 AM
To: 'Soenen, Philippe R'
Subject: RE: RE: Contact Information

Thanks. Philippe. and thanks to Tom. as well.

From: Soenen, Philippe R [mailto:PNS3@pge.com]
Sent: Wednesday, February 10, 2016 11:15 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Subject: [External_Sender] RE: Contact Information

Mike,

The contact for use of the county facility is as follows:

Mike Mesker
Central Services Division
805.781.1138

Tom Jones passed along that he had left a voicemail with Mike Mesker.

Regards,

Philippe Soenen

Phone: 805.995.6461 | Cell: (b)(6) | email: pns3@pge.com

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Thursday, February 04, 2016 3:53 AM
To: Soenen, Philippe R
Subject: Contact Information

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Philippe,

When you and Tom came in for the drop-in, you had mentioned the possibility of using the county's facility for our eventual public meeting to discuss the draft SEIS. Can you provide me with the facility contact info? Obviously, there is some time between now and then, but I happened to think about it and wanted to ask for it while I had it on my mind.

Thanks,
Mike

Michael Wentzel

Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Friday, September 18, 2015 11:40 AM
To: 'VOSBURG, ALIA'
Cc: 'Grebel, Terence'
Subject: RE: RE: DCPD Environmental Audit Proposed Schedules

Thanks'

From: VOSBURG, ALIA [mailto:AKV1@pge.com]
Sent: Friday, September 18, 2015 11:39 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: DCPD Environmental Audit Proposed Schedules

Mike,

Thanks for getting back to us so quickly. I forgot to mention that we are proposing an alternatives meeting take place Thursday morning (that's why it wasn't on the list for Wednesday meetings). We will work on getting the portal loaded for waste management as soon as possible.

Thank you,

Alia Vosburg
DCPD License Renewal
(805) 595-6467

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Friday, September 18, 2015 3:46 AM
To: VOSBURG, ALIA
Cc: Grebel, Terence
Subject: RE: DCPD Environmental Audit Proposed Schedules

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Alia,

Thanks for passing this on. I'm going to circulate it to my team and ask for feedback by Monday (half of the team is out on travel today). One thing I did notice is that we had requested a breakout session for alternatives, but that was not on the list. Can we add that to the list? One other thing to note is that we may not need the waste management breakout (we had noted in the request "if necessary"). After our reviewer looks over the information you provide, he may not need to meet with your team to discuss. Rather than keep everybody waiting in limbo, if you can make the information available on the portal as soon as you have it, I can ask him to take a look at it and let me know if he will need to meet

Thanks,
Mike

From: VOSBURG, ALIA [mailto:AKV1@pge.com]
Sent: Thursday, September 17, 2015 6:58 PM

To: Wentzel, Michael <Michael.Wentzel@nrc.gov>

Cc: Grebel, Terence <TLG1@pge.com>

Subject: [External_Sender] DCPD Environmental Audit Proposed Schedules

Mike,

Please see the proposed general tour route which covers terrestrial, surface water, geology and soils, air quality, noise, and groundwater. Note a separate cultural resources tour (not shown) will be taking place simultaneously. We are proposing these tours start at 10:00am Tuesday, Sept. 29th, following an 8:00am entrance meeting.

Please also see the proposed schedule of breakout meetings for Wednesday Sept. 30, beginning at 8:00am.

Thanks,

Alia Vosburg
DCPD License Renewal
(805) 595-6467

From: Wentzel, Michael
Sent: Thursday, September 10, 2015 9:24 AM
To: Grebel, Terence
Cc: Olsofsky, Michelle
Subject: RE: RE: FW: Question for M. Wentzel on SAMA Document Request

Terry

Sorry for the delay in getting back to you. What we are looking for in that documentation request are the MACCS2 input/output decks in whatever format is convenient (e.g., PDF, etc.).

I hope this clarifies the request.

Thanks.
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Wednesday, September 09, 2015 12:29 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Olsofsky, Michelle <MMA0@pge.com>
Subject: [External_Sender] RE: FW: Question for M. Wentzel on SAMA Document Request

Mike:

Thanks for keeping us todate.

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Wednesday, September 09, 2015 8:36 AM
To: Grebel, Terence
Cc: Olsofsky, Michelle
Subject: RE: FW: Question for M. Wentzel on SAMA Document Request

Terry.

I just wanted to let you know that I am still working on getting this clarified for you. I hope to have something later today

Thanks.
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, September 08, 2015 11:32 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Olsofsky, Michelle <MMA0@pge.com>
Subject: [External_Sender] FW: Question for M. Wentzel on SAMA Document Request

Mike:

Can you please get back to us on the question below?

From: Olsofsky, Michelle
Sent: Tuesday, September 08, 2015 7:35 AM
To: Grebel, Terence
Subject: Question for M. Wentzel on SAMA Document Request

Terry,

Our technical team has the following question for Mike Wentzel regarding SAMA General RAI #4 (Doc request for Windows based Methods for Estimation of Leakages and Consequences of Releases (MELCOR) Accident Consequence Code System (WinMACCS) calculation documentation) –

- WinMACCS documentation is currently available on the NRC website:
<http://pbadupws.nrc.gov/docs/ML0723/ML072350221.pdf>
- However, the DCPD Level 3 model does not use WinMACCS and does not reference the above WinMACCS document.
- DCPD used MACCS2. Volume 1 of the MACCS2 User's Guide is on the NRC website
(<http://pbadupws.nrc.gov/docs/ML1100/ML110030976.pdf>). DCPD can provide Volume 2 if necessary.

Is it acceptable to provide the NRC with the MACCS2 Vols 1 & 2 User's Guides for the SAMA Audit?

Thanks in advance,
Michelle Olsofsky
DCPD License Renewal
734 748-0084

From: Wentzel, Michael
Sent: Wednesday, July 29, 2015 4:36 PM
To: 'Hartwig, Adriana'
Subject: RE: RE: FW: RE: RE: RE: Diablo Canyon Tour

Hi Adriana.

I just got back to my desk and did see that I have an email from Stacey. The short answer to your question is that I do not believe that we will need keycards, because our staff will be escorted the whole time. For your awareness, the whole reason that this came up is because when I originally asked my PG&E counterpart what we needed to do for access for the trip, I was told that we needed to get people on the Region's access letter. We were just following through on that direction to make sure that everyone was covered. I apologize if that has caused any confusion.

Thanks.
Mike

From: Hartwig, Adriana [mailto:ADH6@pge.com]
Sent: Wednesday, July 29, 2015 4:26 PM
To: Wentzel, Michael
Subject: [External_Sender] RE: FW: RE: RE: RE: Diablo Canyon Tour

Hi Mike,

I just received the special good guy letter from Stacey. My question is (and I passed this info along to her as well), do they really want to be keycarded? They're currently scheduled to be onsite for under 4 hours. It is going to take a minimum of 15 minutes to get their keycards (more likely between 30 – 60 minutes). If they are going to be keycarded, we will need to build this into the current schedule as well.

Adriana

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Wednesday, July 29, 2015 10:28 AM
To: Hartwig, Adriana
Subject: RE: FW: RE: RE: RE: Diablo Canyon Tour

Adriana,

I just heard back from Jane Marshall. She will not be able to call to provide you the information you need until Monday. Hopefully, this will not be an issue for you.

Thanks,
Mike

From: Wentzel, Michael
Sent: Tuesday, July 28, 2015 3:02 PM
To: 'Hartwig, Adriana'
Subject: RE: FW: RE: RE: RE: Diablo Canyon Tour

Adriana,

I will not be on the tour. I will forward on your contact info to Jane and Michele. I spoke with Michele yesterday and she had some reservation about emailing her info, so you providing your phone number may help with that. Jane is on leave until Monday. I am hoping she will check her email before then and provide you her info.

Thanks.
Mike

From: Hartwig, Adriana [<mailto:ADH6@pge.com>]
Sent: Tuesday, July 28, 2015 1:47 PM
To: Wentzel, Michael
Subject: [External_Sender] FW: RE: RE: RE: Diablo Canyon Tour

Good afternoon Mike,

Will you be attending the tour as well? I will need the information requested below for Jane Marshall and Michele Evans to put in our Access database.

Full name
Date of Birth
Social Security Number
US Citizen: Yes or No
Address
Phone Number
Male or Female

If they would prefer not to provide the personal information via e-mail, they are welcome to contact me at 805-545-3188.

Thank you,

Adriana Hartwig

PG&E | Diablo Canyon | Regulatory Services | 104/5/536B | Phone 805-545-3188

From: Grebel, Terence
Sent: Tuesday, July 28, 2015 9:47 AM
To: Hartwig, Adriana
Subject: FW: RE: RE: RE: Diablo Canyon Tour

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Monday, July 27, 2015 5:40 AM
To: Grebel, Terence
Subject: RE: RE: RE: RE: Diablo Canyon Tour

Terry,

I've made a couple of minor edits to the list of attendees. As far as access goes, all but Dave McIntyre will have their site access training current as of today. Dave will not be able to complete his training in time for the trip. I will work with the region to get the others added to the good guy letter. Should I put Dave, or any of the others, in touch with someone at PG&E to pass along whatever personal info is needed to get access?

Thanks.
Mike

From: Grebel, Terence [<mailto:TLG1@pge.com>]
Sent: Thursday, July 23, 2015 4:55 PM
To: Wentzel, Michael
Cc: Jones, Thomas P.; Grebel, Terence
Subject: [External_Sender] RE: RE: RE: Diablo Canyon Tour

Mike:

Attached is the updated proposed itinerary. Sorry for taking so long to get it to you. If it changes I will send you an updated copy.

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Thursday, July 23, 2015 8:26 AM
To: Grebel, Terence
Subject: RE: RE: RE: Diablo Canyon Tour

Terry,

You had mentioned last week that you thought you would have a draft of the itinerary that you would be able to share with me this week. Is that still the case and, if so, do you have an idea of when you'll be able to share it with me?

Thanks.
Mike

From: Grebel, Terence [<mailto:TLG1@pge.com>]
Sent: Monday, July 06, 2015 12:23 PM
To: Wentzel, Michael
Subject: [External_Sender] RE: RE: Diablo Canyon Tour

If we include radiation areas it will take some time for training, etc. Given the two hour tour time, I would suggest no going in radiation areas.

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Monday, July 06, 2015 8:40 AM
To: Grebel, Terence
Subject: RE: RE: Diablo Canyon Tour

Terry,

I have solicited input as to as to any specific areas of interest they may have. So far, what I've gotten back is they are interested in a general site tour and any particular points of interest that may be relevant or interesting to license renewal (e.g. any degraded SSCs, etc.). Also, since Michele Evans is planning to be there, if there are any particular areas outside of license renewal that PG&E may want to show the group (e.g., FLEX

equipment?), that would work, as well. Also, I've heard that the tour does not need to include the spent fuel pool.

As far as how long, I think ideally it would be ideal to start around 9am and last no longer than 2 hours. They need to have enough time to grab lunch and make it to the public meeting location. I would agree with you that they would probably like to meet your senior management, if available.

Mike

From: Grebel, Terence [<mailto:TLG1@pge.com>]
Sent: Monday, July 06, 2015 10:29 AM
To: Wentzel, Michael
Subject: [External_Sender] RE: Diablo Canyon Tour

Mike:

Can you provide any information on what they may like to see and how long a tour. I assume tha they may like to meet our senior management if they are available.

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Thursday, July 02, 2015 9:28 AM
To: Grebel, Terence
Subject: Diablo Canyon Tour

Terry,

In conjunction with our August 5 public meetings for license renewal, a few of my managers were interested in trying to set up a tour of the site. The group would consist of Michele Evans, the Deputy Office Director for NRR, Jane Marshall, the Deputy Director for license renewal, and two of the license renewal branch chiefs. Ideally, they were hoping to set something up for 9am on August 5. Can you let me know if it would be possible to something up and what information we would need to provide in order to facilitate that?

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

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To learn more, please visit <http://www.pge.com/about/company/privacy/customer/>

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To learn more, please visit <http://www.pge.com/about/company/privacy/customer/>

From: Wentzel, Michael
Sent: Monday, November 16, 2015 12:20 PM
To: Grebel, Terence; Plasse, Richard
Cc: Jones, Thomas P.; Soenen, Philippe R
Subject: RE: RE: FW: PG&E Drop In Visit on December 8-9, 2015

Terry,

We are scheduled for 8am on December 9.

Thanks,
Mike

From: Grebel, Terence [TLG1@pge.com]
Sent: Thursday, November 12, 2015 6:00 PM
To: Wentzel, Michael; Plasse, Richard
Cc: Jones, Thomas P.; Soenen, Philippe R
Subject: [External_Sender] RE: FW: PG&E Drop In Visit on December 8-9, 2015

Mike and Rick:

8AM EST December 9th will work of us. Can you please send the latest org chart for the NRC License Renewal Organization?

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Thursday, November 12, 2015 4:54 AM
To: Grebel, Terence
Subject: RE: FW: PG&E Drop In Visit on December 8-9, 2015

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Terry,

Sorry for the iteration. Would Tom and Philippe be able to meet at 8:00am. There is a meeting that our Division Director has to attend at 10:00am that I was not aware of. He is available between 8:00-8:45am, but then not again until the afternoon.

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, November 10, 2015 5:26 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>>
Cc: Jones, Thomas P. <TPJ2@pge.com<mailto:TPJ2@pge.com>>; Soenen, Philippe R <PNS3@pge.com<mailto:PNS3@pge.com>>
Subject: [External_Sender] FW: PG&E Drop In Visit on December 8-9, 2015

Mike:

Can they meet with you and Rick at 10 AM and then with your management for one hour? That would get Tom's travel needs.

From: Jones, Thomas P.

Sent: Tuesday, November 10, 2015 2:10 PM
To: Soenen, Philippe R; Grebel, Terence
Subject: RE: PG&E Drop In Visit on December 8-9, 2015

That will work just fine if it is an hour or so- I fly out that date and have check out of hotel and transit to airport. 10 AM would be preferable. What is the protocol and expected time to do it right?

Regards,
Tom Jones

Director, Government Relations
Pacific Gas & Electric Company

Office: 805 595 6340

Mobile: (b)(6)

From: Soenen, Philippe R
Sent: Tuesday, November 10, 2015 1:36 PM
To: Grebel, Terence; Jones, Thomas P.
Subject: RE: PG&E Drop In Visit on December 8-9, 2015

That date and time works for me.

Philippe Soenen

Regulatory Services

Office - 805.545.6984

Cell (b)(6)

From: Grebel, Terence
Sent: Tuesday, November 10, 2015 1:32 PM
To: Jones, Thomas P.; Soenen, Philippe R
Subject: Fwd: PG&E Drop In Visit on December 8-9, 2015

Tom and Philippe:
Does this time and date work for you?

Sent from my iPhone

Begin forwarded message:

From: "Wentzel, Michael" <Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>>
Date: November 10, 2015 at 1:22:16 PM PST
To: "Grebel, Terence" <TLG1@pge.com<mailto:TLG1@pge.com>>, "Plasse, Richard" <Richard.Plasse@nrc.gov<mailto:Richard.Plasse@nrc.gov>>
Cc: "Jones, Thomas P." <TPJ2@pge.com<mailto:TPJ2@pge.com>>, "Soenen, Philippe R" <PNS3@pge.com<mailto:PNS3@pge.com>>
Subject: RE: RE: PG&E Drop In Visit on December 8-9, 2015

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It looks like 11am may be better on our part. If that works, I can confirm that with our admin. If that doesn't work, are any schedule constraints on your director's part that we would need to work around?

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, November 10, 2015 4:08 PM

To: Wentzel, Michael <Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>>; Plasse, Richard <Richard.Plasse@nrc.gov<mailto:Richard.Plasse@nrc.gov>>
Cc: Jones, Thomas P. <TPJ2@pge.com<mailto:TPJ2@pge.com>>; Soenen, Philippe R <PNS3@pge.com<mailto:PNS3@pge.com>>
Subject: [External_Sender] RE: PG&E Drop In Visit on December 8-9, 2015

What would you recommend? 9AM?

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Tuesday, November 10, 2015 12:59 PM
To: Grebel, Terence; Plasse, Richard
Cc: Jones, Thomas P.; Soenen, Philippe R
Subject: RE: PG&E Drop In Visit on December 8-9, 2015

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Terry,

It looks like December 9th would be best for us. Do you have a timeframe in mind?

Thanks,
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, November 10, 2015 1:23 PM
To: Plasse, Richard <Richard.Plasse@nrc.gov<mailto:Richard.Plasse@nrc.gov>>; Wentzel, Michael <Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>>
Cc: Jones, Thomas P. <TPJ2@pge.com<mailto:TPJ2@pge.com>>; Soenen, Philippe R <PNS3@pge.com<mailto:PNS3@pge.com>>
Subject: [External_Sender] PG&E Drop In Visit on December 8-9, 2015

Rick and Mike:

Our new Director of Strategic Projects will be coming to Washington, D.C. on 12/8-9. I suggested that he meet with youall and perhaps some of your License Renewal management. This will just be an introduction visit. Can you please check your availability and your management?

From: Wentzel, Michael
Sent: Monday, December 07, 2015 11:12 AM
To: 'Olsofsky, Michelle'
Subject: RE: RE: NRC Phone Call on SAMA RAIs

Michelle,

For Wednesday, we would not be available until after 3pm. We could do 4pm, if that would work. Alternately, it looks like we are available after 2pm on Tuesday and after 3pm on Thursday. All times Eastern. Do any of those timeframes work?

Thanks
Mike

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Monday, December 07, 2015 10:59 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Soenen, Philippe R <PNS3@pge.com>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: NRC Phone Call on SAMA RAIs

Mike,

Does 1:30-2pm Eastern (10:30-11am Pacific) work for you? If so, I can re-schedule the meeting for that time.

Thanks in advance,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Monday, December 07, 2015 9:57 AM
To: Olsofsky, Michelle
Cc: Soenen, Philippe R; Grebel, Terence
Subject: RE: NRC Phone Call on SAMA RAIs

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Hi Michelle,

I have another meeting that I have to attend at this same time. Do you have another time when everyone is available? If so, let me know and I can check with my staff to confirm their availability.

Thanks,
Mike

-----Original Appointment-----

From: Olsofsky, Michelle [mailto:MMA0@pge.com]

Sent: Monday, December 07, 2015 10:52 AM

To: Soenen, Philippe R; Grebel, Terence; Pyo, John; Barber, Nathan R; Wentzel, Michael

Subject: [External_Sender] NRC Phone Call on SAMA RAIs

When: Wednesday, December 09, 2015 1:00 PM-1:30 PM (UTC-06:00) Central Time (US & Canada).

Where: Bridgeline 1-866-652-7690 participant code (b)(6)

All,

The meeting is to discuss NRC questions on the submitted DCPD SAMA RAIs.

Please confirm your availability.

Thanks you,
Michelle Olsofsky
DCPD License Renewal
734-748-0084

From: Wentzel, Michael
Sent: Wednesday, June 24, 2015 10:26 AM
To: 'Grebel, Terence'
Subject: RE: RE: RE: Tuesday Schedule

Terry.

My cell phone number is (b)(6) I am planning on leaving now and I have a couple of quick stops to make before then. I should be around 8:15am. but I can wait until 8:30am. if that works better.

Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Wednesday, June 24, 2015 9:47 AM
To: Wentzel, Michael
Subject: [External_Sender] RE: RE: Tuesday Schedule

Mike:

Can you please send me your cell phone number? Are you still planning on coming to our offices today at 8-8:30AM timeframe?

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Tuesday, June 23, 2015 8:04 PM
To: Kaminski, Cindy; Grebel, Terence
Cc: Olsofsky, Michelle; VOSBURG, ALIA
Subject: RE: RE: Tuesday Schedule

Thanks. See you then.

From: Kaminski, Cindy [mailto:CMSa@pge.com]
Sent: Monday, June 22, 2015 5:43 PM
To: Grebel, Terence; Wentzel, Michael
Cc: Olsofsky, Michelle; VOSBURG, ALIA
Subject: [External_Sender] RE: Tuesday Schedule

Mike, attached please find maps to our offices. The meeting at 8:30 will be at 735 Tank Farm, Suite 220. If there is time, we will walk over to 4111 Broad Street, Suite 120 to show you the large conference room. This will be where the Audit Entrance and Exit Meetings will take place.

Thank you,

Cindy Kaminski

PG&E | Diablo Canyon Licensing Basis Verification Project/License Renewal | 4111 Broad St., San Luis Obispo |
Phone: 805-545-4515

From: Grebel, Terence
Sent: Friday, June 19, 2015 12:10 PM
To: Wentzel, Michael

Cc: Olsofsky, Michelle; Kaminski, Cindy; Bates, Al; Strickland, Jearl
Subject: Re: Tuesday Schedule

Mike:

8:30 am will work for us. We will send you a map on Monday. We look forward to seeing you at our offices on Tuesday.

Sent from my iPhone

On Jun 19, 2015, at 11:28 AM, Wentzel, Michael <Michael.Wentzel@nrc.gov> wrote:

Terry,

Just wanted to touch base with you to let you know that all of my Tuesday annual assessment meeting obligations have not quite settled out, but I think I should be generally free before 10am that day. As far as meeting to tour the site audit location, do you think we could do that around 8 or 8:30am that morning? Hopefully, that should give us plenty of time before I have to be somewhere else, though I will only know that for sure once everything has been finalized.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

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PG&E is committed to protecting our customers' privacy.

To learn more, please visit <http://www.pge.com/about/company/privacy/customer/>

From: Wentzel, Michael
Sent: Friday, September 18, 2015 2:27 PM
To: 'Olsofsky, Michelle'
Cc: 'Grebel, Terence'
Subject: RE: RE: Portal Question

Thanks and no worries. It happens.

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Friday, September 18, 2015 2:26 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: Portal Question

Mike,

I'm trying to get in contact with our technical support on the below. In the meantime, I'll pdf the responses and load those onto the portal. This should take 10-15 minutes.

Our apologies for the bugs.

Thanks,

Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Friday, September 18, 2015 1:07 PM
To: Olsofsky, Michelle
Cc: Grebel, Terence
Subject: Portal Question

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.
Michelle.

One other issue. When I click on any of the Word documents, Microsoft Word Viewer opens. but no documents actually open. However, when I click on a PDF, the file opens. Any advice?

Thanks,
Mike

From: Wentzel, Michael
Sent: Tuesday, January 12, 2016 2:28 PM
To: 'Soenen, Philippe R'; 'Grebel, Terence'
Subject: RE: RE: RAI Telecon Draft Summary

Philippe.

It turns out that our contractor will have limited ability to support a phone call tomorrow. Does your team have availability sometime between 9am and 1pm Pacific?

From: Wentzel, Michael
Sent: Tuesday, January 12, 2016 12:14 PM
To: 'Soenen, Philippe R' <PNS3@pge.com>; Grebel, Terence <TLG1@pge.com>
Subject: RE: RE: RAI Telecon Draft Summary

Philippe.

I am still waiting to hear back from our contractor to confirm her availability for a phone call, but I wanted to pass on to you the main issue that we wanted to get clarified

The data provided in RAI response AQ-1 include numbers or dashes. Does a dash indicate that the site was sampled, but the species was not observed (which would be equivalent to a zero)? If a species was not listed at a site, can we assume the value is zero because it was not observed?

I should be able to confirm availability soon and let you know.

On another note, I received two to the three packages with the paper copies of the RAI responses. Hopefully the third will show up shortly. If not, I will let you know.

Thanks.
Mike

From: Soenen, Philippe R [mailto:PNS3@pge.com]
Sent: Monday, January 11, 2016 9:58 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: RAI Telecon Draft Summary

Mike,

We have reviewed the draft telecom and we do not have any comments on it. Once you can get some of the specifics on the aquatic monitoring that requires follow up we will look for the PG&E availability to support a Wednesday or Thursday phone call.

Thanks,

Philippe Soenen

Cell: (b)(6) email: pns3@pge.com

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Monday, January 11, 2016 4:54 AM
To: Soenen, Philippe R; Grebel, Terence
Subject: RAI Telecon Draft Summary

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Philippe/Terry,

Attached is a draft of the telecon summary from our phone call last week. Please let me know if you have any comments. Also, it looks like we are going to need one more phone call to clarify some of the aquatic monitoring data that was provided in the RAI responses. I hope to provide you with some of the issues that we need to get cleared up later today. Ideally, we would like to have a phone call either Wednesday or Thursday this week, depending on availability.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

.

From: Wentzel, Michael
Sent: Thursday, July 23, 2015 11:26 AM
To: 'Grebel, Terence'
Subject: RE: RE: RE: Diablo Canyon Tour

Terry.

You had mentioned last week that you thought you would have a draft of the itinerary that you would be able to share with me this week. Is that still the case and, if so, do you have an idea of when you'll be able to share it with me?

Thanks.
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Monday, July 06, 2015 12:23 PM
To: Wentzel, Michael
Subject: [External_Sender] RE: RE: Diablo Canyon Tour

If we include radiation areas it will take some time for training, etc. Given the two hour tour time, I would suggest no going in radiation areas.

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Monday, July 06, 2015 8:40 AM
To: Grebel, Terence
Subject: RE: RE: Diablo Canyon Tour

Terry.

I have solicited input as to as to any specific areas of interest they may have. So far, what I've gotten back is they are interested in a general site tour and any particular points of interest that may be relevant or interesting to license renewal (e.g., any degraded SSCs, etc.). Also, since Michele Evans is planning to be there, if there are any particular areas outside of license renewal that PG&E may want to show the group (e.g., FLEX equipment?), that would work, as well. Also, I've heard that the tour does not need to include the spent fuel pool.

As far as how long, I think ideally it would be ideal to start around 9am and last no longer than 2 hours. They need to have enough time to grab lunch and make it to the public meeting location. I would agree with you that they would probably like to meet your senior management, if available.

Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Monday, July 06, 2015 10:29 AM
To: Wentzel, Michael
Subject: [External_Sender] RE: Diablo Canyon Tour

Mike:

Can you provide any information on what they may like to see and how long a tour. I assume tha they may like to meet our senior management if they are available.

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Thursday, July 02, 2015 9:28 AM
To: Grebel, Terence
Subject: Diablo Canyon Tour

Terry,

In conjunction with our August 5 public meetings for license renewal, a few of my managers were interested in trying to set up a tour of the site. The group would consist of Michele Evans, the Deputy Office Director for NRR, Jane Marshall, the Deputy Director for license renewal, and two of the license renewal branch chiefs. Ideally, they were hoping to set something up for 9am on August 5. Can you let me know if it would be possible to something up and what information we would need to provide in order to facilitate that?

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

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From: Wentzel, Michael
Sent: Tuesday, December 08, 2015 7:12 AM
To: Grebel, Terence; Plasse, Richard
Cc: Jones, Thomas P.; Soenen, Philippe R
Subject: RE: RE: RE: FW: PG&E Drop In Visit on December 8-9, 2015

Terry,

Barring any last minute changes, it will be our Director and Deputy Director, Chris Miller and Jane Marshall, respectively; the branch chiefs for the safety and environmental projects branches, Yoira Diaz and Jim Danna, respectively; as well as Rick and myself.

Thanks,
Mike

-----Original Message-----

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Monday, December 07, 2015 4:44 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>; Plasse, Richard <Richard.Plasse@nrc.gov>
Cc: Jones, Thomas P. <TPJ2@pge.com>; Soenen, Philippe R <PNS3@pge.com>
Subject: [External_Sender] RE: RE: FW: PG&E Drop In Visit on December 8-9, 2015

Mike:

Can either you or Rick get back to us who you anticipate will be in the PG&E meeting at 8AM on Wednesday.

-----Original Message-----

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Monday, November 16, 2015 9:20 AM
To: Grebel, Terence; Plasse, Richard
Cc: Jones, Thomas P.; Soenen, Philippe R
Subject: RE: RE: FW: PG&E Drop In Visit on December 8-9, 2015

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Terry,

We are scheduled for 8am on December 9.

Thanks,
Mike

From: Grebel, Terence [TLG1@pge.com]
Sent: Thursday, November 12, 2015 6:00 PM
To: Wentzel, Michael; Plasse, Richard
Cc: Jones, Thomas P.; Soenen, Philippe R
Subject: [External_Sender] RE: FW: PG&E Drop In Visit on December 8-9, 2015

Mike and Rick:

8AM EST December 9th will work of us. Can you please send the latest org chart for the NRC License Renewal Organization?

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Thursday, November 12, 2015 4:54 AM
To: Grebel, Terence
Subject: RE: FW: PG&E Drop In Visit on December 8-9, 2015

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Terry,

Sorry for the iteration. Would Tom and Philippe be able to meet at 8:00am. There is a meeting that our Division Director has to attend at 10:00am that I was not aware of. He is available between 8:00-8:45am, but then not again until the afternoon.

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, November 10, 2015 5:26 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>>
Cc: Jones, Thomas P. <TPJ2@pge.com<mailto:TPJ2@pge.com>>; Soenen, Philippe R <PNS3@pge.com<mailto:PNS3@pge.com>>
Subject: [External_Sender] FW: PG&E Drop In Visit on December 8-9, 2015

Mike:

Can they meet with you and Rick at 10 AM and then with your management for one hour? That would get Tom's travel needs.

From: Jones, Thomas P.
Sent: Tuesday, November 10, 2015 2:10 PM
To: Soenen, Philippe R; Grebel, Terence
Subject: RE: PG&E Drop In Visit on December 8-9, 2015

That will work just fine if it is an hour or so- I fly out that date and have check out of hotel and transit to airport. 10 AM would be preferable. What is the protocol and expected time to do it right?

Regards,
Tom Jones

Director, Government Relations
Pacific Gas & Electric Company

Office: 805 595 6340

Mobile: (b)(6)

From: Soenen, Philippe R
Sent: Tuesday, November 10, 2015 1:36 PM
To: Grebel, Terence; Jones, Thomas P.
Subject: RE: PG&E Drop In Visit on December 8-9, 2015

That date and time works for me.

Philippe Soenen

Regulatory Services
Office - 805.545.6984
Cell - (b)(6)

From: Grebel, Terence
Sent: Tuesday, November 10, 2015 1:32 PM
To: Jones, Thomas P.; Soenen, Philippe R
Subject: Fwd: PG&E Drop In Visit on December 8-9, 2015

Tom and Philippe:
Does this time and date work for you?

Sent from my iPhone

Begin forwarded message:

From: "Wentzel, Michael" <Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>>
Date: November 10, 2015 at 1:22:16 PM PST
To: "Grebel, Terence" <TLG1@pge.com<mailto:TLG1@pge.com>>, "Plasse, Richard" <Richard.Plasse@nrc.gov<mailto:Richard.Plasse@nrc.gov>>
Cc: "Jones, Thomas P." <TPJ2@pge.com<mailto:TPJ2@pge.com>>, "Soenen, Philippe R" <PNS3@pge.com<mailto:PNS3@pge.com>>
Subject: RE: RE: PG&E Drop In Visit on December 8-9, 2015
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It looks like 11am may be better on our part. If that works, I can confirm that with our admin. If that doesn't work, are any schedule constraints on your director's part that we would need to work around?

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, November 10, 2015 4:08 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>>; Plasse, Richard <Richard.Plasse@nrc.gov<mailto:Richard.Plasse@nrc.gov>>
Cc: Jones, Thomas P. <TPJ2@pge.com<mailto:TPJ2@pge.com>>; Soenen, Philippe R <PNS3@pge.com<mailto:PNS3@pge.com>>
Subject: [External_Sender] RE: PG&E Drop In Visit on December 8-9, 2015

What would you recommend? 9AM?

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Tuesday, November 10, 2015 12:59 PM
To: Grebel, Terence; Plasse, Richard
Cc: Jones, Thomas P.; Soenen, Philippe R
Subject: RE: PG&E Drop In Visit on December 8-9, 2015

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Terry,

It looks like December 9th would be best for us. Do you have a timeframe in mind?

Thanks,
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Tuesday, November 10, 2015 1:23 PM

To: Plasse, Richard <Richard.Plasse@nrc.gov<mailto:Richard.Plasse@nrc.gov>>; Wentzel, Michael
<Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>>
Cc: Jones, Thomas P. <TPJ2@pge.com<mailto:TPJ2@pge.com>>; Soenen, Philippe R
<PNS3@pge.com<mailto:PNS3@pge.com>>
Subject: [External_Sender] PG&E Drop In Visit on December 8-9, 2015

Rick and Mike:

Our new Director of Strategic Projects will be coming to Washington, D.C. on 12/8-9. I suggested that he meet with youall and perhaps some of your License Renewal management. This will just be an introduction visit. Can you please check your availability and your management?

From: Wentzel, Michael
Sent: Friday, September 18, 2015 2:52 PM
To: 'Olsofsky, Michelle'
Cc: 'Grebel, Terence'
Subject: RE: RE: RE: Portal Question

Thanks, Michelle. Everything seems to be working now.

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Friday, September 18, 2015 2:43 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: RE: Portal Question

Mike,

I have replaced all of the Audit Question Word files with pdf files. Please let me know if there is anything else that I can help with.

Thanks,

Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Friday, September 18, 2015 1:27 PM
To: Olsofsky, Michelle
Cc: Grebel, Terence
Subject: RE: RE: Portal Question

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Thanks and no worries. It happens.

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Friday, September 18, 2015 2:26 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: Portal Question

Mike,

I'm trying to get in contact with our technical support on the below. In the meantime, I'll pdf the responses and load those onto the portal. This should take 10-15 minutes.

Our apologies for the bugs.

Thanks,

Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Friday, September 18, 2015 1:07 PM
To: Olsofsky, Michelle
Cc: Grebel, Terence
Subject: Portal Question

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Michelle,

One other issue. When I click on any of the Word documents, Microsoft Word Viewer opens, but no documents actually open. However, when I click on a PDF, the file opens. Any advice?

Thanks.
Mike

From: Wentzel, Michael
Sent: Monday, December 07, 2015 11:42 AM
To: 'Olsofsky, Michelle'
Subject: RE: RE: RE: NRC Phone Call on SAMA RAIs

That time looks like it will work

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Monday, December 07, 2015 11:37 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Subject: [External_Sender] RE: RE: NRC Phone Call on SAMA RAIs

Mike,

My team is available at 3pm Thursday. Does that sound okay?

Thanks,

Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Monday, December 07, 2015 10:12 AM
To: Olsofsky, Michelle
Subject: RE: RE: NRC Phone Call on SAMA RAIs

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Michelle,

For Wednesday, we would not be available until after 3pm. We could do 4pm, if that would work. Alternately, it looks like we are available after 2pm on Tuesday and after 3pm on Thursday. All times Eastern. Do any of those timeframes work?

Thanks.
Mike

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Monday, December 07, 2015 10:59 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Soenen, Philippe R <PNS3@pge.com>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: NRC Phone Call on SAMA RAIs

Mike,

Does 1:30-2pm Eastern (10:30-11am Pacific) work for you? If so, I can re-schedule the meeting for that time.

Thanks in advance,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Monday, December 07, 2015 9:57 AM
To: Olsofsky, Michelle
Cc: Soenen, Philippe R; Grebel, Terence
Subject: RE: NRC Phone Call on SAMA RAIs

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Hi Michelle,

I have another meeting that I have to attend at this same time. Do you have another time when everyone is available? If so, let me know and I can check with my staff to confirm their availability.

Thanks,
Mike

-----Original Appointment-----

From: Olsofsky, Michelle [<mailto:MMA0@pge.com>]
Sent: Monday, December 07, 2015 10:52 AM
To: Soenen, Philippe R; Grebel, Terence; Pyo, John; Barber, Nathan R; Wentzel, Michael
Subject: [External_Sender] NRC Phone Call on SAMA RAIs
When: Wednesday, December 09, 2015 1:00 PM-1:30 PM (UTC-06:00) Central Time (US & Canada).
Where: Bridgeline 1-866-652-7690 participant code (b)(6)

All,

The meeting is to discuss NRC questions on the submitted DCPD SAMA RAIs.

Please confirm your availability.

Thanks you,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael
Sent: Wednesday, January 13, 2016 1:57 PM
To: 'Olsofsky, Michelle'
Cc: 'Soenen, Philippe R'; 'Grebel, Terence'
Subject: RE: RE: RE: RAI Telecon Draft Summary

Michelle,

We're good with the clarifications that you've provided and do not need a call to discuss. Thanks for the quick turnaround.

Mike

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Wednesday, January 13, 2016 12:30 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Soenen, Philippe R <PNS3@pge.com>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: RE: RE: RAI Telecon Draft Summary

Mike,

Thank you for the follow-up. In response to the second part of the clarification below, our subject matter expert stated:

Yes, we assume the value is zero if a species was not observed.

Please let us know if you or the reviewer has any further questions on this topic.

Thank you,
Michelle Olsofsky
DCPP License Renewal
734 748-0084

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Wednesday, January 13, 2016 4:53 AM
To: Olsofsky, Michelle
Cc: Soenen, Philippe R; Grebel, Terence
Subject: RE: RE: RE: RAI Telecon Draft Summary

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Michelle,

There was a second part to that clarification, as well: If a species was not listed at a site, can we assume the value is zero because it was not observed?

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Tuesday, January 12, 2016 5:16 PM

To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Soenen, Philippe R <PNS3@pge.com>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: RE: RAI Telecon Draft Summary

Mike,

Our subject matter expert reviewed the aquatic question below and provided the following response:

The dashes indicate that a specific taxon was not observed. It is the same as zero.

Please let us know if you or the reviewer has any further questions on this topic.

Thanks you,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Grebel, Terence
Sent: Tuesday, January 12, 2016 1:24 PM
To: Olsofsky, Michelle
Cc: Soenen, Philippe R
Subject: FW: RE: RAI Telecon Draft Summary

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Tuesday, January 12, 2016 9:14 AM
To: Soenen, Philippe R; Grebel, Terence
Subject: RE: RE: RAI Telecon Draft Summary

Philippe.

I am still waiting to hear back from our contractor to confirm her availability for a phone call, but I wanted to pass on to you the main issue that we wanted to get clarified:

The data provided in RAI response AQ-1 include numbers or dashes. Does a dash indicate that the site was sampled, but the species was not observed (which would be equivalent to a zero)? If a species was not listed at a site, can we assume the value is zero because it was not observed?

I should be able to confirm availability soon and let you know.

On another note, I received two to the three packages with the paper copies of the RAI responses. Hopefully, the third will show up shortly. If not, I will let you know.

Thanks
Mike

From: Soenen, Philippe R [<mailto:PNS3@pge.com>]
Sent: Monday, January 11, 2016 9:58 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: RAI Telecon Draft Summary

Mike,

We have reviewed the draft telecom and we do not have any comments on it. Once you can get some of the specifics on the aquatic monitoring that requires follow up we will look for the PG&E availability to support a Wednesday or Thursday phone call.

Thanks,

Philippe Soenen

Cell: 804 535-0481 | Email: (b)(6) | Email: pns3@pge.com

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]

Sent: Monday, January 11, 2016 4:54 AM

To: Soenen, Philippe R; Grebel, Terence

Subject: RAI Telecon Draft Summary

Alert: This message originated outside of PG&E. Use caution when opening attachments, clicking links or responding to requests for information.

Philippe/Terry,

Attached is a draft of the telecon summary from our phone call last week. Please let me know if you have any comments. Also, it looks like we are going to need one more phone call to clarify some of the aquatic monitoring data that was provided in the RAI responses. I hope to provide you with some of the issues that we need to get cleared up later today. Ideally, we would like to have a phone call either Wednesday or Thursday this week, depending on availability.

Thanks,

Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Monday, July 27, 2015 8:40 AM
To: 'Grebel, Terence'
Subject: RE: RE: RE: RE: Diablo Canyon Tour
Attachments: 08052015 NRC (3).docx

Terry,

I've made a couple of minor edits to the list of attendees. As far as access goes, all but Dave McIntyre will have their site access training current as of today. Dave will not be able to complete his training in time for the trip. I will work with the region to get the others added to the good guy letter. Should I put Dave, or any of the others, in touch with someone at PG&E to pass along whatever personal info is needed to get access?

Thanks,
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Thursday, July 23, 2015 4:55 PM
To: Wentzel, Michael
Cc: Jones, Thomas P.; Grebel, Terence
Subject: [External_Sender] RE: RE: RE: Diablo Canyon Tour

Mike:

Attached is the updated proposed itinerary. Sorry for taking so long to get it to you. If it changes I will send you an updated copy.

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Thursday, July 23, 2015 8:26 AM
To: Grebel, Terence
Subject: RE: RE: RE: Diablo Canyon Tour

Terry,

You had mentioned last week that you thought you would have a draft of the itinerary that you would be able to share with me this week. Is that still the case and, if so, do you have an idea of when you'll be able to share it with me?

Thanks,
Mike

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Monday, July 06, 2015 12:23 PM
To: Wentzel, Michael
Subject: [External_Sender] RE: RE: Diablo Canyon Tour

If we include radiation areas it will take some time for training, etc. Given the two hour tour time, I would suggest no going in radiation areas.



Escort/Contact Information

Thomas Jones 805-459-4530
Terry Grebel 805-458-0534

Visitors (5)

1. Evans, Michele Deputy Office Director for NRR
2. Marshall, Jane Deputy Director for License Renewal
3. James Danna Branch Chief for License Renewal
4. David McIntyre Office of Public Affairs Branch Chief for License Renewal
- Wentzel, Mike Environmental Project Manager
5. Yoira Diaz-Sanabria Branch Chief for License Renewal

Transportation

Driver	Vehicle
Thomas Jones	PG&E Tour Van

Itinerary

Time	Area/Location/Subject	Speaker/Contact	Contact Info
8:00	a.m. NRC arrive at Energy Education Center (EEC) 6588 Ontario Road San Luis Obispo, CA 93401	Thomas Jones/ Terry Grebel	
8:00	a.m. Welcome and Safety Message (5 mins)	Thomas Jones	
8:05	a.m. Diablo Canyon Overview(10 mins)	Thomas Jones	
8:15	a.m. Board DCPD Tour van and depart for DCPD		
8:25	a.m. Arrive at Avila Front Gate		805-545-6106
8:45	a.m. Fukushima Facilities(15 mins)		
9:00	a.m. Meeting with Ed Halpin (15 mins)		
9:20	a.m. Independent Spent Fuel Storage Installation (ISFSI) 230 kV, 500 kV switchyards (15 mins)		
9:35	a.m. Arrive at Vehicle Inspection Station (VIS) and exit van- Park in Lot ?		805-545-3014
9:40	a.m. Intake/ Outfall View(25 mins)		
10:05	a.m. Security Counter(15 mins)		805-545-3277
10:20	a.m. Enter into Protected Area		
10:25	a.m. Turbine Deck/Control Room Floor(20 mins)	Shift Manager (James Dillis)	805-545-3277
10:45	a.m. EDGs/ buttress area- show LIP exceedances and compensatory measures(15 mins)		
11:00	a.m. Exit discussion (25 mins)		
11:25	a.m. Exit Protected Area and board van		
11:45	a.m. Arrive at EEC		

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Monday, July 06, 2015 8:40 AM
To: Grebel, Terence
Subject: RE: RE: Diablo Canyon Tour

Terry,

I have solicited input as to as to any specific areas of interest they may have. So far, what I've gotten back is they are interested in a general site tour and any particular points of interest that may be relevant or interesting to license renewal (e.g., any degraded SSCs etc.). Also, since Michele Evans is planning to be there, if there are any particular areas outside of license renewal that PG&E may want to show the group (e.g., FLEX equipment?), that would work, as well. Also, I've heard that the tour does not need to include the spent fuel pool.

As far as how long, I think ideally it would be ideal to start around 9am and last no longer than 2 hours. They need to have enough time to grab lunch and make it to the public meeting location. I would agree with you that they would probably like to meet your senior management, if available.

Mike

From: Grebel, Terence [<mailto:LG1@pgc.com>]
Sent: Monday, July 06, 2015 10:29 AM
To: Wentzel, Michael
Subject: [External_Sender] RE: Diablo Canyon Tour

Mike:

Can you provide any information on what they may like to see and how long a tour. I assume tha they may like to meet our senior management if they are available.

From: Wentzel, Michael [<mailto:Michael.Wentzel@nrc.gov>]
Sent: Thursday, July 02, 2015 9:28 AM
To: Grebel, Terence
Subject: Diablo Canyon Tour

Terry,

In conjunction with our August 5 public meetings for license renewal, a few of my managers were interested in trying to set up a tour of the site. The group would consist of Michele Evans, the Deputy Office Director for NRR, Jane Marshall, the Deputy Director for license renewal, and two of the license renewal branch chiefs. Ideally, they were hoping to set something up for 9am on August 5. Can you let me know if it would be possible to something up and what information we would need to provide in order to facilitate that?

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

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From: Wentzel, Michael
Sent: Wednesday, January 13, 2016 4:15 PM
To: 'Soenen, Philippe R'; 'Olsofsky, Michelle'
Cc: 'Grebel, Terence'
Subject: RE: RE: RE: RE: RAI Telecon Draft Summary

We do not need that documented in the letter. I did get the third package this morning and have passed on all three to our document control staff.

From: Soenen, Philippe R [mailto:PNS3@pge.com]
Sent: Wednesday, January 13, 2016 4:13 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>; Olsofsky, Michelle <MMA0@pge.com>
Cc: Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: RE: RE: RAI Telecon Draft Summary

Mike,

As a follow up, I take your response to mean that we do not have to include this information in the letter that we be submitting to provide responses to the previous clarification phone call. Is that correct?

Also, did the third package arrive for you?

Thanks,

Philippe Soenen

Cell: (857) 595-9241 | Cell: (b)(6) | email: pns3@pge.com

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Wednesday, January 13, 2016 10:57 AM
To: Olsofsky, Michelle
Cc: Soenen, Philippe R; Grebel, Terence
Subject: RE: RE: RE: RAI Telecon Draft Summary

Michelle,

We're good with the clarifications that you've provided and do not need a call to discuss. Thanks for the quick turnaround.

Mike

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Wednesday, January 13, 2016 12:30 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Soenen, Philippe R <PNS3@pge.com>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: RE: RAI Telecon Draft Summary

Mike,

Thank you for the follow-up. In response to the second part of the clarification below, our subject matter expert stated:

Yes, we assume the value is zero if a species was not observed.

Please let us know if you or the reviewer has any further questions on this topic.

Thank you,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Wednesday, January 13, 2016 4:53 AM
To: Olsofsky, Michelle
Cc: Soenen, Philippe R; Grebel, Terence
Subject: RE: RE: RE: RAI Telecon Draft Summary

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Michelle,

There was a second part to that clarification, as well. If a species was not listed at a site, can we assume the value is zero because it was not observed?

From: Olsofsky, Michelle [mailto:MMA0@pge.com]
Sent: Tuesday, January 12, 2016 5:16 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Cc: Soenen, Philippe R <PNS3@pge.com>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: RE: RAI Telecon Draft Summary

Mike,

Our subject matter expert reviewed the aquatic question below and provided the following response:

The dashes indicate that a specific taxon was not observed. It is the same as zero.

Please let us know if you or the reviewer has any further questions on this topic.

Thanks you,
Michelle Olsofsky
DCPP License Renewal
734-748-0084

From: Grebel, Terence
Sent: Tuesday, January 12, 2016 1:24 PM
To: Olsofsky, Michelle
Cc: Soenen, Philippe R
Subject: FW: RE: RAI Telecon Draft Summary

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Tuesday, January 12, 2016 9:14 AM
To: Soenen, Philippe R; Grebel, Terence
Subject: RE: RE: RAI Telecon Draft Summary

Philippe,

I am still waiting to hear back from our contractor to confirm her availability for a phone call, but I wanted to pass on to you the main issue that we wanted to get clarified:

The data provided in RAI response AQ-1 include numbers or dashes. Does a dash indicate that the site was sampled, but the species was not observed (which would be equivalent to a zero)? If a species was not listed at a site, can we assume the value is zero because it was not observed?

I should be able to confirm availability soon and let you know.

On another note, I received two to the three packages with the paper copies of the RAI responses. Hopefully, the third will show up shortly. If not, I will let you know.

Thanks.
Mike

From: Soenen, Philippe R [mailto:PNS3@pge.com]
Sent: Monday, January 11, 2016 9:58 AM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>; Grebel, Terence <TLG1@pge.com>
Subject: [External_Sender] RE: RAI Telecon Draft Summary

Mike,

We have reviewed the draft telecom and we do not have any comments on it. Once you can get some of the specifics on the aquatic monitoring that requires follow up we will look for the PG&E availability to support a Wednesday or Thursday phone call.

Thanks.

Philippe Soenen

On: 01/11/2016 | 09:58 | (b)(6) | Email: pns3@pge.com

From: Wentzel, Michael [mailto:Michael.Wentzel@nrc.gov]
Sent: Monday, January 11, 2016 4:54 AM
To: Soenen, Philippe R; Grebel, Terence
Subject: RAI Telecon Draft Summary

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Philippe/Terry,

Attached is a draft of the telecon summary from our phone call last week. Please let me know if you have any comments. Also, it looks like we are going to need one more phone call to clarify some of the aquatic monitoring data that was provided in the RAI responses. I hope to provide you with some of the issues that we

need to get cleared up later today. Ideally, we would like to have a phone call either Wednesday or Thursday this week, depending on availability.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Wednesday, April 01, 2015 2:44 PM
To: Grebel, Terence
Cc: Olsofsky, Michelle
Subject: RE: Schedule for SAMa update

Thanks for the update, Terry.

-----Original Message-----

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Wednesday, April 01, 2015 1:31 PM
To: Wentzel, Michael
Cc: Olsofsky, Michelle
Subject: Schedule for SAMa update

We expect to docket an update by the end of June.

Sent from my iPhone

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From: Wentzel, Michael
Sent: Thursday, October 22, 2015 3:55 PM
To: 'Grebel, Terence'
Subject: RE: Re: SAMA RAIs

Terry,

I signed the SAMA RAI letter today, so the letter will have today's date. I will forward an electronic copy once it has been processed through ADAMS. There were no substantive changes between this final version and the draft version that I had previously sent. If you have any questions, please let me know.

Thanks,
Mike

-----Original Message-----

From: Grebel, Terence [mailto:TLG1@pge.com]
Sent: Thursday, October 22, 2015 12:03 PM
To: Wentzel, Michael <Michael.Wentzel@nrc.gov>
Subject: [External_Sender] Re: SAMA RAIs

Yes

Sent from my iPhone

On Oct 22, 2015, at 8:42 AM, Wentzel, Michael
<Michael.Wentzel@nrc.gov<mailto:Michael.Wentzel@nrc.gov>> wrote:

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Terry,

I just wanted to confirm with you that the 30 response time for the SAMA RAIs is acceptable.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov<mailto:michael.wentzel@nrc.gov>

From: Grebel, Terence <TLG1@pge.com>
Sent: Wednesday, April 01, 2015 1:31 PM
To: Wentzel, Michael
Cc: Olsofsky, Michelle
Subject: Schedule for SAMa update

We expect to docket an update by the end of June.

Sent from my iPhone

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From: Wentzel, Michael
Sent: Thursday, August 27, 2015 10:22 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: Revised Environmental Site Audit Needs
Attachments: License Renewal Environmental Site Audit Regarding Diablo Canyon Power Plant, Units 1 and 2 - Final Draft.docx

Terry,

Attached is the latest version of the DCPD environmental site audit needs. This version adds requests for alternatives and cumulative impacts, and incorporates some clarifying edits in the groundwater requests. There should not be any substantive changes (i.e., additions/deletions of requests) between this version and the final version that gets issued.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

**SUBJECT: LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT REGARDING DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 (TAC NOS. MF4019 AND MF4020)**

Dear Mr. Halpin:

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing Pacific Gas and Electric Company's license renewal application for Diablo Canyon Power Plant, Units 1 and 2. The environmental site audit will be conducted at Diablo Canyon Power Plant, Units 1 and 2, during the week of September 28, 2015, by NRC staff and its contractors. The environmental audit activities will be conducted in accordance with the environmental audit plan (Enclosure 1).

To develop the Supplemental Environmental Impact Statement, the NRC staff requests the information described in the environmental audit needs list (Enclosure 2) be made available, to the extent possible, during the environmental site audit. The NRC staff informally transmitted this information to your staff (Terry Grebel) by e-mail on August 27, 2015.

If you have any questions, please contact me by telephone at 301-415-6459, or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323
Enclosure: As stated
cc w/encl: Listserv

Mr. Edward D. Halpin
Senior Vice President and
Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 56, Mail Code 104/6
Avila Beach, CA 93424

SUBJECT: LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT REGARDING DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 (TAC NOS. MF4019 AND MF4020)

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If you have any questions, please contact me by telephone at 301-415-6459, or by e-mail at michael.wentzel@nrc.gov.

Sincerely,

Michael J. Wentzel, Project Manager
Projects Branch 2
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos. 50-275 and 50-323
Enclosure: As stated
cc w/encl: Listserv
DISTRIBUTION: See next page

ADAMS Accession No.:

*concurrence via email

OFFICE	LA:DLR*	PM:RPB2:DLR	BC:RERB:DLR	BC:RPB2:DLR	PM:RPB2:DLR
NAME		MWentzel	DWrona	JDanna	MWentzel
DATE					

OFFICIAL RECORD COPY

Letter from M. Wentzel to E. Halpin dated XXXX

SUBJECT: LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT REGARDING DIABLO
CANYON POWER PLANT, UNITS 1 AND 2 (TAC NOS. MF4019 AND MF4020)

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RidsNrrDlrRsrg Resource

RidsOgcMailCenter Resource

RidsNrrPMDiabloCanyon Resource

MWentzel

JDanna

RPlasse

YDiaz-Sanabria

SLingam

SUttal, OGC

JOindell, OGC

CKanatas, OGC

THipschman, SRI

JReynoso, RI

GMiller, RIV

DMcIntyre, OPA

LUsselding, OPA

WMaier, RIV

AMoreno, OCA

MWaters, EDO

LICENSE RENEWAL ENVIRONMENTAL AUDIT PLAN DIABLO CANYON POWER PLANT, UNITS 1 AND 2

1. Background

By letter dated November 24, 2009, Pacific Gas and Electric Company (PG&E or applicant) submitted to the U.S. Nuclear Regulatory Commission (NRC) an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54 (10 CFR Part 54) to renew the operating licenses for Diablo Canyon Power Plant, Units 1 and 2 (DCPP). In accordance with the requirements of 10 CFR Part 51, the NRC staff is reviewing the information contained in the environmental report (ER) submitted in conjunction with the license renewal application (LRA).

As part of its review of the ER, the NRC staff's will perform an environmental audit in San Luis Obispo. The purpose of this audit is to gain understanding, verify information, and identify information that will require docketing to support the basis of the licensing or regulatory decision. Specifically, the NRC staff will identify pertinent environmental data, review the facility and area, and obtain clarifications regarding information provided in the ER.

Per NRC guidance, the NRC staff prepared a regulatory audit plan that provides a clear overview of audit activities, scope, and team assignments.

2. Environmental Audit Bases

License renewal requirements are specified in 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." Licensees are required by 10 CFR 54.23 to submit an ER that complies with the requirements in 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," as part of the LRA. Review guidance for the staff is provided in NUREG-1555, "Standard Review Plans for Environmental Reviews for Nuclear Power Plants: Supplement 1 – Operating License Renewal."

NRC staff is required to prepare a site-specific supplement to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants." During the scoping process required in 10 CFR Part 51, NRC staff is required to define the proposed action, identify significant issues which must be studied in depth, and to identify those issues that can be eliminated from further study.

3. Environmental Audit Scope

The scope of this environmental audit is to identify those issues which are significant and those issues which can be eliminated from further study and to identify the environmental resources that must be adequately described and evaluated in the site-specific supplemental environmental impact statement (SEIS). Audit team members will focus on reviewing the documents and requested information listed in the Environmental Audit Needs List (Enclosure 2) and discussing the information with the applicant's subject matter experts. Additional questions may develop during the audit.

4. Information and Other Material Necessary for the Environmental Audit

As described in the Environmental Audit Needs List (Enclosure 2).

ENCLOSURE 1

5. Tentative Team Assignments Area of Review Assigned Auditor

The environmental audit team members are shown in Table 1. Those members of the team who are contractors from Pacific Northwest National Laboratory will have PNNL after their name.

Table 1 Environmental Audit Team Members and Resource Assignments

Discipline	Team Members
Environmental Project Manager	Michael Wentzel, NRC
Alternatives	Robert Hoffman, NRC*
Aquatic Resources	Michelle Moser, NRC Valerie Cullinan, PNNL*
Cumulative Impacts	Robert Hoffman, NRC*
Geologic Environment	William Ford, NRC
Historic and Cultural Resources	Jeffrey Rikhoff, NRC Tara O'Neill, PNNL
Human Health	Russell Chazell, NRC*
Air Quality and Noise	Nancy Martinez, NRC
Socioeconomics	Jeffrey Rikhoff, NRC
Special Status Species and Habitats	Michelle Moser, NRC Briana Grange, NRC
Terrestrial Resources	Briana Grange, NRC
Waste Management	Russell Chazell, NRC*
Water Resources – Surface Water	Kevin Folk, NRC
Water Resources – Groundwater	William Ford, NRC
*Will participate in the environmental site audit by telephone, as necessary.	

6. Logistics

The environmental audit will be conducted in San Luis Obispo from September 29-October 1, 2015. An entrance meeting will be held with plant management at the beginning of the audit. An exit meeting will be held at the end of this audit.

7. Special Requests

The NRC staff requests the applicant make available the information identified on the Environmental Audit Needs List (Enclosure 2). Plant staff members who are subject matter experts in the disciplines listed on the Environmental Site Audit Needs List should be available for interviews and site tours as identified on the Environmental Audit Needs List (Enclosure 2).

8. Deliverables

An audit summary report is scheduled to be issued by NRC staff within 90 days from the end of the environmental audit.

**DIABLO CANYON POWER PLANT, UNITS 1 AND 2
LICENSE RENEWAL ENVIRONMENTAL SITE AUDIT NEEDS LIST**

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed Appendix E, the Environmental Report (ER), of the Diablo Canyon Power Plant, Units 1 and 2 (DCPP) license renewal application (LRA), as revised by amendments submitted by Pacific Gas and Electric (PG&E) in December 2014 and February 2015.

Please be prepared to discuss the following issues and make available the following information during the environmental site audit.

Alternatives

- ALT-1 Identify the available acreage and locations on the DCPP site that would be suitable for siting replacement power generation.
- ALT2 Clarify whether or not 2012 State generating capacities or utilization presented in Section 7.2 of the ER (Amendment 2) were factored into the composition of the energy sources considered in the Combination Alternative.
- ALT-3 Clarify whether any components of the combination alternative would be sited outside of the PG&E service area.
- ALT-4 Provide the data sources supporting the conclusion on page 7.2-14 that "Currently, fuel cells are not economically or technologically competitive with other alternatives for electricity generation."
- ALT-5 Clarify the basis for the solar photovoltaic acreage estimates included under the discussion of distributed generation on page 7.2-11.
- ALT-6 Provide the data sources supporting the discussion and associated conclusions regarding the feasibility of Compressed Air Energy Storage (CAES) technology.
- ALT-7 Section 4.2.5 of the ER (Amendment 1) references studies that have been conducted which address retrofitting closed-cycle cooling at DCPP. Please indicate whether PG&E has conducted any additional closed-cycle cooling alternative analyses or associated screening studies since publication of the 2014 report prepared by Bechtel Power Corporation (reference 27 as listed in ER (Amendment 1), Section 4.22)

Meetings requested: Provide PG&E's subject matter expert(s) and/or contractor(s) responsible for writing the alternatives portion of the ER and who can discuss the above information requests.

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) Possible onsite locations suitable for siting replacement power generation facilities.

Aquatic Resources

AQ-1 Section 2.2.1 of the ER, "Marine Ecology," describes the various aquatic monitoring efforts that have occurred near DCPD since 1976, including the Thermal Effects Monitoring Program (TEMP); the Marine Ecological Monitoring Program (MEMP); and the Receiving Water Monitoring Program (RWMP). The most recent RWMP from 2012 and 2013 provide the count or percent cover, mean, and standard deviation for the abundance or percent cover for algae, invertebrates, and fish. For monitoring efforts from 1976-2011, provide the count or percent cover, mean, and standard deviation for each year of monitoring for the following species:

a) Algae

- i) Bull kelp (*Nereocystis luetkeana*)
- ii) Feather-boa kelp (*Egregia menziesii*)
- iii) Hollow-branched seaweed (*Gastroclonium subarticulatum*, formerly *G. coulteri*)
- iv) Iridescent seaweed (*Mazzella flaccida*, formerly *Iridaea flaccida*)
Oar-blade kelp (*Laminaria dentigera*)
- v) Tree kelp (*Pterygophora californica*)
- vi) Un-named red seaweed (*Chondracanthus canaliculatus*, formerly *Gigartina canaliculata*)

b) Invertebrates

- i) Aggregating sea anemone (*Anthopleura elegantissima*)
- ii) Black abalone (*Haliotis cracherodii*)
- iii) Brown turban snail (*Chlorostoma brunnea*, formerly *Tegula brunnea*)
- iv) Kelp crab (*Pugettia producta*)
- v) Ochre starfish (*Pisaster ochraceus*)
- vi) Purple sea urchin (*Strongylocentrotus purpuratus*)
- vii) Red Abalone (*Haliotis rufescens*)
- viii) Red sea urchin (*Strongylocentrotus franciscanus*)
- ix) Rock crab (*Cancer antennarius*)
- x) Sun stars (*Pycnopodia helianthoides*)
- xi) White abalone (*Haliotis sorenseni*)

c) Fish

- i) Blue rockfish (*Sebastes mystinus*)
- ii) Cabezon (*Scorpaenichthys marmoratus*)
- iii) Coho salmon (*Oncorhynchus kisutch*)
- iv) Green sturgeon (*Acipenser medirostris*)

- v) Gopher rockfish (*Sebastes carnatus*)
- vi) Rock Prickleback (*Xiphister mucosus*)
- vii) Steelhead trout (*Oncorhynchus mykiss*)

- AQ-2 Section 2.2.1.2 of the ER, "Species/Habitat Inventories, Marine Mammal Resources," states that no known or recorded incidents of marine mammal injuries or fatalities have occurred due to power plant operations through 2014. The NRC staff is aware of 3 reports of Marine Mammal Strandings at DCP in 2015 (February 22, March 16, and May 6). In each case, PG&E reported to the NRC that the death was likely attributable to natural causes and verbal notification of the incident was reported to National Oceanic and Atmospheric Administration (NOAA) Fisheries. Describe any comments or letters received from NOAA Fisheries in response to the Marine Mammal Strandings report, especially in regards to the cause of death.
- AQ-3 Section 2.2.1.3 of the ER, "Commercial and Recreationally Important Species" describes the commercial landing data collected by the California Department of Fish and Wildlife (CDFW) from 2009 through 2013. Provide a reference for this data.
- AQ-4 Section 2.2.2.1 of the ER, "Species and Relative Abundance," was revised to describe recent rainbow trout and steelhead (*Oncorhynchus mykiss*) studies in Diablo Creek and Coon Creek. In addition, a discussion of other aquatic resources in these creeks was deleted. Provide a description of the aquatic resources in Diablo Creek and Coon Creek, other than *O. mykiss*.
- AQ-5 Section 4.1 of the ER, "Entrainment of Fish and Shellfish in Early Life Stages," states that PG&E has had extensive communications and consultations with the Central Coast Regional Water Quality Control Board (CCRWQCB), the California State Water Resource Control Board (SWRCB), and the CDFW. Provide copies of all letters and communications to and from these agencies regarding impingement, entrainment, and heat shock since 2010. Indicate if PG&E anticipates or is aware of the need to conduct any additional studies related to impingement, entrainment, or heat shock, or any studies that may be conducted by State agencies or other organizations on these topics.
- AQ-6 Section 4.1 of the ER, "Entrainment of Fish and Shellfish in Early Life Stages," states that the Once Through Cooling (OTC) Water Policy adopted by the SWRCB effectively requires reductions of at least 85 percent of flow or commensurate with closed-cycle cooling. The SWRCB states that the OTC Water Policy requires a 93 percent reduction in water use. Describe PG&E's basis for stating the OTC Water Policy requirement of reducing flow by at least 85 percent.

- AQ-7 Section 4.1 of the ER, "Entrainment of Fish and Shellfish in Early Life Stages," states that "during the current period of operation, available data from both DCPD-specific ecological studies, as well as independent studies of regional marine fisheries, provide evidence that local populations of fish susceptible to entrainment in larval stages have remained relatively stable...The conclusion from the extensive data from past and ongoing monitoring has shown that overall population decreases have not occurred, and the local marine ecosystem remains healthy." Describe the basis for this statement, including the references for studies that would support this statement.
- AQ-8 Section 4.3 of the ER, "Impingement of Fish and Shellfish," states that PG&E completed an impingement assessment of the OTC system in 1986 and the ER Amendment provides a summary of the results of the study. Provide a copy of this study.
- AQ-9 Section 4.4 of the ER, "Heat Shock," states that DCPD is updating a cooling system thermal discharge impacts assessment using data gathered from 2008 through 2013 from the ongoing Receiving Water Monitoring Program (RWMP) and expects the final report to be completed during the 2nd Quarter in 2015. Provide a copy of this report.

Meetings requested: Provide PG&E's subject matter expert(s) and/or contractor(s) responsible for writing the aquatic resources portion of the ER and who can discuss the above information requests. This meeting may be combined with the terrestrial resources and special status species and habitats meetings, as appropriate.

Cumulative Impacts

- CI-1 Please provide name, description, location, and status of any additional past, present, or reasonably foreseeable projects or actions that have been identified since ER (Amendment 1) was prepared.

Geologic Environment

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) Soil erosion control practices that have been implemented at the DCPD site.
- 2) Alluvial and stream terrace deposits associated with Diablo Creek.
- 3) Terrace deposits on top of the wave-cut platform along the Pacific Ocean.
- 4) The Obispo Formation from the shoreline along the Pacific Ocean. (Perhaps near the mouth of Diablo Creek or some other location where the structures and beds of the Diablo Creek Formation can be safely observed and examined).

Historic and Cultural Resources

- HC-1 Provide an updated map detailing the level of ground disturbance at the DCPD site, including documentation on how this level of disturbance was determined.
- HC-2 What percentage of land within the DCPD property has been formally surveyed?

- HC-3 What percentage of land within the DCPD property is undisturbed?
- HC-4 Provide updated map(s) of previously surveyed areas and archaeological site locations within the entire DCPD property (plant site and PG&E plant property) and along existing in-scope transmission lines, up to the first substation, which will be needed during the site visit. These maps will not be docketed, as they are considered sensitive information.
- HC-5 Provide copies of all references used to develop the historic and cultural resources portions of the ER.
- HC-6 Provide the status – and a draft copy if available – of the most recent Cal Poly Field School technical report for the excavation at CA-SLO-5 as discussed on page 2.11-8 of the ER (last sentence of first partial paragraph at the top of the page).
- HC-7 Provide the charter and meeting minutes for the last four years of the DCPD Land Stewardship Team as discussed in Section 2.11.3 of the ER. Provide a description of how a proposed activity on the DCPD site is evaluated for cultural resource impacts.
- HC-8 Provide a copy of any administrative controls and environmental procedures in place for land-disturbing activities (e.g., trenching, clearing, digging) on or associated with DCPD property. Describe how inadvertent discoveries are treated by DCPD during normal operations.
- HC-9 Provide information on management around less-developed areas of the plant site, especially near known historic and cultural resources or near unsurveyed areas.
- HC-10 Provide a copy of the program developed to monitor North Ranch sites as discussed in Section 2.11.4 of the ER. Additionally, provide copies of any reports generated from this monitoring (pages 2.11-6 and 7).
- HC-11 Provide the current status of the updated *National Register* nomination package for the *Pecho* district as discussed in Section 2.11.4 of the ER (page 2.11-7).
- HC-12 Provide documentation of construction projects that have occurred on the property since the last NRC license renewal site visit and tour in 2010. How were potential impacts to historic and cultural resources considered? Documentation demonstrating compliance with existing administrative controls and environmental procedures would be useful. What materials are used by PG&E staff to determine whether the SHPO should be consulted?
- HC-13 Provide any information on cultural resource management and protection training required for DCPD staff.
- HC-14 Provide copies of all letters and communications to and from the California State Historic Preservation Officer specific to determining the National Register of Historic Places (NRHP)-eligibility of all cultural resources identified since 2010 within the DCPD property, including the plant site and along existing in-scope transmission lines, up to the first substation.
- HC-15 Provide updated information on procedures for consulting/interacting with Federal- and State-recognized Indian tribes that have ancestral or historical ties to the DCPD area and surrounding lands.

- HC-16 Provide consultation letters and other communication documents indicating correspondence to and from the California SHPO and Federal- and State-recognized Indian tribes that have ancestral or historical ties to the project area and surrounding lands.
- HC-17 Provide the status and updated draft document of the SHPO-requested *Programmatic Agreement* and *Historic Resources Management Plan* intended to replace the current Archaeological Resources Management Plan as discussed in Section 9.1.3 of the ER.

Meetings requested: Provide PG&E's subject matter expert(s) and/or contractor(s) familiar with the cultural resources located within the DCPD and PG&E property and the cultural resource management plan. Additionally, provide knowledgeable staff to discuss any PG&E administrative controls and environmental procedures in place for the protection of historic and cultural resources.

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) In-scope transmission line tour up to the first substation (including any archaeological sites recorded along the lines).
- 2) Existing archaeological sites, preferably led by an archaeologist and PG&E staff familiar with National Historic Preservation Act historic properties and cultural resources located within the DCPD and PG&E property.

Human Health

- HH-1 Provide copies of the plant procedures that workers use that address safety standards, minimization of risks through the use of engineering controls, design controls, administrative controls, personal protection equipment, and safe work practices. (ER Section 4.0.2)
- HH-2 Provide any information relative to the processes used by the plant to control electrical shock hazards. (ER Section 4.0.2).

Air Quality and Noise

- AQ-1 Provide copies of DCPD's air permit(s) issued by the San Luis Obispo County Air Pollution Control District. Describe the compliance history associated with DCPD's air permit. Has PG&E received any Notice of Violations (NOVs) from the San Luis Obispo County Air Pollution Control District regarding conditions established in the air permit(s)?
- AQ-2 Provide copies of Annual Emission Reports submitted to the San Luis Obispo County Air Pollution Control District for the most recent 5 years.
- AQ-3 Summarize stationary and mobile sources of non-radiological air emissions at DCPD. Identify the equipment and quantity.

- AQ-4 Provide the associated annual air emissions (air pollutant and quantity) for the most recent 5 years of operation for air permitted emission sources at DCCP. Include criteria pollutants (ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide, lead), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs).
- AQ-5 Provide a site-wide emission (quantity) inventory data (annual) for greenhouse gases (GHG) for the most recent 5 years. Emissions should include stationary combustion sources, mobile sources (commuters, visitors, delivery vehicle, etc.) and other sources (refrigerant leakage, emissions from switchyard). Please: 1) identify and discuss the GHG emission sources and 2) provide information used to support the GHG emission values (e.g. operating hours per year, fuel consumption and rates, and energy rating, as applicable) for each source.
- AQ-6 Have field tests concerning ozone and nitrogen oxides emissions generated by high voltage transmission lines been conducted near DCCP's in scope transmission lines? If so, please provide this information.
- AQ-7 Are there expected upgrade/replacement activities for equipment/operation that could increase or decrease air emissions over the license renewal period?
- AQ-8 Provide information about any noise complaints for the most recent 5 years resulting from plant operation.
- AQ-9 Describe the DCCP off-site noise environment and primary noise sources in the vicinity of DCCP.
- AQ-10 Identify and describe primary noise sources resulting from plant operation.
- AQ-11 Has PG&E conducted ambient noise surveys in and/or around the DCCP site? If so, provide this information.

Meetings requested: Provide PG&E's subject matter expert(s) and/or contractor(s) to discuss the air quality and noise portions of the ER to discuss the following aspects of facility operations:

- 1) Sources of air pollutants operating at DCCP
- 2) Air permits and emission inventories

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) General site layout
- 2) Major air emission and noise sources
- 3) Nearby noise sensitive receptors

Socioeconomics

- SOC-1 Provide updated permanent workforce data, preferably residential distribution of permanent workforce by county, in table format.

- SOC-2 In addition to property tax payment information presented in Section 2.7 of the ER, describe any other major annual support payments (e.g., emergency preparedness fees and payments or fees because of the ISFSI), one-time payments, and other forms of non-tax compensation (if any) provided to local organizations, communities, and jurisdictions (e.g., county, municipality, townships, villages, incorporated places, and school districts) on behalf of DCPD.
- SOC-3 Provide information about any anticipated changes in State and local tax laws, rates, and assessed property value or any other recent or anticipated tax payment adjustments that could result in notable future increases or decreases in property taxes or other payments.

Special Status Species and Habitats

- SSH-1 In an Information for Planning and Conservation (IPaC) Report dated May 12, 2015 (ADAMS Accession No. ML15132A423), the U.S. Fish and Wildlife identified a number of Federally listed species that are not addressed in the ER. Provide any available information on potential habitat, occurrence, or sightings of the following species:
- a) Blunt-nosed leopard lizard (*Gambelia sila*)
 - b) California clapper rail (*Rallus longirostris obsoletus*)
 - c) California jewelflower (*Caulanthus californicus*)
 - d) Giant kangaroo rat (*Dipodomys ingens*)
 - e) Kerm primrose sphinx moth (*Euproserpinus euterpe*)
 - f) Marbled murrelet (*Brachyramphus marmoratus*)
 - g) Pismo clarkia (*Clarkia speciosa* spp. *immaculate*)
 - h) Salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*)
 - i) Spreading navarretia (*Navarretia fossalis*)
 - j) Vernal pool fairy shrimp (*Branchinecta lynchi*)
- SSH-2 In the ER, Amendment 1, Table 2.4-1 states that multiple survey results have been negative for the California least tern (*Sternula antillarum browni*). However, the NRC staff was unable to find information indicating that past ecological studies actively surveyed for this species. Explain what surveys have been done for this species.
- SSH-3 In the ER, Amendment 1, Table 2.4-1 states that long-term monitoring has failed to identify western snowy plover (*Charadrius alexandrinus nivosus*) at Coon Creek beach. To what long-term monitoring is the ER referring?
- SSH-4 In the ER, Amendment 1, Table 2.4-1 states that long-term monitoring has failed to detect least Bell's vireo (*Vireo bellii pusillus*). To what long-term monitoring is the Environmental Report referring?

- SSH-5 In the ER, Amendment 1, Table 2.4-1 states that there is no record of the marsh sandwort (*Arenaria paludicola*) on the Diablo Canyon Lands. However, the NRC staff was unable to find information indicating that past ecological studies actively surveyed for this species. Explain what surveys have been done for this species.
- SSH-6 Section 2.5 of the ER, "Threatened and Endangered Species: Aquatic Listed Species," states that blue whale (*Balaenoptera musculus*), sperm whale (*Physeter macrocephalus*), fin whale (*Balaenoptera physalus*), humpback whale (*Megaptera novaeangliae*), and sei whale (*Balaenoptera borealis*) may be found near DCPD for limited amounts of time. Provide citations for any relevant monitoring studies that provide a basis for this statement. In addition, killer whales (*Orcinus orca*) and North Pacific right whales (*Eubalaena japonica*) could occur near DCPD. Provide any available information on the occurrence or sightings of whales near DCPD.
- SSH-7 Section 2.5 of the ER, "Threatened and Endangered Species: Aquatic Listed Species," states that white abalone (*Haliotis sorenseni*) may be found near DCPD for limited amounts of time. Provide citations for any relevant monitoring studies that provide a basis for this statement. In addition, provide any available information on the occurrence or sightings of this species near DCPD.
- SSH-8 Section 2.5 of the ER, "Threatened and Endangered Species, Tidewater Goby," states that no records of adult tidewater goby (*Eucyclogobius newberryi*) were found for drainages on the DCPD site. Describe the types of records PG&E searched in order to provide a basis for this statement. In addition, clarify whether any juveniles were observed on site.
- SSH-9 Section 2.5 of the ER, "Threatened and Endangered Species," describes the monitoring results for sea turtles, marine mammals, and black abalone. Provide a summary of the monitoring methods that are specific to sea turtles, marine mammals, and black abalone.
- SSH-10 Section 4.10 of the ER, "Threatened and Endangered Species," states that PG&E has not identified any impacts to the Southern Sea Otter (*Enhydra lutris*) or the Guadalupe Fur Seal (*Arctocephalus townsendi*) from DCPD operations based on extensive monitoring efforts. Provide a basis for this statement, including a summary of monitoring methods and activities and the references of any reports or studies that describe these monitoring efforts.
- SSH-11 Section 4.10 of the ER, "Threatened and Endangered Species," states that PG&E is not aware of sea turtles aggregating near the DCPD discharge area, based on stranding and siting data. Provide a summary of the stranding and siting data that PG&E reviewed to support this statement.
- SSH-12 Section 4.10 of the ER, "Threatened and Endangered Species," describes the likely presence of steelhead trout (*Oncorhynchus mykiss*), tidewater goby, green sturgeon (*Acipenser medirostris*), and coho salmon (*Oncorhynchus kisutch*) in the vicinity of the intake cover and potential impacts from impingement and entrainment. Provide a description of any known occurrences of these species near the discharge in Diablo Cove and potential direct and indirect effects to these species as a result of the thermal effluent.

Meetings requested: Provide PG&E's subject matter expert(s) and/or the contractor(s) responsible for writing the special status species and habitats portion of the ER and who can discuss the above information requests. This meeting may be combined with the aquatic and terrestrial resources meetings, as appropriate.

Terrestrial Resources

- TER-1 Approximately how many acres of land does the "Diablo Canyon Lands" (the DPCC site, North Ranch, and South Ranch, collectively) encompass? Within the DPCC site, how many acres are non-disturbed, natural areas?
- TER-2 Section 2.4.3 of the ER describes important state natural communities that are "considered unique or sensitive within California." Clarify whether these natural communities are considered unique or sensitive by the State, another organization, the scientific community, etc.
- TER-3 Do the Diablo Canyon Lands contain habitats designated as "environmentally sensitive habitat areas" as defined by the California Coastal Act of 1976, as amended? If so, describe the location, species composition, and any other important characteristics of these areas.
- TER-4 In the ER, Amendment 1, Table 2.4-1 states that "multiple surveys from 2005 through 2011 failed to identify a nesting colony" of tricolored blackbirds (*Agelaius tricolor*). To what surveys is the ER referring?
- TER-5 In the ER, Amendment 1, Table 2.4-1 states that the burrowing owl (*Athene cunicularia*) is believed to be "nearly extirpated as a breeding species in coastal San Luis Obispo County." What is the source of this information?
- TER-6 In the ER, Amendment 1, the "Record of Occurrence" column in Table 2.4-1 states that there is a record of occurrence for the silvery legless lizard (*Anniella pulchra pulchra*), but the "Occurrence Potential" column states that multiple survey results for the species have been negative. Clarify this seemingly contradictory information.
- TER-7 In the ER, Amendment 1, the "Record of Occurrence" column in Table 2.4-1 states that there is a record of occurrence for the southern rubber boa (*Charina umbratica*), but the "Occurrence Potential" column states that survey results for the species have been negative. Clarify this seemingly contradictory information.
- TER-8 Describe any site procedures that PG&E maintains for assessing and mitigating the environmental effects of new ground-disturbing activities or other new site activities that could affect terrestrial habitats or species. Provide copies of such procedures, as applicable.
- TER-9 Provide copies of PG&E's landscape maintenance procedures for the DCPD site. If PG&E does not maintain such procedures, briefly describe how non-industrial, previously disturbed, or landscaped areas of the site are maintained.
- TER-10 Provide a copy of PG&E's stormwater pollution prevention plan.

Meetings requested: Provide PG&E's subject matter expert(s) and/or the contractor(s) responsible for writing the terrestrial resources portion of the ER and who can discuss the above information requests. This meeting may be combined with the aquatic resources and special status species and habitats meetings, as appropriate.

Tours requested: Provide a tour such that the NRC staff can observe the various terrestrial and wetlands habitat types found on the site. This tour may be combined with the water resources – surface water tour, as appropriate.

Waste Management

- WM-1 Provide the chemical composition and generation volume of the waste streams discussed in Section 3.1.5 of the ER.
- WM-2 Provide a list of anticipated waste disposal companies and disposal sites for the waste streams discussed in Section 3.1.5 of the ER.
- WM-3 Provide NPDES monthly discharge monitoring reports for the past 5 years. (ER Section 3.1.5).
- WM-4 Provide a copy of the industrial process chemical inventory discussed in Section 4.0.2 of the ER.
- WM-5 Provide a copy of the Hazardous Waste Facility Permit discussed in Section 4.0.2 of the ER.
- WM-6 Provide an outline of the hazardous materials training program that workers complete. (ER Section 4.0.2)
- WM-7 Provide copies of the procedures used for managing hazardous waste, spill contingencies, waste minimization procedures, treatment, storage, & disposal (TSD) training, and industrial hygiene practices. (ER Section 4.0.2)
- WM-8 Discuss current DCCP waste minimization programs and their effectiveness. (ER Section 4.0.2).
- WM-9 Provide copies of the procedures used for managing universal wastes as defined in the Resource Conservation and Recovery Act (RCRA) and/or Chapter 22 of the California Code of Regulations (22 CCR). (ER Section 4.0.2).
- WM-10 Clarify whether DCCP is a large or small quantity hazardous waste generator under the RCRA and/or 12 CCR. (ER Section 4.0.2).
- WM-11 Provide a list, to include location within the facility, of any anticipated 90-day RCRA/CCR hazardous waste collection points and copies of applicable state or Federal RCRA audits for the last 5 years. (ER Section 4.0.2).

Meetings requested: If necessary, provide PG&E's subject matter expert(s) and/or the contractor(s) responsible for writing the waste management and pollution prevention portion of the ER and who can discuss the above information requests.

Water Resources – Groundwater

- GW-1 Provide the records supporting the statements in the ER concerning volume of groundwater consumed.
- GW-2 Provide information that looks at the potential for saltwater intrusion into the groundwater of the Obispo Formation from the extraction of groundwater on site.
- GW-3 Provide any groundwater and geologic reports that have been prepared for DCPD to support the Nuclear Energy Institute "Industry Groundwater Protection Initiative."

Meetings requested: Provide PG&E's subject matter expert(s) and/or the contractor(s) responsible for writing the groundwater hydrology and quality portions of the ER and who can discuss the above information request and the following:

- 1) The direction of groundwater flow at the DCPD site and whether groundwater levels near the ocean are affected by ocean tides.
- 2) If Deep Water Well No. 2 withdraws its water from the Obispo Formation, clarify the following potentially contradictory statements in the ER:
 - a) From Page 2.3-1: "Groundwater at the DCPD site is limited to the streambed of Diablo Creek within the geographically isolated Diablo Canyon. No significant groundwater has been encountered outside of the stream bed gravels [...] Makeup water wells No. 1 and No. 2 with collar elevations at 232 ft above mean sea level (MSL) and 333.3 ft MSL, respectively, produced water from the alluvium in Diablo Creek and from fractured sandstone and dolomite of the Obispo Formation."
 - b) From Pages 2.3-1 and 2.3-2: "DCPD groundwater use is limited to the periodic withdrawal of freshwater supply from an onsite deep well. The groundwater source is geologically isolated to the DCPD watershed, and is therefore not hydraulically connected to other area groundwater resources."
 - c) From Page 3.1-6: "Groundwater reserves at the site are limited by the nature of the plant location, and lack of hydraulic connection with groundwater resources on properties outside of plant controlled lands."
 - d) From Page 4.0-7: "[T]he groundwater source at DCPD is geologically isolated to the DCPD watershed, and is therefore not hydraulically connected to other area groundwater resources."
 - e) From Page 4.5-2: "When in operation, the well draws from an isolated source specific to DCPD. The topography of the location precludes any connection between the well source water and offsite water resources. There are no neighboring wells (outside of the DCPD industrial site and adjacent controlled property) that can be impacted or made unavailable due to operation of the onsite well. Therefore, no cone of depression can be created from groundwater use on the plant site that could extend offsite regardless of pump withdrawal rate or an extended period of withdrawal."
 - f) From Page 5-3: "Deep Well #2 draws from an isolated source specific to Diablo Canyon that is replenished by flows through the alluvium near 200 ft MSL."

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) The locations of water wells 2 and 5.
- 2) The location of monitor wells GW-01 and GW-02.

- 3) Groundwater seeps, if any.
- 4) The desalination plant area, including the intake structure and brine discharge locations.

Water Resources – Surface Water

- SW-1 Provide a summary of documented/reported water withdrawals via the intake structure over the last 5 years and associated return discharges (via National Pollution Discharge Elimination System (NPDES) Outfall 001). Include monthly averages for each annual data set.
- SW-2 Provide a copy of the most recent application or Notice of Intent submitted to the State for coverage under the State General Industrial Storm Water Discharge permit.
- SW-3 Provide a copy of the Stormwater Pollution Prevention Plan (current version)
- SW-4 Provide a map of NPDES permitted outfall locations (inclusive of process wastewater and stormwater outfalls).
- SW-5 Provide a summary of the NPDES permit status for DCP, including status and recent actions and associated milestones for resolving outstanding NPDES permit renewal and associated Once-Through Cooling (OTC) Policy issues. In addition, provide copies of all letters and communications to and from the State of California (e.g., CCRWQCB and SWRCB) specific to the NPDES permit process since 2010. Indicate if PG&E anticipates or is aware of the need to conduct any additional studies with respect to the OTC Policy.
- SW-6 Provide copies of any NOVs, nonconformance notifications, or related infractions received from regulatory agencies associated with NPDES permitted discharges, sanitary sewage systems, groundwater or soil contamination, including spills, leaks, and other inadvertent releases of fuel solvents, chemicals, or radionuclides received to date (covering past 5 years inclusive of 2015). Include correspondence of self-reported violations to responsible agencies.
- SW-7 Clarify the use of the Raw Water Reservoirs, as described in Section 2.3 of the ER and cited elsewhere, and its relation to other plant systems. Clarify how the reservoirs are filled/maintained. Include information on size, capacity, and nature of construction.
- SW-8 The NRC staff understands that PG&E has very recently begun to provide the San Luis Obispo city and county with water produced by DCP's desalinization facility (discussed in Section 2.9.1 of the ER). Verify and provide a summary discussion of the nature of PG&E's agreement to deliver water and include the volume and rate supplied for public use, method of delivery, etc.
- SW-9 Provide a description of any planned operational and maintenance activities (or projects) anticipated to be undertaken during the license renewal term (as possible, identify expected timeframe, location(s) affected, acres disturbed, and activity/project duration).

Meetings requested: Provide PG&E's subject matter expert(s) and/or the contractor(s) responsible for writing the surface water hydrology and quality portions of the ER and who can discuss the following:

- 1) The DCPP intake and circulating water systems, effluent discharges, and affected water resources.
- 2) The status of PG&E's NPDES permit renewal as well as related Once-Through Cooling Policy issues and the CWA Section 401 Water Quality Certification.

Tours requested: Provide a tour of the site such that the NRC staff can observe the following:

- 1) General tour of the site and vicinity including associated intake structures and conveyances (i.e., shoreline intake structure and circ. water/auxiliary pumps, Diablo Cove and shoreline outfall, Deep Well #2, and significant streams).
- 2) Other surface water/effluent management features (i.e., mouth of Diablo Creek at Diablo Cove, old Diversion Point 1 on Diablo Creek, Raw Water Storage Reservoir, and wastewater treatment facility).
- 3) Representative NPDES outfall locations.

From: Wentzel, Michael
Sent: Thursday, December 10, 2015 7:19 AM
To: Terrence Grebel (TLG1@pge.com)
Cc: Olsofsky, Michelle (MMA0@pge.com)
Subject: SAMA Clarifications Requested

Terry,

In preparation for our phone call this afternoon, here are the items that we wanted to clarify:

1. RAI 1.c

What is the meaning of "and the reactor coolant system (RCS)" in item 1 on page 3 of the RAI responses?

2. RAI 1.d

Briefly describe the seismic hazard information used in models DC02 and DC03 particularly compared with the information provided for the 2010 RAI response on pages F-34 and F-35 of ER Amendment 2.

3. RAI 1.i

In order to properly understand and document the recent development of the DCPD FPRA, identify the internal events model that was used as the basis for the interim fire PRA model that was peer reviewed in 2012 and provide the internal events CDF. Confirm that the FPRA CDF given for DC02 is based on DCPD models predating the NFPA-805 revisions. What are the dates of model DC02 and D02A?

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Wednesday, October 28, 2015 10:32 AM
To: Terrence Grebel (TLG1@pge.com)
Subject: SAMA RAIs
Attachments: ML15287A165.pdf

This attachment is publicly available as ML15287A165.

Terry,

I've attached a copy of the final SAMA RAI letter. Sorry for the delay in getting these to you. As I mentioned, we're having some administrative issues getting documents processed through ADAMS. If you have any questions, please let me know.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Tuesday, September 01, 2015 6:23 PM
To: 'Terrence Grebel (TLG1@pge.com)'
Subject: SAMA Site Audit Needs Letter
Attachments: License Renewal Environmental Site Audit Regarding Diablo Canyon Power Plant, Units 1 and 2 - SAMA (ML15233A518).pdf

This attachment is publicly available as ML15233A518.

Terry,

Attached is a copy of the final SAMA audit needs letter. There was one minor edit made prior to issuance (deleted a set of repeated).

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: Wentzel, Michael
Sent: Wednesday, April 29, 2015 11:28 AM
To: Terrence Grebel (TLG1@pge.com)
Cc: Plasse, Richard
Subject: Schedule Change Letter
Attachments: ML15104A509 - Schedule Revision for the Review of the Diablo Canyon Power Plant, Units 1 and 2, License Renewal Application.pdf
This attachment is publicly available as ML15104A509.

Terry,

The attached schedule change letter is being issued today.

Thanks,
Mike

Michael Wentzel
Project Manager
NRR/DLR/RPB2
(301) 415-6459
michael.wentzel@nrc.gov

From: [Groom, Jeremy](#)
To: [Miller, Geoffrey](#)
Subject: RE: Summary of the Site Audit Related to the Diablo Canyon Power Plant, Units 1 and 2 License Renewal Environmental Review.
Date: Thursday, October 15, 2015 3:23:00 PM

Thanks Geoff. I appreciate you forwarding these to me.

From: Miller, Geoffrey
Sent: Thursday, October 15, 2015 12:02 PM
To: Werner, Greg <Greg.Werner@nrc.gov>; Pick, Greg <Greg.Pick@nrc.gov>; Alexander, Ryan <Ryan.Alexander@nrc.gov>; Groom, Jeremy <Jeremy.Groom@nrc.gov>
Subject: FW: Summary of the Site Audit Related to the Diablo Canyon Power Plant, Units 1 and 2 License Renewal Environmental Review.

FYI

From: NRC_MAIL_DLR Resource
Sent: Thursday, October 15, 2015 1:38 PM
To: RidsNrrDlr Resource <RidsNrrDlr.Resource@nrc.gov>; RidsNrrDlrRpb1 Resource <RidsNrrDlrRpb1.Resource@nrc.gov>; RidsNrrDlrRpb2 Resource <RidsNrrDlrRpb2.Resource@nrc.gov>; RidsNrrDlrRerb Resource <RidsNrrDlrRerb.Resource@nrc.gov>; RidsNrrDlrRarb Resource <RidsNrrDlrRarb.Ressource@nrc.gov>; RidsNrrDlrRasb Resource <RidsNrrDlrRasb.Resource@nrc.gov>; RidsNrrDlrRsrg Resource <RidsNrrDlrRsrg.Resource@nrc.gov>; RidsOgcMailCenter Resource <RidsOgcMailCenter.Resource@nrc.gov>; RidsNrrPMDiabloCanyon Resource <RidsNrrPMDiabloCanyon.Resource@nrc.gov>
Cc: Wentzel, Michael <Michael.Wentzel@nrc.gov>; Danna, James <James.Danna@nrc.gov>; Plasse, Richard <Richard.Plasse@nrc.gov>; Lingam, Siva <Siva.Lingam@nrc.gov>; Kanatas, Catherine <Catherine.Kanatas@nrc.gov>; Lindell, Joseph <Joseph.Lindell@nrc.gov>; Hipschman, Thomas <Thomas.Hipschman@nrc.gov>; Reynoso, John <John.Reynoso@nrc.gov>; Miller, Geoffrey <Geoffrey.Miller@nrc.gov>; McIntyre, David <David.McIntyre@nrc.gov>; Uselding, Lara <Lara.Uselding@nrc.gov>; Maier, Bill <Bill.Maier@nrc.gov>; Moreno, Angel <Angel.Moreno@nrc.gov>
Subject: Summary of the Site Audit Related to the Diablo Canyon Power Plant, Units 1 and 2 License Renewal Environmental Review.

TO: Mr. Edward D. Halpin

FROM: Michael Wentzel

DATE: October 7, 2015

SUBJECT: Summary of the Site Audit Related to the Diablo Canyon Power Plant,
Units 1 and 2 License Renewal Environmental Review

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