



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

September 13, 2012

Mr. Michael J. Pacilio
Senior Vice President
Exelon Generation Company, LLC
President and Chief Nuclear Officer (CNO)
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: BYRON STATION, UNIT NOS. 1 AND 2 – AUDIT OF THE LICENSEE'S
MANAGEMENT OF REGULATORY COMMITMENTS (TAC NOS. ME7128
AND ME7129)

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 Office of Nuclear Reactor Regulation has instructed staff to perform an audit of licensees' commitment management programs once every three 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.

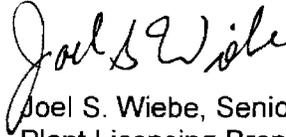
An audit of the commitment management program of Exelon Generation Company, LLC (Exelon, the licensee) for Byron Station, Unit Nos. 1 and 2 (Byron) was performed at the site on August 15 and August 16, 2012. Based on the audit, the NRC staff concluded that: (1) the licensee has implemented NRC commitments in a timely manner; and (2) the licensee has implemented an effective program for managing NRC commitment changes. Details of the audit are set forth in the enclosed audit report.

M. Pacilio

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No response to this letter is required. The NRC staff appreciates the resources that were made available by your staff during the audit. If you have any questions, please have your staff contact me at (301) 415-6606.

Sincerely,

A handwritten signature in black ink that reads "Joel S. Wiebe". The signature is written in a cursive style with a large initial "J" and "W".

Joel S. Wiebe, Senior Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-454 and STN 50-455

Enclosure: Regulatory Commitments Audit Report

cc w/encl: ListServ

AUDIT REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

LICENSEE MANAGEMENT OF REGULATORY COMMITMENTS

BYRON STATION, UNIT NOS. 1 AND 2

DOCKET NOS. STN 50-454 AND STN 50-455

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 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 Office of Nuclear Reactor Regulation (NRR) has instructed staff to perform an audit of licensees' commitment management programs once every three 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. NRR guidelines direct NRR's project managers (PM) 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 three years. However, due to PM staffing issues (e.g. reassignments, high workload, and staff shortages) and continuing resolution travel restrictions, the audit exceeded the three year schedule. This extended audit schedule was approved by NRC management.

2.0 AUDIT PROCEDURE AND RESULTS

The audit of the commitment management program of Exelon Generation Company, LLC (Exelon, the licensee) for Byron Station, Unit Nos. 1 and 2 (Byron), was performed at the site on August 15 and August 16, 2012. The NRC staff reviewed commitments that have been made since the previous audit in April 2008. In accordance with NRC Office of Nuclear Reactor Regulation's Office Instruction LIC-105, "Managing Regulatory Commitments Made by Licensees to the NRC," audits consist of two major parts: (1) verification of the licensee's program for managing implementation of NRC commitments, and (2) verification of the licensee's program for managing changes to NRC commitments.

2.1 Audit Scope

LIC-105 limits the audit of commitments to those made in writing to the NRC as a result of past licensing actions (license amendments, relief requests, exemptions, etc.) or licensing activities (bulletins, generic letters, etc.). Accordingly, the audit excluded commitments integrated into the

updated final safety analysis report, quality assurance program, site security plan, emergency plan, or other documents governed by a change-control mechanism contained in regulations such as, Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Sections 50.54 or 50.59

To generate a list of items for the audit, the NRC staff performed public, web-based Agencywide Documents Access and Management System (ADAMS) searches for commitments and requested summary reports from the licensee's commitment tracking database. From the results of these searches, the NRC staff selected a representative sample of the regulatory commitments to audit. The sample covered a variety of systems, disciplines, commitment changes, and licensing actions important to the NRC staff's decision-making process.

During the on-site phase of the audit, the licensee provided documentation to support the NRC staff's audit in each of the sample areas and provided copies of relevant commitment management procedures. The licensee's documentation included reports and summary sheets providing the status of each commitment, tracking and change forms, and appropriate backup documentation, as needed (e.g., plant procedures, and/or other plant documentation).

The attached tables, Table 1: "Audited Closed Commitments", Table 2: "Audited Open Commitments", and Table 3: "Audited Reported Commitment Changes", list the licensee's commitments audited by the NRC staff.

2.2 Verification of Licensee's Program for Managing Implementation of NRC Commitments

For this part of the audit, the NRC staff reviewed relevant procedures 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. The procedures reviewed were: (1) Exelon Nuclear Procedure LS-AA-110, "Commitment Management," Revision 8, and (2) Exelon Nuclear Procedure LS-AA-110-1001, "Commitment Tracking Program T&RM, for Use with PassPort," Revision 6. The NRC staff reviewed a sample of open and closed commitments, selected as discussed above, to confirm that the licensee had implemented and closed commitments appropriately. The staff also confirmed that commitments still open had been captured in an effective program for future implementation.

2.2.1 Audit Results – Implementation of NRC Commitments

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 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. The NRC staff noted an enhancement to LS-AA-110 with Revision 8, as compared to prior revisions. In Revision 8, the licensee added guidance regarding the establishment of a Sunset Clause to establish a time period to evaluate the effectiveness of commitments. The licensee also added a step to the commitment change process to use the Regulatory Commitment Change Screening Form (included as Attachment 4 in LS-AA-110) for screening/evaluating a) changes that do not modify the method of commitment implementation and b) changes to items that are not considered regulatory commitments. The form also provides a process to remove items that are not considered regulatory commitments from the commitment tracking program.

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 NRC commitments.

For this part of the audit, the NRC staff reviewed the specific commitments listed in Tables 1 and 2. The commitments reviewed involved Orders, generic letters, power uprates, relief requests, and license amendments. During the audit, the NRC staff reviewed the site records associated with these commitments to determine whether the licensee had implemented and closed the commitments appropriately, and whether the licensee had established a success path for future implementation of the open commitments.

The NRC staff reviewed the documentation associated with the closed regulatory commitments (i.e., 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 traceability back to the original commitment was appropriately identified in the close-out document. 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 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.

2.3 Verification of Licensee's Program for Managing Changes to NRC Commitments

For this part of the audit, the NRC staff reviewed licensee procedure LS-AA-110, Revision 8, "Commitment Management," against NEI 99-04. Section 4.6 of the procedure states that the commitment change process is consistent with the guidance provided in NEI 99-04. As described in LS-AA-110, if it is determined that a commitment is no longer valid, or that there is a better way of performing the activity, then the commitment can be changed through the commitment change process. Attachment 1, "Commitment Change Evaluation Form," Attachment 2, "Decision Making Guidance for Proposed Commitment Changes," and Attachment 4, "Regulatory Commitment Change Screening Form," of LS-AA-110, provide detailed instructions regarding making changes to a commitment, including the need to inform the NRC, and contain a data sheet to document the evaluation and approval of changes.

2.3.1 Audit Results – Changes to NRC Commitments

The NRC staff found that LS-AA-110 closely follows the guidance of NEI 99-04. The NRC staff reviewed the documentation associated with the changed commitments. The NRC staff concluded that the procedure used by the licensee to manage commitment changes is appropriate and effective. The results of the NRC staffs review was that Byron had complete records and documented commitment changes, appropriately.

3.0 CONCLUSION

Based on the above audit findings, the NRC staff concludes that the licensee has implemented an effective program for managing NRC commitments. Specifically, the licensee has

implemented NRC commitments on a timely basis, and the licensee's program for managing changes to NRC commitments is effective.

4.0 LICENSEE PERSONNEL CONTACTED FOR THIS AUDIT

Tracey Hulbert
Joseph Langan

Principal Contributors: P. Hernandez, NRR
J. Wiebe, NRR

Date of issuance: September 13, 2012

Table 1: Audited Closed Commitments		
Assignment Report (AR) Number	Description	Comments
76436702	Complete detailed walkdowns of Unit 2 inaccessible piping sections of systems subject to Generic Letter (GL) 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems.	No issues noted.
93304305	Steam Generator (SG) Alternate Repair Criteria for outage number B2R15 - perform one-time verification of the tube expansion to locate any significant deviations.	No issues noted.
93304301	Outage B2R15 – Mode 4 – License Amendment Request (LAR) – SG Permanent Alternate Repair Criteria - Perform SG eddy current inspection for slippage monitoring	No issues noted.
110239809*	The analysis of digital computer systems performed and results documented as required.	Records for this file list it as closed and reference the AR and details of the cancellation. No issues noted.
92401507	LAR – Ultimate Heat Sink (UHS) Compliance backfit – revise appropriate procedures	No issues noted.
92401508	UHS Administrative temperature limit condition – revise appropriate procedures	No issues noted.
96792239	Maintain the fire detection systems for the Fire Zones during replacement of two of four Essential Service Water System (SX) pump suction isolation valves.	No issues noted.
53099001	The licensee will perform crack growth analysis for reactor pressure vessel head penetrations based on an acceptable crack growth rate formula.	No issues noted.

* **NOTE:** The item was listed as closed and was cross referenced with item 1223694-10 which cancelled the item.

Table 2: Audited Open Commitments

Assignment Report (AR) Number	Description	Comments
125141703	Measurement Uncertainty Recapture Power Uprate LAR - implements modifications to support Steam Generator Tube Rupture and Margin To Overfill analysis single failure considerations	No issues noted.
134264302	NRC Info request – estimated effect on peak cladding temperature resulting from thermal conductivity degradation in Emergency Core Cooling System.	No issues noted.
119333701	Outage B1R18 In-service inspection (ISI) Relief Request I3R19 – notify NRC of new indication(s) in the penetration nozzle or J-groove weld beneath a seal weld repair, or new linear indications in the seal weld repair, prior to commencing repair activities	No issues noted.
122369410	Approved Cyber security plan	No issues noted.
125989901	Submit a LAR to revise Technical Specification (TS) 3.3.1 – relating to the conditions for which all applicable functions have bypass test capability installed and revise TS as appropriate.	No issues noted.

Table 3: Audited Reported Commitment Changes

Commitment Change Number	Description	Comments
10-011	This was needed for Independent Spent Fuel Storage Installation (ISFSI) crane issue regarding single proof loading system – NUREG 0554/0612 issue.	Commitment change package was completed satisfactorily.
12-001	Revise surveillances to reflect practice of entering a TS Limiting Condition of Operation Action Requirement (LCOAR) when a valve stroke time exceeds the limiting value in the procedure, even though the value is less than the TS limit (GL1989-01).	Commitment deletion was justified satisfactorily.
12-011	Procedure Byron Technical Specification (BVS) XPT-15 was revised to add acceptance criteria & guidance to notify shift manager if acceptance criteria are not met. BVS XPT-15 is being replaced with Byron Instrument Maintenance Surveillance Requirement (BISR) Procedure 3.1.10-2. Location of commitment is moved.	Commitment change package was completed satisfactorily.

M. Pacilio

-2-

No response to this letter is required. The NRC staff appreciates the resources that were made available by your staff during the audit. If you have any questions, please have your staff contact me at (301) 415-6606.

Sincerely,

/ RA /

Joel S. Wiebe, Senior Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-454 and STN 50-455

Enclosure: Regulatory Commitments Audit Report

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