

DiabloCanyonNPEm Resource

From: Ferrer, Nathaniel
Sent: Monday, September 20, 2010 4:10 PM
To: Grebel, Terence; Soenen, Philippe R
Cc: DiabloCanyonNPEm Resource
Subject: RAI Letters Dated September 17, 2010
Attachments: RAI Related to the Review of the DCP LRA - (Set 24) Aging Management Programs.pdf;
RAI Related to the Review of the DCP LRA - (Set 26) Scoping and Screening Follow-Ups.pdf

Terry and Philippe,

Attached is an electronic copies of RAI letters dated September 17, 2010. Formal copies are being sent via mail.

Nathaniel Ferrer
Project Manager
Division of License Renewal
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
(301)415-1045

Hearing Identifier: DiabloCanyon_LicenseRenewal_NonPublic
Email Number: 1240

Mail Envelope Properties (26E42474DB238C408C94990815A02F09115A4A80DE)

Subject: RAI Letters Dated September 17, 2010
Sent Date: 9/20/2010 4:10:18 PM
Received Date: 9/20/2010 4:10:21 PM
From: Ferrer, Nathaniel

Created By: Nathaniel.Ferrer@nrc.gov

Recipients:

"DiabloCanyonNPEm Resource" <DiabloCanyonNPEm.Resource@nrc.gov>
Tracking Status: None
"Grebel, Terence" <TLG1@PGE.COM>
Tracking Status: None
"Soenen, Philippe R" <PNS3@PGE.COM>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	323	9/20/2010 4:10:21 PM
RAI Related to the Review of the DCPD LRA - (Set 24) Aging Management Programs.pdf 240385		
RAI Related to the Review of the DCPD LRA - (Set 26) Scoping and Screening Follow-Ups.pdf 233980		

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:



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

September 17, 2010

Mr. John Conway
Senior Vice President
Generation and Chief Nuclear Officer
Pacific Gas and Electric Company
77 Beale Street, MC B32
San Francisco, CA 94105

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE REVIEW OF
THE DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2, LICENSE
RENEWAL APPLICATION (TAC NOS. ME2896 AND ME2897) – AGING
MANAGEMENT PROGRAMS

Dear Mr. Conway:

By letter dated November 23, 2009, Pacific Gas & Electric Company submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54, to renew the operating licenses for Diablo Canyon Nuclear Power Plant, Units 1 and 2, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

The request for additional information was discussed with Mr. Terry Grebel, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-1045 or by e-mail at nathaniel.ferrer@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "N. Ferrer", written in a cursive style.

Nathaniel Ferrer, 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: Distribution via Listserv

Diablo Canyon Nuclear Power Plant, Units 1 and 2
License Renewal Application
Request for Additional Information Set 24
Aging Management Programs

RAI B2.1.20-2

Background

GALL AMP XI.M36, "External Surfaces Monitoring Program" states, "[s]urfaces that are inaccessible or not readily visible during plant operations are inspected during refueling outages. Surfaces that are inaccessible or not readily visible during both plant operations and refueling outages are inspected at such intervals that would provide reasonable assurance that the effects of aging will be managed such that applicable components will perform their intended function during the period of extended operation."

The Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants (SRP-LR) Section 3.2.2.4 states, "[t]he summary description of the programs and activities for managing the effects of aging for the period of extended operation in the Final Safety Analysis Report (FSAR) Supplement should be sufficiently comprehensive such that later changes can be controlled by 10 CFR 50.59." It also states that, "[e]xamples of the type of information required are provided in Table 3.2-2 of this SRP-LR." SRP-LR Section 3.2.3.4 states, "[t]he reviewer confirms that the applicant has provided information equivalent to that in Table 3.2-2 in the FSAR Supplement for aging management of the auxiliary systems for license renewal." The description of program for the "External Surfaces Monitoring Program" in Tables 3.2-2, 3.3-2 and 3.4-2 includes the following, "[s]urfaces that are inaccessible during plant operations are inspected during refueling outages. Surfaces that are inaccessible during both plant operations and refueling outages are inspected at frequencies to provide reasonable assurance that effect of aging will be managed such that applicable components will perform their intended function during the period of extended operation."

Issue

LRA Section B2.1.20 states, "[e]xternal surface inspections will be performed on passive components in scope for license renewal at intervals no longer than once per refueling cycle ..." LRA Section B2.1.20 also states, "[t]he External Surfaces Monitoring Program will provide clarification for areas, or portions of systems or components, that may be exempted from walkdown inspections based on physical or environmental constraints."

It is not clear to the staff if the applicant has access to all surfaces being age managed by the External Surfaces Monitoring Program during plant operations and refueling outages as is implied in the first quoted statement, but given the second quoted statement, it does appear that the applicant has a process for excluding some external surfaces from walkdowns based on physical or environmental constraints. The License Renewal Application (LRA) does not contain a statement that the applicant will ensure that those components that are "exempted from walkdowns," will be ultimately inspected or evaluated to ensure the components will perform their intended functions during the period of extended operation if an inspection cannot be performed. The staff requires further information to understand how the applicant will evaluate

ENCLOSURE

components that are “exempted from walkdowns”, thus implying that they will never be inspected.

LRA Section A1.20, the FSAR Supplement description for the External Surfaces Monitoring Program does not contain information related to inaccessible surfaces during plant operations and inaccessible surfaces during plant operations and refueling outages.

Request

1. Describe the criteria that will be used and evaluation methodology to ensure that components “exempted from walkdown” will be managed such that applicable components will perform their intended function during the period of extended operation.
2. Revise FSAR Supplement Section A1.20 to ensure that surfaces that are inaccessible during both plant operations and refueling outages are inspected at frequencies to provide reasonable assurance that effect of aging will be managed such that applicable components will perform their intended function during the period of extended operation, or provide justification that a revision is not needed.

RAI B2.1.20-3

LRA Table 3.3.2-7, “Auxiliary Systems – Compressed Air” contains line items for copper alloy (>15 percent zinc) regulators and solenoid valves exposed to atmospheric weather being managed for loss of material by the External Surfaces Monitoring Program. LRA Section B2.1.20, External Surfaces Monitoring AMP, does not include copper alloy (>15 percent zinc) in the Program Description or “scope of program” exemption.

Given that the External Surfaces Monitoring Program does not include copper alloy (>15 percent zinc) material in LRA Section B2.1.20, the staff cannot conclude that associated AMR line items will be appropriately age managed.

Request:

1. Revise LRA Section B2.1.20 to include copper alloy (>15 percent zinc) or state an alternative aging management program for the above line items.
2. State whether the associated program basis documents include copper alloy (>15 percent zinc) material.

September 17, 2010

Mr. John Conway
Senior Vice President
Generation and Chief Nuclear Officer
Pacific Gas and Electric Company
77 Beale Street, MC B32
San Francisco, CA 94105

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE REVIEW OF THE DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (TAC NOS. ME2896 AND ME2897) – AGING MANAGEMENT PROGRAMS

Dear Mr. Conway:

By letter dated November 23, 2009, Pacific Gas & Electric Company submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54, to renew the operating licenses for Diablo Canyon Nuclear Power Plant, Units 1 and 2, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

The request for additional information was discussed with Mr. Terry Grebel, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-1045 or e-mail nathaniel.ferrer@nrc.gov.

Sincerely,
/RA/
Nathaniel Ferrer, Safety 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: Distribution via Listserv

DISTRIBUTION:
See Next Page

ADAMS Accession No.: ML102460050

OFFICE	LA:DLR	PM:RPB2:DLR	BC:RPB2:DLR	PM:RPB2:DLR
NAME	YEdmonds	NFerrer	DWrona	NFerrer
DATE	09/10/10	09/16/10	09/17/10	09/17/10

OFFICIAL RECORD COPY

Letter to John Conway from Nathaniel Ferrer dated September 17, 2010

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE REVIEW OF THE DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (TAC NOS. ME2896 AND ME2897) – AGING MANAGEMENT PROGRAMS

DISTRIBUTION:

HARD COPY:

DLR RF

E-MAIL:

PUBLIC

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

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



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

September 17, 2010

Mr. John Conway
Senior Vice President
Generation and Chief Nuclear Officer
Pacific Gas and Electric Company
77 Beale Street, MC B32
San Francisco, CA 94105

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE REVIEW OF
THE DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2, LICENSE
RENEWAL APPLICATION (TAC NOS. ME2896 AND ME2897) – SCOPING
AND SCREENING

Dear Mr. Conway:

By letter dated November 23, 2009, Pacific Gas & Electric Company submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54, to renew the operating licenses for Diablo Canyon Nuclear Power Plant, Units 1 and 2, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

The request for additional information was discussed with Mr. Terry Grebel, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-1045 or by e-mail at nathaniel.ferrer@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "N. Ferrer", written over a horizontal line.

Nathaniel Ferrer, 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: Distribution via Listserv

Diablo Canyon Nuclear Power Plant, Units 1 and 2
License Renewal Application
Request for Additional Information Set 26
Scoping and Screening – Clarification on Responses

Based on the staff's review of Pacific Gas and Electric Company's (PG&E's) responses dated July 7 and July 19, 2010, and as discussed in telephone conferences held on August 12 and August 18, 2010, please provide responses to the following:

RAI 2.1-1 (follow-up)

In license renewal application (LRA) Section 2.1.2.2, the applicant stated that the scoping methodology for nonsafety-related structures, and components (SCs) with spatial interaction with safety-related structures, systems and components (SSCs) was, "Nonsafety-related systems and components that contain fluid or steam, and are located inside structures that contain safety-related SSCs are included in scope for potential spatial interaction under criterion Title 10 of the *Code of Federal Regulation* (10 CFR) 54.4(a)(2)."

During plant walkdown, the staff observed inside the turbine building area, there were nonsafety-related fluid-filled SCs that were not included in the scope of license renewal located near safety-related SCs, Control Room Pressurization System (CRPS), in scope under 10 CFR 54.4(a)(1). Therefore, in accordance with the applicant's methodology stated above in LRA Section 2.1.2.2, all fluid-filled SCs in the turbine building area should have been included in the scope of license renewal.

By letter dated May 24, 2010, the staff issued RAI 2.1-1, requesting the applicant provide a review of nonsafety-related SSCs located in the turbine building, which have the potential to spatially interact with safety-related SSCs.

By letter dated June 18, 2010, the applicant provided additional SSCs to the scope of license renewal. However, the applicant did not provide an evaluation of nonsafety-related SCs with the potential to adversely interact with SCs in scope under 10 CFR 54.4(a)(1) inside the turbine building, specifically CRPS components.

The staff requests that the applicant justify the exclusion of nonsafety-related fluid-filled components in the turbine building, in accordance with the methodology as stated in the LRA Section 2.1.2.2, from the scope of license renewal in areas containing SCs in scope under 10 CFR 54.4(a)(1), specifically including an evaluation of the CRPS system.

RAI 2.1-2 (follow-up)

By letter dated June 18, 2010, the applicant responded to RAI 2.1-2 and amended the LRA by including a small segment for the extraction steam piping in scope for (a)(2) on LRA drawing LR-DCPP-05-107705-04 at location 45-E. In addition, the applicant include two segments of service water piping into scope of license renewal, denoted on LRA drawing LR-DCPP-15-107715-05, as inside the diesel generator room. However, the piping and components between

ENCLOSURE

these two segments were not included in the scope of license renewal. Based upon the information provided, the staff cannot determine if the spatial interaction boundaries were appropriate.

Therefore, the staff requests the applicant provide an evaluation of the spatial interaction boundaries of the abovementioned extraction steam and service water piping that were included in scope of licensing renewal.

RAI 2.1-2 (follow-up)

By letter dated July 28, 2010, the applicant provided an evaluation of high energy piping in the turbine building that should be included in the scope of license renewal to protect safety-related cable in the turbine building from the effects of pipe whip and jet impingement.

However, the staff made the following observations of the scoping of the high energy lines in the turbine building:

- On LRA drawing LR-DCPP-02-106702-15, the applicant depicts high energy lines in scope for 10 CFR 54.4(a)(2), but several tanks are not highlighted, to indicate they are within the scope of license renewal under 10 CFR 54.4(a)(2), in which the high energy lines go through.
- On LRA drawing LR-DCPP-02-106702-13, the applicant depicts high energy lines in scope for 10 CFR 54.4(a)(2), but air blowers and tanks are not highlighted, to indicate they are within the scope of license renewal under 10 CFR 54.4(a)(2), in which the high energy lines go through.
- On LRA drawing LR-DCPP-02-106702-18, the applicant depicts high energy lines in scope for 10 CFR 54.4(a)(2), but pumps and tanks are not highlighted to indicate they are within the scope of license renewal under 10 CFR 54.4(a)(2), in which the high energy lines go through.
- On LRA drawings LR-DCPP-02-106702-12 and LR-DCPP-02-107702-12 at location 125-C, SCs are shown not highlighted in scope for 10 CFR 54.4(a)(2) heading into the continuation flag. However, on LRA drawings LR-DCPP-02-106702-13 and LR-DCPP-02-107702-13 at location 130-E, the SCs are shown highlighted in scope for 10 CFR 54.4(a)(2).

The staff requests that the applicant justify its exclusion of the above fluid-filled nonsafety-related SCs in the turbine building.

September 17, 2010

John Conway
Senior Vice President
Generation and Chief Nuclear Officer
Pacific Gas and Electric Company
77 Beale Street, MC B32
San Francisco, CA 94105

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE REVIEW OF THE DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (TAC NOS. ME2896 AND ME2897) – SCOPING AND SCREENING

Dear Mr. Conway:

By letter dated November 23, 2009, Pacific Gas & Electric Company submitted an application pursuant to Title 10 of the *Code of Federal Regulations* Part 54, to renew the operating licenses for Diablo Canyon Nuclear Power Plant, Units 1 and 2, for review by the U.S. Nuclear Regulatory Commission (NRC or the staff). The staff is reviewing the information contained in the license renewal application and has identified, in the enclosure, areas where additional information is needed to complete the review.

The request for additional information was discussed with Mr. Terry Grebel, and a mutually agreeable date for the response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-1045 or e-mail nathaniel.ferrer@nrc.gov.

Sincerely,
/RA/
Nathaniel Ferrer, Safety 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: Distribution via Listserv

DISTRIBUTION:
See Next Page

ADAMS Accession No.: ML102520278

OFFICE	LA:DLR	PM:RPB2:DLR	BC:RPB2:DLR	PM:RPB2:DLR
NAME	IKing	NFerrer	DWrona	NFerrer
DATE	9/13/10	09/13/10	09/17/10	09/17/10

OFFICIAL RECORD COPY

Letter to John Conway from Nathaniel Ferrer dated September 17, 2010

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION RELATED TO THE REVIEW OF THE DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2, LICENSE RENEWAL APPLICATION (TAC NOS. ME2896 AND ME2897) – SCOPING AND SCREENING

DISTRIBUTION:

HARD COPY:

DLR RF

E-MAIL:

PUBLIC

RidsNrrDir Resource

RidsNrrDirRpb1 Resource

RidsNrrDirRpb2 Resource

RidsNrrDirRarb Resource

RidsNrrDirRapb Resource

RidsNrrDirRasb Resource

RidsNrrDirRerb Resource

RidsNrrDirRpob Resource

RidsOgcMailRoom Resource

N. Ferrer

K. Green

A. Stuyvenberg

D. Wrona

A. Wang

M. Peck, RIV

T. Brown, RI

G. Miller, RIV

N. O'Keefe, RIV

I. Couret, OPA

V. Dricks, OPA

W. Maier, RIV

J. Weil, OCA

E. Williamson, OGC

S. Uttal, OGC

R. Rihm, EDO