



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

March 11, 2019

Mr. James M. Welsch
Vice President Nuclear Generation
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: DIABLO CANYON POWER PLANT - NOTIFICATION OF NRC DESIGN BASES ASSURANCE INSPECTION (TEAMS) (05000275/2019010 AND 05000323/2019010) AND INITIAL REQUEST FOR INFORMATION

Dear Mr. Welsch:

On May 21, 2019, the Nuclear Regulatory Commission (NRC) will begin a triennial baseline component design bases inspection at the Diablo Canyon Power Plant. A six-person team will perform this inspection using NRC Inspection Procedure 71111, Attachment 21M "Design Bases Assurance Inspection (Teams)."

The inspection focuses on the maintenance of component design bases and modifications made to structures, systems, and components. The samples reviewed during this inspection will be identified during an information gathering visit. In addition, a number of operating experience issues will also be selected for review during the in-office preparation week.

The inspection will include an information gathering site visit by the team leader and 2 weeks of onsite inspection by the team. The inspection will consist of three NRC inspectors and two NRC contractors, who will focus on engineering, and one NRC inspector that will focus on operations. The current inspection schedule is as follows:

Onsite Information Gathering Visit: May 22, 2019
Preparation Week: June 3, 2019
Onsite Week: June 10-14 and June 24-28, 2019

The purpose of the information gathering visit is to meet with members of your staff to identify potential risk-significant components and operator actions. The lead inspector will also request a tour of the plant with members of your operations staff and probabilistic safety assessment staff. During the onsite weeks, several days will be needed on the plant-referenced simulator in

order to facilitate the development of operator action-based scenarios. Additional information and documentation needed to support the inspection will be identified during the inspection, including interviews with engineering managers, engineers, and probabilistic safety assessment staff.

Our experience with these inspections has shown that they are extremely resource intensive, both for the NRC inspectors and the licensee staff. In order to minimize the inspection impact on the site and to ensure a productive inspection, we have enclosed a request for information needed for the inspection. The request has been divided into two groups. The first group lists information necessary for the information gathering visit and for general preparation. This information should be available to the regional office no later than May 21, 2019, unless otherwise stated. If possible, this information should be provided electronically to the lead inspector. Since the inspection will be concentrated on high risk/low margin components and modifications, calculations associated with your list of high risk components and modifications should be available to review during the information gathering visit to assist in our selection of components based on available design margin.

The second group of documents requested lists information necessary to aid the inspection team in tracking issues identified as a result of the inspection. It is requested that this information be provided to the lead inspector as the information is generated during the inspection. An additional request will be made by the team during the preparation week once the specific components and modifications have been selected. Additional requests by inspectors will also be made throughout the onsite weeks for specific documents needed to complete the review. It is important that all of these documents are up-to-date and complete in order to minimize the number of additional document requests during the preparation and/or onsite portions of the inspection. In order to facilitate the inspection, we request that a contact individual be assigned to each inspector to ensure information requests, questions, and concerns are addressed in a timely manner.

The lead inspector for this inspection is Gerond A. George, Senior Reactor Inspector. We understand that our licensing engineer contact for this inspection is Ms. A. Sorenson. If there are any questions about the inspection or the requested materials, please contact the lead inspector by telephone at 817-200-1562 or by e-mail at Gerond.George@nrc.gov.

This letter does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, control number 3150-0011. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget control number.

J. Welsch

3

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/RA/

Vincent G. Gaddy, Chief
Engineering Branch 1
Division of Reactor Safety

Docket Nos. 50-275, 50-323
License Nos. DPR-80, DPR-82

Enclosure:
Initial Request for Information
Design Bases Assurance Inspection (Teams)

**Initial Request for Information
Design Bases Assurance Inspection (Teams)
Diablo Canyon Power Plant**

Inspection Report: 05000275/2019010; 05000323/2019010

EPID ID: I-2019-010-0039

Information Gathering Date: May 22, 2019

Inspection Dates: June 10-14 and June 24-28, 2019

Inspection Procedure: IP 71111, Attachment 21M, "Design Bases Assurance Inspection (Teams)"

Lead Inspector: Gerond A. George, Senior Reactor Inspector

I. Information Requested Prior to Information Gathering Visit (May 15, 2019)

The following information (Section I of this enclosure) should be sent to the Region IV office in hard copy or electronic format (electronic database preferred), to the attention of Gerond A. George, by May 15, 2019. The specific items selected from the lists shall be available and ready for review on the day indicated in this request. *Please provide requested documentation electronically in "pdf" files, Excel, or other searchable formats, if possible. The information should contain descriptive names and be indexed and hyperlinked to facilitate ease of use. Information in lists should contain enough information to be easily understood by someone who has knowledge of pressurized water reactor technology. If requested documents are large and only hard copy formats are available, please inform the inspector and provide subject documentation during the first day of the onsite inspection.

1. An Excel spreadsheet of equipment basic events (with definitions), including importance measures sorted by risk achievement worth and Birnbaum from your internal events probabilistic risk assessment. Include basic events with risk achievement worth value of 1.3 or greater.
2. A list of the top 50 cut-sets from your PRA.
3. Copies of probabilistic risk assessment "system notebooks" and the latest probabilistic risk assessment summary document.
4. An Excel spreadsheet of probabilistic risk assessment human action basic events or risk ranking of operator actions from your site-specific PSA sorted by risk achievement worth and Birnbaum. Provide copies of your human reliability worksheets for these items.

Enclosure

5. If you have an external events or fire PSA model, provide the information requested in items 1-4 for external events and fire.
6. Lists of permanent and temporary modifications performed in the past 5 years to structures, systems, and components sorted by component identified in Item 1.
7. A list of high large early release frequency impact events and associated components.
8. Structures, systems, and components in the Maintenance Rule (a)(1) category.
9. A list of high risk maintenance rule systems/components and functions; based on engineering or expert panel judgment.
10. A copy of the "Top Ten Issues" list, if available.
11. Any pre-existing list of components and associated calculations with low design margins.
12. A List of root cause evaluations associated with component failures or design issues initiated/completed in the last 5 years.
13. A list of any common-cause failures of components in the last 3 years.
14. A list of operating experience evaluations for the last 3 years.
15. A list of all time-critical operator actions in procedures.
16. A list of current "operator work arounds/burdens."
17. Procedures, including emergency and abnormal, used to accomplish operator actions associated with the basic events credited in your PRA.
18. Electronic copies of quality assurance program manual, corrective action program, and engineering design change procedures.
19. A copy of any internal/external self-assessments and associated corrective action documents generated in preparation for this inspection.
20. A copy of engineering/operations-related audits completed in the last 2 years.
21. Electronic copies of the Technical Specifications, Technical Specifications Bases, Technical Requirements Manual, and the Final Safety Analysis Report, as updated.
22. A copy of the Individual Plant Examination of External Events, if available electronically.
23. One-line drawings of emergency core cooling systems, ultimate heat sink, emergency safety features, and safety-related electrical systems.
24. A copy of plant systems equipment identifier key or procedure.

25. A copy of condition reports associated with inspection findings from the previous NRC Inspection Procedure 71111.21 (or 71111.21 Attachment M inspection).
26. A list of licensee contacts for the inspection team with phone numbers.
27. A copy of the current management and engineering organizational charts.

II. Information Requested to be provided throughout the inspection.

1. Electronic copies of the design bases documents for selected components and modifications.
2. Electronic copies of the system health notebooks for selected components and modifications.
3. A list of the design calculations that provide the design margin information for selected components. (Calculations for selected components should be available during the information gathering visit.)
4. Calculations and drawings associated with selected components.
5. Documentation associated with modifications selected from Item I.6, this includes:
 - a. Post-modification testing, including performance characteristics affected, assumptions, and acceptance criteria associated with modifications selected.
 - b. Updated maintenance and surveillance procedures associated with modifications.
 - c. Updated operation, emergency, and abnormal procedures associated with the modifications.
 - d. 10 CFR 50.59 applicability determination, screening, and safety evaluation.
6. Copies of any corrective action documents generated as a result of the team's questions or queries during this inspection.
7. Copies of the list of questions submitted by the team members and the status/resolution of the information requested (provide daily during the inspection to each team member).

Inspector Contact Information:

Gerond A. George
Senior Reactor Inspector
817-200-1562
Gerond.George@nrc.gov

Mailing Address:

U.S. NRC, Region IV
Attn: Gerond A. George
1600 East Lamar Blvd.
Arlington, TX 76011-4511

DIABLO CANYON POWER PLANT - NOTIFICATION OF NRC DESIGN BASES ASSURANCE INSPECTION (TEAMS) (05000275/2019010 AND 05000323/2019010) AND INITIAL REQUEST FOR INFORMATION – MARCH 11, 2019

DISTRIBUTION:

SMorris, ORA
 MShaffer, ORA
 TVegel, DRP
 MHay, DRP
 RLantz, DRS
 GMiller, DRS
 CNewport, DRP
 JReynoso, DRP
 MHaire, DRP
 RAlexander, DRP
 LNewman, DRP
 MArel, DRP
 VDricks, ORA
 BSingal, NRR
 RKellar, DRS
 PJayroe, DRS
 MHerrera, DRMA
 R4Enforcement
 DCylkowski, ORA
 JWeil, OWFN
 AMoreno, OWFN
 MMcCoppin, OEDO
 BMaier, ORA

ADAMS ACCESSION NUMBER: ML19071A157

SUNSI Review: ADAMS: Non-Publicly Available Non-Sensitive Keyword:
 By: GAG Yes No Publicly Available Sensitive NRC-002

OFFICE	SRI:EB1	C:EB1			
NAME	GGeorge	VGaddy			
SIGNATURE	/RA/	/RA/			
DATE	03/08/2019	3/11/2019			

OFFICIAL RECORD COPY