



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001
October 21, 2010

Mr. Michael J. Pacilio
President and Chief Nuclear Officer
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2 - AUDIT OF THE LICENSEE'S
MANAGEMENT OF REGULATORY COMMITMENTS (TAC NOS. ME4035 AND
ME4036)

Dear Mr. Pacilio:

In Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," dated September 21, 2000, the U.S. 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's 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 regulatory commitments are being effectively implemented.

The NRC's staff performed an audit of the Braidwood Station, Units 1 and 2 (Braidwood), commitment management program at the site on August 11 and 12, 2010, and reviewed commitments made or changed over the past 3 years. Details of the audit are set forth in the enclosed audit report.

M. Pacilio

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If you have any questions, please have your staff contact me at (301) 415-1547.

Sincerely,

A handwritten signature in black ink, appearing to read "Marshall J. David". The signature is written in a cursive style with a large, stylized initial "M".

Marshall J. David, Senior Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-456 and 50-457

Enclosure:
Audit Report

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AUDIT REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

LICENSEE MANAGEMENT OF REGULATORY COMMITMENTS

BRAIDWOOD STATION, UNITS 1 AND 2

DOCKET NOS. 50-456 AND 50-457

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 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML003741774), the U.S. Nuclear Regulatory Commission (NRC) informed licensees that the Nuclear Energy Institute (NEI) document NEI 99-04, "Guidelines for Managing NRC Commitment Changes" (ADAMS Accession No. ML003680088), 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's 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 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. The 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

The NRC staff performed an audit of the Braidwood Station, Units 1 and 2 (Braidwood), commitment management program at the site on August 11 and 12, 2010, and reviewed commitments made by Exelon Generation Company, LLC (EGC, the licensee) for Braidwood over the past 3 years. For the audit, the NRC staff reviewed a sample of Braidwood regulatory commitments, associated tracking and close-out documentation, and the following commitment management program procedures: (1) Exelon Nuclear Procedure LS-AA-110, "Commitment Management," Revision 7, and (2) Exelon Nuclear Procedure LS-AA-110-1001, "Commitment Tracking Program T&RM, for Use with PassPort," Revision 5.

The audit consisted of two major parts: (1) verification of the licensee's management and implementation of regulatory commitments, and (2) verification of the licensee's program for managing changes to regulatory commitments.

Enclosure

2.1 Verification of Licensee's Management and Implementation of Commitments

The primary focus of this part of the audit is to confirm that the licensee has managed and implemented commitments made to the NRC as part of past licensing actions/activities in accordance with NRC guidance and approved plant procedures. 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

Prior to the audit, in order to generate a list of items for the audit, the NRC staff performed ADAMS searches for commitments and reviewed summary reports from the licensee's commitment tracking database. From the results of these searches, the NRC staff selected a representative sample of regulatory commitments to audit. The sample covered a variety of systems, disciplines, commitment changes, and licensing actions.

The sample 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).
- (3) Commitments made as an internal reminder to take actions to comply with existing regulatory requirements such as regulations, technical specifications, and the updated final safety analysis report.

The specific closed, open, and changed commitments selected for the audit are listed in the tables at the end of this report.

2.1.2 Audit Results

The NRC staff reviewed Procedures LS-AA-110 and LS-AA-110-1001 to determine whether the licensee had an effective program in place to identify, manage, and close commitments made to the NRC as part of licensing actions/activities. In addition, the NRC staff reviewed the selected sample of open and closed commitments to confirm that the licensee had implemented closed commitments appropriately, and that commitments still open had been captured in an effective program for future implementation. In addition to the above-cited procedures, the NRC staff reviewed relevant reports and summary sheets providing the status of each commitment, tracking and change forms, and associated documentation, as appropriate (e.g., plant procedures, examination records, and/or other plant documentation).

The NRC staff compared the guidance in procedures LS-AA-110 and LS-AA-110-1001 to the guidance in NEI 99-04. As a result of this comparison, the NRC staff found that the Exelon procedures were consistent with the NEI guidance for identifying, managing, and closing commitments. The NRC staff also found that roles and responsibilities, processes, and metrics were clearly identified in the Exelon procedures. In late 2007, the licensee added a provision to

LS-AA-110 for an annual review and assessment of the commitment management program, which goes a step beyond the guidance NEI 99-04. The first annual assessment for Braidwood was performed in December 2008 and the second annual assessment was performed in December 2009. During the audit, the NRC staff reviewed the documentation for these assessments and concluded that the assessments fully met the guidance in LS-AA-110.

The licensee's commitments are tracked in a computer database called PassPort. Based on reports provided by the licensee and on queries of the PassPort database during the audit, the NRC staff found that PassPort is able to provide the necessary information (e.g., summary of the commitment, commitment type, lead department, responsible individual, due date, extensions, closure method and date, and associated historical information) to effectively manage regulatory commitments.

The NRC staff reviewed the documentation associated with the sampled closed regulatory commitments, particularly plant procedures that had been revised as a result of the commitments, and found that the commitments reviewed had been closed in a manner that fully satisfied the commitments made to the NRC. The NRC staff noted that the method of linking specific changes in procedures to specific regulatory commitments had improved over time, resulting in excellent traceability in the most recently-revised procedures. The results of the NRC staff's review of closed regulatory commitments are summarized in Table 1.

The NRC staff found that the licensee's commitment tracking program had captured the sampled open regulatory commitments in sufficient detail to clearly identify the due date, responsible party, and necessary steps/actions required to fully close out the commitment. The results of the NRC staff's review of open regulatory commitments are summarized in Table 2.

2.2 Verification of the Licensee's Program for Managing 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. Accordingly, the NRC staff compared procedure LS-AA-110 to NEI 99-04 to determine whether the procedure is consistent with the guidance in NEI 99-04 for evaluating and reporting changes to regulatory commitments. Also, the NRC staff reviewed the documentation associated with a sample of commitment changes.

2.2.1 Audit Results

The NRC staff found that LS-AA-110 follows closely the guidance of NEI 99-04. The NRC staff concludes that the procedure used by the licensee to manage commitment changes is appropriate.

The NRC staff observed that the licensee had complete and accurate records, and had documented the sampled commitment changes, appropriately.

The results of the NRC staff's review of changed regulatory commitments are summarized in Table 3.

3.0 CONCLUSION

The NRC staff concludes, based on this audit, that: (1) the licensee has an effective program for managing and implementing regulatory commitments, and (2) the licensee has an effective program for managing changes to regulatory commitment.

4.0 LICENSEE PERSONNEL CONTACTED FOR THIS AUDIT

Lydia Dworakowski

Principal Contributor: M. David

Date: October 21, 2010

Table 1: Audited Closed Commitments

Assignment Report (AR) Number	Summary Description	Comments
00529958-02	AREVA fuel assemblies will meet AREVA's own mechanical and thermal-hydraulic limits per Topical Report BAW-10239(P)(A) and other approved methodologies for Unit 1, prior to Cycle 15.	No issues noted.
00562197-02	EGC will implement administrative controls to ensure that activities that degrade the availability of the reactor coolant system pressure relief system, auxiliary feedwater, anticipated mitigating system actuation circuitry, or turbine trip should not be scheduled when a logic train or an reactor trip breaker train is inoperable for maintenance.	No issues noted.
00762321-05	For steam generator (SG) tube integrity assessments, the ratio of 2.5 will be used in the completion of both the condition monitoring (CM) assessment and operational assessment (OA) upon implementation of the SG tube interim alternate repair criteria (IARC). This is required to be included in the preliminary CM and OA to be completed prior to entering Mode 4 following implementation of the IARC at Unit 2, during refueling outage 13.	No issues noted.
00762321-06	For SG tube integrity assessments, the ratio of 2.5 will be used in the completion of both the CM and OA upon implementation of the SG tube IARC. This is required to be included in the final CM and OA to be completed within 90 days following implementation of the IARC at Unit 2, during refueling outage 13.	No issues noted.
00766295-01	EGC and AmerGen will implement the 10 CFR Part 26, Subpart I, requirements for managing fatigue at each operating nuclear facility, concurrently with implementation of the technical specification (TS) amendment to remove work hour limitations from TS.	No issues noted.

Table 1: Audited Closed Commitments (Continued)

Assignment Report (AR) Number	Summary Description	Comments
00794251-01	Complete the detailed walkdowns of Unit 1 inaccessible piping sections of Generic Letter (GL) 2008-01 subject systems, prior to startup from refueling outage 14.	No issues noted.
00833259-05	EGC will revise periodic venting procedures for the GL 2008-01 subject systems to include enhanced acceptance criteria and requirements to perform ultrasonic tests on a graded approach as part of venting verifications of accessible high points.	No issues noted.
00931910-08	EGC commits to perform a one-time verification of the tube expansion to locate any significant deviations in the distance from the top of the tubesheet to the bottom of the expansion transition. If any deviations are found, the condition will be entered into the corrective action program and dispositioned. Additionally, EGC commits to notify the Nuclear Regulatory Commission of significant deviations. Applicable to Unit 2 refueling outage 14.	No issues noted.
00952078-06	Establish guarantee, as allowed by NRC regulations, for any difference in funding assurance for Braidwood Station, Units 1 and 2, and Byron Station, Units 1 and 2, based on site-specific SAFSTOR decommissioning cost estimates and decommissioning trust fund values as of December 31, 2009.	No issues noted.

Table 2: Audited Open Commitments

Assignment Report (AR) Number	Summary Description	Comments
00622521-05	Subsequent inservice examination of the structural weld overlays on the Unit 1 pressurizer will be in accordance with American Society of Mechanical Engineers (ASME) Section XI, Appendix Q, Q-4300 or alternate schedules as/if mandated in future NRC regulations.	No issues noted.
01082765-04	Complete the design-basis vehicle bomb analysis.	No issues noted.

Table 3: Audited Commitment Changes

Commitment Change Number	Summary Description	Comments
2008-01	Include overtime controls and guidelines to meet the requirements of Generic Letter 82-12, "Nuclear Power Plant Staff Working Hours," in procedure RS-AA-119.	Commitment deletion was justified satisfactorily.
2008-02	Revise procedures to record check valve back-leakage using appropriate flow instrumentation during quarterly ASME surveillances to trend check valve condition.	Commitment deletion was justified satisfactorily.
2009-01	Perform periodic checks of certain diesel generator components.	Commitment deletion was justified satisfactorily.
2009-03	Perform a chlorine survey and associated evaluations every 3 years to ensure the risk to control room personnel from any potential chlorine accident is maintained sufficiently small.	Commitment deletion was justified satisfactorily.
2009-04	Monitor the Cathodic Protection System via system-specific performance criteria.	Commitment deletion was justified satisfactorily.
2010-01	Revise certification guide and procedures to provide more specific guidance to prevent errors during fuel movement.	Commitment deletion was justified satisfactorily.

M. Pacilio

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If you have any questions, please have your staff contact me at (301) 415-1547.

Sincerely,

/RA/

Marshall J. David, Senior Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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