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10 CFR 50.71
10 CFR 54.37(b)

September 19, 2014

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Calvert Cliffs Nuclear Power Plant, Unit Nos. 1 and 2
Renewed Facility Operating License Nos. DPR-53 and DPR-69
NRC Docket Nos. 50-317 and 50-318

Subject: Updated Final Safety Analysis Report, Revision 47

Enclosed for your use is one copy (CD) of our Updated Final Safety Analysis Report (UFSAR), Revision 47. This revision is submitted within six months after the latest refueling outage in accordance with 10 CFR 50.71(e).

The List of Effective pages are included. This electronic copy is a complete revision.

Attachment (1) provides a description of changes to commitments made to the Nuclear Regulatory Commission.

Attachment (2) contains the report describing how newly identified items are managed for aging effects.

There are no new regulatory commitments contained in this correspondence.

Should you have questions regarding this matter, please contact Mr. Douglas E. Lauver at (410) 495-5219.

Respectfully,

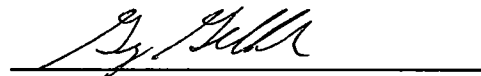
A handwritten signature in black ink, appearing to read "George Gellrich".

George H. Gellrich
Site Vice President

A053
NRR

CERTIFICATION:

I, George H. Gellrich, certify that I am Vice President-Calvert Cliffs Nuclear Power Plant, LLC, and that the information contained in this submittal accurately presents changes made since the previous submittal, necessary to reflect information and analyses submitted to the Commission or prepared pursuant to Commission requirement.



GHG/BJD/bjd

- Attachments: (1) Changes to Commitments Made to the Nuclear Regulatory Commission
(2) Report Consistent with 10 CFR 54.37(b) on How Aging Effects for Newly-Identified Structures, Systems, or Components are Managed
Enclosure: Updated Final Safety Analysis Report, Revision 47 (CD)

cc: NRC Project Manager, Calvert Cliffs

(Without Enclosure)

NRC Regional Administrator, Region I
NRC Resident Inspector, Calvert Cliffs
S. Gray, MD-DNR

ATTACHMENT (1)

**CHANGES TO COMMITMENTS MADE TO
THE NUCLEAR REGULATORY COMMISSION**

ATTACHMENT (1)

CHANGES TO COMMITMENTS MADE TO THE NUCLEAR REGULATORY COMMISSION

Calvert Cliffs has changed the following commitments made to the Nuclear Regulatory Commission (NRC):

Commitment: UFSAR Chapter 16 Table 16-2 line item #18 directs inspection of the containment emergency sump for corrosion.

Change: Delete line item #18 inspection of the containment emergency sump cover and debris screen for general corrosion.

Justification: The original emergency containment sump cover was constructed of steel that was subject to general corrosion. Inspecting the containment emergency sump cover and debris screen for general corrosion was credited with managing this degradation mechanism. The emergency containment sump cover and debris screens were replaced with stainless steel – by ES199502396, Work Orders C119971659 & C21219963827. As a result, general corrosion is no longer a credible aging mechanism. See SE00138 (50.59 evaluation).

Commitment: An aging management program relied on several Operations, for discovery of conditions that could allow general corrosion to progress for the instrument line supports by performance of visual inspections of plant operating areas during plant operator rounds. The purpose of this program is to provide requirements and guidance on personnel accountability for the correction of housekeeping, material and radiological deficiencies.

Change: These Operations procedures are deleted from UFSAR Table 16-2 Lines 7 and 156.

Justification: Several procedures were credited to assess the condition of component supports, specifically looking for general corrosion. However, these procedures never looked for corrosion or any other aging degradation mechanism. The purpose of these procedures is to look for deficiencies or plant abnormalities such as pooled water, leak, loose brackets, irregular temperatures, etc., to document the deficiency found, and to hold the spa e owner accountable for correcting the housekeeping issue. Instead, the licensee will credit the Structures and Systems Walkdown Program (AMBD-0052), which actually inspects for the applicable, plausible aging mechanisms for the same component supports. Under AMBD-0052, the walkdowns will not be as frequent as the daily OPS walkdowns; however, with the intent of aging management to monitor for plausible ARDMs prior to degrading the SSC function, these less frequent inspections will not negatively affect the safety of the plant.

Since all of the component supports discussed above are already inspected/monitored under other aging management programs, there is no need to rely on the Operations Procedures. All of these AMPs now being credited are sufficient by themselves to detect ARDMs in time to take corrective action.

ATTACHMENT (2)

**REPORT CONSISTENT WITH 10 CFR 54.37(b) ON HOW AGING
EFFECTS FOR NEWLY-IDENTIFIED STRUCTURES, SYSTEMS, OR
COMPONENTS ARE MANAGED**

ATTACHMENT (2)

REPORT CONSISTENT WITH 10 CFR 54.37(b) ON HOW AGING EFFECTS FOR NEWLY-IDENTIFIED STRUCTURES, SYSTEMS, OR COMPONENTS ARE MANAGED

This report is in lieu of adding a level of detail to the Calvert Cliffs Nuclear Power Plant (CCNPP) Updated Final Safety Analysis Report (UFSAR) that is greater than in the remainder of the UFSAR, including the License Renewal Supplement. An entry on the Nuclear Regulatory Commission (NRC) website, "Frequently Asked Questions (FAQs) About License Renewal Inspection Procedure (IP) 71003, 'Post-Approval Site Inspection for License Renewal'" relates to the amount of detail required per 10 CFR 54.37(b). It states, "The NRC staff will consider it acceptable if the summary information included in the FSAR update is consistent with the requirements of 10 CFR 54.21(d), and the guidance provided in Revision 1 of NUREG-1800, 'Standard Review Plan for Review of License Renewal Applications for Nuclear Power Plants' (SRP-LR), provided that the licensee has supplied the technical details (as described in RIS 2007-16) in another documented submittal to the NRC." The information in this report is consistent with the technical information previously submitted to the NRC with the License Renewal Application (LRA).

On April 8, 1998 CCNPP submitted a LRA to the NRC to renew the operating licenses for CCNPP Units 1 and 2 for an additional 20 years beyond the original expiration dates of July 31, 2014 (Unit 1) and August 13, 2016 (Unit 2). Within the LRA, information was provided to define the component types, functions, and the Aging Management Programs that applied. Lists of individual components within the scope of license renewal were not required to be provided.

Subsequent to the completion of the necessary reviews, audits, responses to Requests for Additional Information, and resolutions of other questions, the NRC published NUREG-1705, Safety Evaluation Report Related to the License Renewal of Calvert Cliffs Nuclear Power Plant, Units 1 and 2 in December of 1999, which documented the NRC staff's review of the information submitted to them through July 16, 1999. The renewed operating licenses for CCNPP 1 and CCNPP 2 were issued on March 23, 2000, extending the license for CCNPP 1 to July 31, 2034 and CCNPP 2 to August 13, 2036.

For holders of a renewed operating license, 10 CFR 54.37(b) requires that newly-identified structures, systems, or components (SSCs) be included in the Final Safety Analysis Report (FSAR) update required by 10 CFR 50.71(e) describing how the effects of aging will be managed. Newly-identified SSCs are those SSCs that were installed in the plant at the time of License Renewal of CCNPP 1 and CCNPP 2, but were not evaluated as part of the LRA (as discussed in Regulatory Issue Summary 2007-16).

During the period of April 2013 to April 2014, a review of the site component database identified approximately 7000 components installed before April 2, 1999 that may not have previously been screened for license renewal applicability.

Of the components that were identified as in-scope and subject to aging management review, 239 components were found to have not been addressed by the LRA and are, therefore, "newly identified" and subject to 10 CFR 54.37(b) reporting requirements. The 239 components can be broken down into two groups. The first group of 237 is already addressed within the groups of device types submitted with the LRA. The second group consists of 2 components that would not have been addressed under any of the groups of device types in the LRA.

The 239 "newly-identified" components have been evaluated for aging effects requiring management and those with such aging have been assigned to existing Aging Management Programs and appropriate aging management strategies have been invoked to adequately

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detect and manage the applicable aging effects throughout the period of extended operation. This can be verified by NRC inspection.

The CCNPP LRA was the first submitted to the NRC and the guidance currently available to applicants in the GALL Report (NUREG-1801) and the SRP (NUREG-1800) did not exist. Hence, the format of the CCNPP LRA does not align with what later applicants submitted. Although the tables and discussion provided in the CCNPP LRA are not actually being revised, the attached tables show, in a format similar to what current LRAs would contain, how aging of the 2 newly-identified components would have been addressed, had these components been included in the LRA.

Time-Limited Aging Analysis

One new Time-Limited Aging Analysis was identified for CCNPP in association with aligning the CCNPP AMP for reactor vessel internals with industry guidance and GALL XI.M16A. The Time-Limited Aging Analysis addresses fatigue of reactor vessel internals in accordance with the guidance of MRP-227A. Details of these analyses were reviewed at CCNPP by NRC Region 1 Inspectors during the Phase 2, IP71003, Post-Approval Inspection performed during the weeks of May 19th, June 2nd, and July 7th, 2014.

ATTACHMENT (2)

REPORT CONSISTENT WITH 10 CFR 54.37(b) ON HOW AGING EFFECTS FOR NEWLY-IDENTIFIED STRUCTURES, SYSTEMS, OR COMPONENTS ARE MANAGED

CCNPP Control Room HVAC System - LRA Section 5.11C
(2 Components)

Component Type	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Program	NUREG-1801 Vol 2 Item	Table 1 Item	Notes
Solenoid Valve	PB	Copper Alloy	Dry Air	None	N/A	VII.J.AP-8		