



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

December 16, 2010

Mr. George H. Gellrich, Vice President
Calvert Cliffs Nuclear Power Plant, LLC
Calvert Cliffs Nuclear Power Plant
1650 Calvert Cliffs Parkway
Lusby, MD 20657-4702

SUBJECT: CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2 - AUDIT
OF THE LICENSEE'S MANAGEMENT OF REGULATORY COMMITMENTS
(TAC NOS. ME5018 AND ME5019)

Dear Mr. Gellrich:

In Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," dated September 21, 2000, the Nuclear Regulatory Commission (NRC) informed licensees that the Nuclear Energy Institute (NEI) document NEI 99-04, "Guidelines for Managing NRC Commitment Changes," contains acceptable guidance for controlling regulatory commitments and encouraged licensees to use the NEI guidance or similar administrative controls to ensure that regulatory commitments are implemented and that changes to the regulatory commitments are evaluated and, when appropriate, reported to the NRC.

The NRC Office of Nuclear Reactor Regulation has instructed its staff to perform an audit of licensees' commitment management programs once every 3 years to determine whether the licensees' programs are consistent with the industry guidance in NEI 99-04, and that those regulatory commitments are being effectively implemented.

An audit of Calvert Cliffs' commitment management program was performed at the Calvert Cliffs site on November 30 and December 1, 2010. Based on the audit, the NRC staff concludes that Calvert Cliffs has: (1) established an effective commitment management program, (2) implemented NRC commitments on a timely basis, and (3) implemented an effective program for managing changes to NRC commitments.

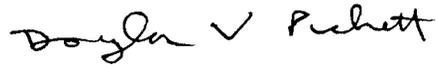
Details of the audit are described in the enclosed audit report. The NRC staff appreciates the resources that were made available by your staff for performing the audit.

G. Gellrich

- 2 -

Please feel free to contact me at 301-415-1364 if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Douglas V. Pickett". The signature is written in a cursive style with a checkmark-like flourish above the 'V'.

Douglas V. Pickett, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosure:
As stated

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AUDIT REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

LICENSEE MANAGEMENT OF REGULATORY COMMITMENTS

CALVERT CLIFFS NUCLEAR POWER PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-317 AND 50-318

1.0 INTRODUCTION AND BACKGROUND

In Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," dated September 21, 2000, the Nuclear Regulatory Commission (NRC) informed licensees that the Nuclear Energy Institute (NEI) document NEI 99-04, "Guidelines for Managing NRC Commitment Changes," contains acceptable guidance for controlling regulatory commitments and encouraged licensees to use the NEI guidance or similar administrative controls to ensure that regulatory commitments are implemented and that changes to the regulatory commitments are evaluated and, when appropriate, reported to the NRC.

The NRC Office of Nuclear Reactor Regulation (NRR) has instructed its staff to perform an audit of licensees' commitment management programs once every 3 years to determine whether the licensees' programs are consistent with the industry guidance in NEI 99-04, and that those regulatory commitments are being effectively implemented.

NEI-99-04 defines a "regulatory commitment" as an explicit statement to take a specific action agreed to, or volunteered by, a licensee and submitted in writing on the docket to the NRC. NRR guidelines direct the NRR Project Manager to audit the licensee's commitment management program by assessing the adequacy of the licensee's implementation of a sample of commitments made to the NRC in past licensing actions (amendments, reliefs, exemptions, etc.) and activities (bulletins, generic letters, etc.). The audit is to be performed every 3 years.

2.0 AUDIT PROCEDURE AND RESULTS

An audit of the Calvert Cliffs commitment management program was performed at the Calvert Cliffs site on November 30 and December 1, 2010. The audit reviewed commitments made since the previous audit on August 14, 2007. The audit consisted of two major parts: (1) verification of the licensee's implementation of NRC commitments that have been completed and (2) verification of the licensee's program for managing changes to NRC commitments.

2.1 Verification of Licensee's Implementation of NRC Commitments

The primary focus of this part of the audit is to confirm that the licensee has implemented commitments made to the NRC as part of past licensing actions/activities. For commitments not yet implemented, the NRC staff determines whether they have been captured in an effective program for future implementation.

2.1.1 Audit Scope

The audit addressed a sample of commitments made during the review period. The audit focused on regulatory commitments (as defined above) made in writing to the NRC as a result of past licensing actions (amendments, exemptions, etc.) or licensing activities (bulletins, generic letters, etc.). Before the audit, the NRC staff searched the Agencywide Document Access and Management System for the licensee's submittals since the last audit and selected a representative sample for verification.

The audit excluded the following types of commitments that are internal to licensee processes:

- (1) Commitments made on the licensee's own initiative among internal organizational components.
- (2) Commitments that pertain to milestones of licensing actions/activities (e.g., respond to an NRC request for additional information by a certain date). Fulfillment of these commitments was indicated by the fact that the subject licensing action/activity was completed.
- (3) Commitments made as an internal reminder to take actions to comply with existing regulatory requirements such as regulations, Technical Specifications (TSs), and Updated Final Safety Analysis Reports (UFSARs). Fulfillment of these commitments was indicated by the licensee having taken timely action in accordance with the subject requirements.

2.1.2 Audit Results

The attached Audit Summary provides details of the audit and its results.

The NRC staff found that the licensee has established an effective commitment management program and implemented NRC commitments on a timely basis.

2.2 Verification of the Licensee's Program for Managing NRC Commitment Changes

The primary focus of this part of the audit is to verify that the licensee has established administrative controls for modifying or deleting commitments made to the NRC. The NRC staff compared the licensee's process for controlling regulatory commitments to the guidelines in NEI-99-04, which the NRC has found to be an acceptable guide for licensees to follow for managing and changing commitments. The process used at Calvert Cliffs is contained in Constellation Nuclear Generation Station Administrative Procedure CNG-NL-1.01-1006, "Commitment Management," Revision 00100.

The audit reviewed a sample of commitment changes that included changes that were or will be reported to the NRC, and changes that were not or will not be reported to the NRC. The audit also verifies that the licensee's commitment management system includes a mechanism to ensure traceability of commitments following initial implementation. This ensures that licensee personnel are able to recognize that future proposed changes to the affected design features or

operating practices require evaluation in accordance with the commitment change control process.

2.2.1 Audit Results

The attached Audit Summary provides details of this portion of the audit and its results.

The primary focus of this part of the audit is the licensee's performance related to implementing controls for modifying or deleting commitments made to the NRC. The staff examined the licensee's commitment tracking system and the NRC commitment management procedures. If the licensee changes or deletes a commitment, the licensee's procedure directs their staff to use the Commitment Evaluation Form, incorporated from NEI 99-04 guidance.

The licensee submits Changes to Commitments Made to the NRC as an attachment to the annual revision of the UFSAR. This attachment describes the original commitment, describes the change, and provides the justification for the change. The licensee has submitted change notifications to the NRC in letters dated September 8, 2008, September 15, 2009, and September 17, 2010. The NRC staff determined that the commitment changes were made in accordance with the licensee's programs and procedures. The licensee's technical evaluations adequately justified the change, and the NRC was informed of commitment changes that have safety or regulatory significance. The licensee's procedures for changing commitments follow the guidance of NEI 99-04.

3.0 CONCLUSION

Based on the above, the NRC staff concludes that Calvert Cliffs has: (1) established an effective commitment management program, (2) implemented NRC commitments on a timely basis, and (3) implemented an effective program for managing changes to NRC commitments.

4.0 LICENSEE PERSONNEL CONTACTED FOR THIS AUDIT

Patricia Furio
Ken Greene
Ned Tyler

Principal Contributor: Douglas Pickett, NRR

Date: December 16, 2010

Attachment: Summary of Audit Results

SUMMARY OF AUDIT RESULTS

COMMITMENTS THAT HAVE BEEN IMPLEMENTED:

The following commitments were verified to be implemented

- Amendments 282/259, issued on September 27, 2007, added new limiting condition for operation (LCO) 3.0.9 that allows licensees to defer declaring an LCO not met for equipment supported by barriers unable to perform their associated support function for up to 30 days provided that risk is assessed and managed. The licensee committed to the guidance of NUMARC 93-01 and procedures as described in NEI 04-08. Constellation Energy Nuclear Group Fleet Administrative Procedure CNG-OP-4.01-1000, "Integrated Risk Management," has been updated to the above guidance documents. In addition, Nuclear Plant Operations Standing Orders have been updated to address risk assessments previously completed for selected applications.
- Amendments 285/262, issued on March 24, 2008, added new LCO 3.0.8 which establishes conditions under which systems are considered to remain capable of performing their intended safety function when associated seismic-designated snubbers are not capable of providing their associated support function. The licensee's letter dated October 17, 2007, which requested this change, committed to implement new TS Bases in support of this change. The revised TS Bases for LCO 3.0.8 were verified to be appropriately updated.
- Amendments 289/265, issued on January 26, 2009, allowed the licensee to remove the 5.2 second closure time for the main steam isolation valves (MSIVs) specified in Surveillance Requirement (SR) 3.7.2.1 and include it in a licensee-controlled document referenced in the TS Bases. TS Bases SR 3.7.2.1 references the inservice testing program and includes the 5.2 second MSIV closure time. In addition, Calvert Cliffs Nuclear Power Plant Technical Procedure STP O-1-1, "MSIV Full Stroke Test," was verified to include the 5.2 second MSIV closure time.
- Amendments 292/268 dated August 6, 2009, included a commitment by the licensee to eliminate overtime control in the TSs (i.e., delete former paragraph 5.2.2.e) and concurrently implement the new Title 10 *Code of Federal Regulations* Part 26 rule on overtime controls. The new rule required implementation by October 1, 2009. The amendments allowed the licensee to perform these actions within the commitment management program. The TSs were verified to have been properly updated. In addition, Constellation Energy Nuclear Group Fleet Administrative Procedure CNG-SE-1.01-1002, "Fatigue Management and Work Hour Controls," was verified to have been properly updated.
- The licensee's letters dated September 26, 2007, and January 29, 2008, included changes to Emergency Response Plan Implementation Procedure ERPIP-B.1, "Equipment Checklist." Commitments to B.5.b required that radios, spare batteries, and steam generator level monitoring kits be stored in the Secondary Fire Brigade Locker. The Secondary Fire Brigade Locker was inspected to verify the presence of the above

items. In addition, the ERPIP-B.1 inventory sheets were reviewed to confirm the presence of the above items.

- The licensee's letter dated July 29, 2009, included three commitments regarding the decommissioning trust funds for the Constellation facilities. These commitments, which were verified to be complete, included the following:
 - o By November 20, 2009, Constellation would provide a site-specific safe storage analysis to the NRC. This letter was issued on November 20, 2009.
 - o By December 31, 2009, Constellation would assess the need for a parent guarantee of funds for decommissioning costs. Commitment Action Item AI-2009-000139 verified this action to be complete.
 - o By December 31, 2010, Constellation would initiate annual re-evaluations of decommissioning trust funds to determine their adequacy. Commitment Action item AI-2009-000140 verified this recurring action is being tracked for the foreseeable future.

COMMITMENTS CURRENTLY BEING TRACKED

The following commitments have not been implemented. The purpose of this portion of the audit was to confirm that the commitments are being properly managed in the licensee's commitment tracking system.

- Amendments 281/258, issued on August 29, 2007, referenced implementation of the alternate source term and included commitments in their letter dated November 23, 2004. The implementation period included in the amendment was open-ended pending modifications to the control room (e.g., increased control room ventilation flow and additional radiation monitors). Calvert Cliffs is somewhat unique in that during the post-accident period, control room operators must take KI pills and wear self-contained breathing apparatus. A work schedule for the control room ventilation system was reviewed. It indicated that the ventilation system upgrades and the addition of radiation monitors will be complete by the start of the February 2011 refueling outage for Unit No. 2.
- The licensee's letter dated November 23, 2009, on the cyber security plan, included a number of long-term commitments. The licensee's Action Item NL-2009-000107 was verified to be tracking these commitments.
- The licensee's letter dated July 23, 2010, included commitments to provide test results and final plant modifications related to Generic Letter 2004-02 before the end of 2010. The licensee's Action Item CT200600008-049 was verified to be tracking these commitments.
- The licensee's letter dated August 9, 2010, included commitments on Attachment 3, page 9, response to RAI #8, regarding the transition to AREVA fuel. The licensee's Action Item NL-2010-000006-009 was verified to be tracking these commitments.

MANAGEMENT OF CHANGES TO REGULATORY COMMITMENTS:

The licensee modified or changed the following commitments prior to implementation. The sample of commitments included both those that were reported to the NRC and those that the licensee concluded did not need to be reported to the NRC. The licensee's Commitment Change Evaluation Form was reviewed for each commitment change.

- The licensee committed to install a software upgrade during the 2008 refueling outage to allow the observation of linear variable differential transformer field input values and failures. The licensee's letter dated September 8, 2008, informed the NRC that the software upgrade was being deferred to the 2010 refueling outage. The change was necessary because the vendor was unable to meet the original deadline for the 2008 refueling outage.
- By letter dated July 17, 2007, the licensee committed to modify the circuits of the emergency core cooling system (ECCS) pump room exhaust filtration system (PREFS) fans to ensure that the fans do not automatically operate during post-accident recovery. The purpose of this commitment was to minimize any contribution of dose emanating from the ECCS pump room to the overall offsite and control room dose calculations. By letter dated September 15, 2009, the licensee informed the NRC that this commitment was being withdrawn and that the ECCS PREFS fans would continue to operate post-accident as originally designed. The change was necessary because the licensee discovered that there would be a significant impact on the core damage frequency if the modification was completed.
- In Chapter 16 of the Calvert Cliffs UFSAR, Table 16-2 includes a program description of the flow accelerated corrosion (FAC) program. A detailed discussion identifies a tracking system that categorizes inspection results into a "Yellow Alert" or "Red Alert" status. By letter dated September 17, 2010, the licensee revised the UFSAR description deleting the above details of the FAC program. The FAC program is described in Calvert Cliffs Nuclear Power Plant Station Administrative Procedure MN-3-124, "Flow Accelerated Corrosion Program," Revision 00302.
- By letter dated November 17, 2000, the licensee requested NRC approval to install mechanical nozzle seal assembly (MNSA) devices for leaking nozzle connections. As part of their proposal, the licensee made commitments regarding service life of installed MNSA devices and when MNSA devices would be selected for complete disassembly and inspection. Subsequent to the licensee's letter, the NRC established criteria for the use of MNSA devices that allowed the licensee to relax its commitments. The licensee concluded that changes to its commitments did not need to be reported to the NRC.

G. Gellrich

- 2 -

Please feel free to contact me at 301-415-1364 if you have any questions.

Sincerely,

/RA/

Douglas V. Pickett, Senior Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-317 and 50-318

Enclosure:
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