

September 5, 2007

Mr. Christopher M. Crane
President and Chief Nuclear Officer
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 - AUDIT OF
LICENSEE'S MANAGEMENT OF REGULATORY COMMITMENTS
(TAC NOS. MD2431 AND MD2432)

Dear Mr. Crane:

Once every 3 years, the U. S. Nuclear Regulatory Commission (NRC) staff is required to audit a licensee's commitment management program in accordance with the NRC Office of Nuclear Reactor Regulation Office Instruction LIC-105, "Managing Regulatory Commitments Made by Licensees to the NRC" (Agencywide Documents Access and Management Systems Accession No. ML042320463). LIC-105 provides the NRC staff and its stakeholders with a common reference for handling regulatory commitments made to the NRC staff by licensees for commercial nuclear reactors. The guidance is consistent with the industry guidance prepared by the Nuclear Energy Institute (NEI), NEI 99-04, "Guidance for Managing NRC Commitment Changes."

An audit of the Quad Cities Nuclear Power Station, Units 1 and 2 (QCNPS) commitment management program was performed at the site during the period June 25, 2007, through June 29, 2007. Concerns regarding the thresholds for identifying regulatory commitments and including them in the commitment tracking system were discussed with your staff and are included in the enclosed audit report. The NRC staff concludes, based on the audit, that (1) QCNPS has implemented NRC commitments on a timely basis, and (2) QCNPS has implemented a program for managing NRC commitment changes.

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) 415-5735.

Sincerely,

/RA/

Meghan M. Thorpe-Kavanaugh, Project Manager
Plant Licensing Branch III-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-254 and 50-265

Enclosure: Audit Report

cc w/encl: See next page

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AUDIT REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

LICENSEE MANAGEMENT OF REGULATORY COMMITMENTS

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2

DOCKET NOS. 50-254 AND 50-265

1.0 INTRODUCTION AND BACKGROUND

On May 27, 2003, the U.S. Nuclear Regulatory Commission (NRC) published the Office of Nuclear Reactor Regulation (NRR) Office Instruction LIC-105, "Managing Regulatory Commitments Made by Licensees to the NRC." LIC-105 provides the NRC staff and its stakeholders a common reference for handling regulatory commitments made to the NRC staff by licensees for commercial nuclear reactors. The guidance is consistent with the industry guidance issued by the Nuclear Energy Institute (NEI) in NEI 99-04, "Guidance for Managing NRC Commitment Changes." The current revision to LIC-105 is publicly available electronically from the Agencywide Documents Access and Management System (ADAMS) (Accession No. ML042320463).

According to LIC-105, which cites the definition from NEI-99-04, a "regulatory commitment" is 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. LIC-105 directs 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 audit was performed at the Quad Cities Nuclear Power Station, Units 1 and 2 (QCNPS) during the period June 25, 2007, through June 29, 2007. This was the first commitment management audit for QCNPS. The NRC staff reviewed commitments made during the period approximately 3 years prior to the audit. In accordance with LIC-105, audits consist 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 was to confirm that the licensee had implemented those commitments made to the NRC as part of past licensing actions/activities. For commitments not yet implemented, the NRC staff aimed to ascertain that the commitments had been captured in an effective program for future implementation.

LIC-105 limits the audit of regulatory commitments to those made in writing to the NRC as a result of past licensing actions or licensing activities (bulletins, generic letters, etc.). Accordingly, commitments integrated into the final safety analysis report (FSAR), quality

Enclosure

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, Section 50.59 or 10 CFR 50.54, are excluded from the audit.

Before the audit, the NRC staff searched ADAMS for the licensee's licensing actions and licensing activity submittals dated in the last 3 years. The NRC staff used the criteria in LIC-105 to select 10 regulatory commitments. Additionally, the NRC staff asked the licensee to provide a list of completed regulatory commitments for the past 3 years. From this list, the NRC staff chose an additional 10 items. The results of those items are shown in Table 1 entitled, "Audited Closed Commitments" of the attachment. Additionally, the NRC staff requested that the licensee provide a list of current open regulatory commitments. From this list, the NRC staff randomly chose five items to review to ensure that they had been captured in an effective program for implementation. These results are shown in Table 2 of the attachment, entitled, "Audited Open Commitments."

In general, the NRC staff found that the licensee's commitment tracking program had implemented the regulatory commitments. The NRC staff had several observations regarding the commitment tracking database and the implementation of commitments as summarized in the following sections. Additional information regarding these observations can be found in the attachment.

2.1.1 Commitment Tracking Database Program

The licensee's commitments are tracked in a computer database called PassPort Action Tracking Program (PassPort), as documented in LS-AA-110-1001, Revision 2, "Exelon's Commitment Tracking Program T&RM." PassPort is a comprehensive program including action tracking, corrective actions, issue reports, and work planning in addition to commitment tracking database (CTD).

The established process for identification and implementation of commitments, as described in LA-AA-110-1001, begins with a review of appropriate documents for commitments and generation of PassPort Action Tracking Items (labeled as type "RCMT"). Following identification, the licensee enters committed due dates (i.e., those committed in formal documentation) or establishes a due date as appropriate. These items are then assigned to the appropriate functional area manager for implementation. Once implementation is complete, the commitment status can be changed to "complete." Closure of a commitment requires completed actions such as an implemented modification or issued procedure revision. The CTD maintains a record of the required action, responsible party, status, due dates, and progress notes.

The NRC staff found PassPort (1) adequately tracks commitments and, (2) provides an adequate method of linking together the summary of the issue, the action type (e.g., RCMT), the lead department, the responsible individual, due date, and extensions when used in accordance with the procedure. However, the NRC staff observed several limitations regarding PassPort's tracking of regulatory commitments.

For example, PassPort does not differentiate between regulatory commitments and non-regulatory commitments or between programmatic and one-time action commitments (i.e. the label RCMT is used for all commitments). LS-AA-110 "Commitment Management," states the purpose of the procedure is for "identification of regulatory commitments and their attributes," and is applicable to "regulatory commitments that are programmatic or one-time actions that Exelon/PSEG Nuclear commits to the NRC." As noted in Table 1, there are several items listed that are currently being tracked as regulatory commitments that do not meet the definition of a regulatory commitment provided in LS-AA-110.

Additionally, the NRC staff observed that PassPort currently does not provide time-sensitive recording for entries into the system making it unable to decipher when an action has been changed or completed. The current system allows the user to change the status of an item from "in progress" to "complete" without an associated date. Moreover, the current implementation of commitment tracking in PassPort does not utilize the completion note section. This affects the traceability of regulatory commitments in the CTD.

2.1.2 Audit Results - Implementation of Commitments

The NRC staff reviewed selected reports generated by the CTD program for commitments to evaluate the status of completion. Table 1 provides details of closed commitments and Table 2 provides details of open commitments. The following sections summarize the staff's observations and results of the audited commitments.

While the licensee implemented the majority of the above stated regulatory commitments, the NRC staff noted three instances of regulatory commitments related to license amendments that were not captured in the commitment tracking database. Each of these regulatory commitments were made in a license amendment request and were relied upon by the NRC staff as part of approval for the proposed action. As stated in LIC-105, "the NRC expects licensees to honor, in good faith, commitments that have a safety or regulatory purpose." These three instances have been discussed with the licensee to ensure regulatory commitments are captured in the CTD and completed in a timely manner. The licensee issued a condition report as a result of these discussions. The NRC staff found these actions acceptable to ensure completion of the regulatory commitments. Further details of these instances are discussed in the attachment.

Based on the audited open and closed commitments, some difficulty appeared to exist in determining the threshold of a regulatory commitment. The NRC staff observed 12 instances that did not meet the definition of a regulatory commitment. Specifically, as defined in the NEI 99-04 guidance, a "regulatory commitment means 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." Also, LS-AA-110 defines a non-regulatory commitment as "an explicit statement to take a specific action agreed to or volunteered by Exelon/PSEG to an external organization," and further states that "NRC commitments are not non-regulatory commitments."

Additionally, the NRC staff observed items labeled and tracked within the commitment management program that were obligations. As defined in NEI 99-04, an obligation "refers to any condition or action that is a legally binding requirement imposed on licensees through applicable rules, regulations, orders and licenses (including technical specifications and license conditions)." For example, the licensee had an open commitment to "submit biennial

50.59/92.48 report.” The reporting requirement from 10 CFR 50.59(d)(2) states “the licensee shall submit, as specified in § [Section] 50.4, a report containing a brief description of any changes, tests, and experiments, including a summary of the evaluation of each. A report must be submitted at intervals not to exceed 24 months.” This is important because there is the potential for the licensee to change a regulation which cannot be changed using the commitment management program.

With regard to the implementation of commitments, the NRC staff found that, in general, the licensee had implemented the majority of the above stated regulatory commitments. Those regulatory commitments that were determined by the audit to not be captured in the CTD have been addressed by the licensee and the NRC staff found these actions acceptable.

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

The NRC staff reviewed the licensee’s procedure LS-AA-110, Revision 5, “Commitment Management,” against NEI 99-04. In particular, Section 4.5 of the procedure states the commitment change process is consistent with the guidance provided by NEI-99-04. As described in procedure LS-AA-110, “if it is determined that a commitment is no longer valid, or 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,” and Attachment 2, “Decision Making Guidance for Proposed Commitment Changes” of LS-AA-110, Revision 5, provide detailed instructions regarding making changes to a commitment, including the need to inform the NRC, and contains a data sheet to document the evaluation and approval of changes.

In general, 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 commitments is appropriate and generally effective. Also, the audit determined that in general the QCNPS had records of commitments and documented commitment changes appropriately. However, the NRC staff had several observations regarding the maintenance of records, and the appropriate use of commitment changes as summarized in the following sections. Additional information regarding these observations can be found in the attachment.

2.2.1 Maintenance of Records

The NRC staff observed that the commitment tracking database entries lacked sufficient detail documenting completion of an item. Specifically, several commitments were closed prior to the actual completion of the commitment. LS-AA-110 states “the commitment tracking database should contain sufficient information to adequately define the commitment. At a minimum, the database should contain the following: a description of the commitment, applicable site(s), source document for the commitment (including title and document date), all implementing documents (including document number and title), response organization for implementing the commitment, and completion date of event (if applicable).” However, many of the items in the licensee’s CTD showed completion of the action when a procedure change was initiated, not when the procedure was approved and implemented.

The NRC staff also observed an inconsistency in the handling of historical regulatory commitments controlled under previous CTDs and the current database. For example, some

regulatory commitments reviewed spanned the use of both types of databases, however, items from previous databases that were still applicable were not captured in the current commitment tracking database. Currently, LS-AA-110 provides guidance for identifying historical commitments not being tracked, but does not provide clear guidance regarding identifying and handling of commitments across successor systems. Additionally, PassPort does not provide an institutional memory over time and across successor systems performing similar functions such as NTS database. This inconsistency affects the traceability of regulatory commitments.

2.2.2 Audit Results - Commitment Changes

In the past 3 years, the licensee had reported six commitment changes. Since none of the changes were evaluated as needing prior NRC notification, they were included in annual summary reports. The NRC staff reviewed all of these reported change evaluations and found that they had been properly documented as required by LS-AA-110. Additionally, the NRC staff reviewed a sample of the non-reported changes for the past 3 years and found that they had been properly documented as well. Notwithstanding, the NRC staff made the following observations contained in Table 3 and Table 4, of the attachment and summarized below.

An inconsistency in identification of regulatory commitments was noted in that corrective actions identified in Licensee Event Reports (LERs) were included as regulatory commitments. As stated in LS-AA-110 and further described in Attachment 2, Decision 3, “for corrective actions identified in a Notice of Violation or Licensee Event Report (LER), the specific method(s) used to restore compliance with an obligation is not normally considered a Regulatory Commitment. The regulatory commitment in this instance is the promise to restore compliance with the violated obligation.”

Traceability of commitments in the licensee’s procedure revisions is achieved by use of the symbol “**CM-#**” next to affected procedure steps. The NRC staff observed that for some of the changed commitments, this symbol was not used to mark the revised commitment in the revised procedure. As stated in procedure LS-AA-110, traceability through “annotation is one of the most important aspects of Commitment Management in that it will help preclude inadvertent deletion of commitments from implementing documents.” Also, commitments are listed in the reference section of the implementing procedures including the corresponding source document and commitment tracking database number. This process is captured in procedure AD-AA-101-1002, “Writer’s Guide and Process Guide for Procedures and T&RM.” However, NRC staff noted that for all of the reported and non-reported commitment changes, there was not an associated CTD entry for the revised commitment. The combination of these observations create the potential for new commitments that are the result of changed regulatory commitments to be inappropriately captured or not captured at all.

With regard to commitment changes, the NRC staff found in general that the licensee had records of commitments and documented commitment changes appropriately. The NRC staff’s observations were discussed with and promptly addressed by the licensee.

3.0 CONCLUSION

The NRC staff made several observations during the audit that were discussed with the licensee. Also, concerns regarding the thresholds for identifying regulatory commitments and including them in the commitment tracking system were discussed with the licensee. In response, the licensee initiated a condition report for appropriate corrective actions. The NRC staff found these actions acceptable. Thus, the NRC staff concludes, based on the audit, that (1) QCNPS has implemented NRC commitments on a timely basis, and (2) QCNPS has implemented a program for managing NRC commitment change.

4.0 LICENSEE PERSONNEL CONTACTED FOR THIS AUDIT

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Attachment: As stated

Date: September 5, 2007