



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

October 3, 2008

Mr. Charles G. Pardee
President and Chief Nuclear Officer
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. MD8321 AND MD8322)

Dear Mr. Pardee:

The Nuclear Regulatory Commission (NRC) staff is required to audit a licensee's commitment management program once every 3 years, in accordance with the NRC Office of Nuclear Reactor Regulation Office Instruction LIC-105, "Managing Regulatory Commitments Made by Licensees to the NRC." 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) in NEI 99-04, "Guidance for Managing NRC Commitment Changes."

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 from April 22 through April 24, 2008. Based on this audit, the NRC staff concludes that: (1) the licensee has implemented NRC commitments in a timely manner for Byron; and (2) the licensee has generally implemented an effective program for managing NRC commitment changes for Byron. A copy of the audit report is enclosed.

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) 415-1547.

Sincerely,

A handwritten signature in black ink, appearing to read "Marshall J. David".

Marshall J. David, 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: Distribution via ListServ

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UNITED STATES
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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

On September 7, 2004, 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."

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 NRC Office of Nuclear Reactor Regulation's 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 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 from April 22 through April 24, 2008. 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 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 (or those that should have been 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, Section 50.54 or Section 50.59.

Enclosure

Prior to the audit, in order 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 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 also 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, examination records, and/or other plant documentation).

Tables 1 through 3 list the licensee's commitments that were 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 6, and (2) Exelon Nuclear Procedure LS-AA-110-1001, "Commitment Tracking Program T&RM, for Use with PassPort," Revision 4. In addition, the NRC staff reviewed a sample of open and closed commitments, selected as discussed above, 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.

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 Nuclear 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 6, as compared to prior revisions. In Revision 6, the licensee added a provision for an annual review and assessment of the commitment management program; the first such assessment for Byron is planned for the first quarter of 2009 to cover calendar year 2008.

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 Table 1 (closed commitments) and Table 2 (open commitments). The commitments reviewed involved orders, generic letters, bulletins, confirmatory action letters, and license amendments. During

the audit, the NRC staff reviewed the site records associated with these commitments to determine whether the licensee had implemented the closed 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, 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. However, the NRC staff identified several instances where the traceability back to the original commitment was missing in the close-out document and where there were minor inconsistencies in commitment numbering among documents associated with multiple commitments. These instances are noted with the summary of the overall results of the NRC staff's review of closed regulatory commitments in Table 1. The licensee volunteered to document these instances in the Byron corrective action program for evaluation.

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

The NRC staff reviewed licensee procedure LS-AA-110, Revision 6, "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," and Attachment 2, "Decision Making Guidance for Proposed Commitment Changes," 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 follows closely the guidance of NEI 99-04. In fact, minor inconsistencies between LS-AA-110 and NEI 99-04, identified during previous audits (Braidwood – ADAMS Accession No. ML072000343, and Quad Cities – ADAMS Accession No. ML072110011) had been resolved in Revision 6 of LS-AA-110. The NRC staff concludes that the procedure used by the licensee to manage commitment changes is appropriate and generally effective.

The NRC staff reviewed the documentation associated with the changed commitments. The NRC staff observed that, overall, Byron had complete records and documented commitment changes, appropriately. The NRC staff identified one instance where the Commitment Change Evaluation Form, completed on December 6, 2006, cited three procedures in which the subject commitment had been institutionalized; however, one of the three procedures had been deleted in 1987. The NRC staff considers this to be a problem with low significance, with no further action warranted, because the commitment is fully institutionalized in the other two cited

procedures. This instance is noted with the summary of the overall results of the NRC staff's review of changed regulatory commitments in Table 3.

3.0 CONCLUSION

Based on the above audit findings, the NRC staff concludes that the licensee has generally 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. However, as noted above and as listed in Table 1, the NRC staff identified several instances where the traceability back to the original commitment was missing in the close-out document and where there were minor inconsistencies in commitment numbering among documents associated with multiple commitments.

4.0 LICENSEE PERSONNEL CONTACTED FOR THIS AUDIT

William Grundman
Joseph Langan
Tracey Hulbert

Principal Contributors: A. Billoch, NRR
M. David, NRR

Date: October 3, 2008

Table 1: Audited Closed Commitments

| Assignment Report (AR) Number | Description | Comments |
|-------------------------------|--|---|
| 236364-08 | NRC Bulletin 2003-01: Provide specific guidance to TSC personnel on sources of make-up water for RWST refill. | Sources of make-up water for RWST refill are documented in TSC guidance, but commitment is not cited in guidance. (Traceability issue.) |
| 282077-15 | GL 2004-02: Phase 2 analysis for downstream effects - assure downstream effect analysis is complete. | No issues noted. |
| 354451-11 | NRC Bulletin 2005-02: EP for security related events - procedure change. | Commitment is incorporated into security procedure, but incorrect commitment number cited. (Traceability issue.) |
| 322514-25 | Commitment associated with AST LAR: Specify that within 1 hour of a spent fuel accident air flow will be established in the proper direction in the containment and FHB. | Commitment is incorporated into emergency procedure, except for the ≤ 1 hour metric; licensee explained to the satisfaction of NRC staff why the ≤ 1 hour metric was not incorporated and why, nevertheless, it will be met with a high degree of confidence. (Intent of commitment was met.) |
| 352618-01 | Control Room Envelope Program: Submit LAR adopting TSTF-448 within 90 days after NRC approval. | No issues noted. |
| 435218-08 | Order EA-03-009 Interim Inspection: Requirements for RPV inspections and description of the as found condition of the RPV during B2R13. | No issues noted. |

Table 1: Audited Closed Commitments (Continued)

| Assignment Report (AR) Number | Description | Comments |
|-------------------------------|---|--|
| 356341-01 | LAR for One-Time S/G Inspection Program: Review and process revisions to procedures, processes and UFSAR to implement one-time S/G inspection program change and commitments. | Commitment is incorporated, but is not cited in the procedure and is incorrectly cited in the close-out AR. (Traceability issue.) |
| 595141-01 | NRC Letter Response RS-07-027 for Alloy 600/82/182 pressurizer materials at Byron - revise procedures to implement enhanced leakage monitoring. | Commitment is incorporated into operating procedures, but corporate commitment (593117) is cited in lieu of Byron commitment. (Traceability issue.) |
| 541428-03 | Security B.5.b, Phase 2: Revise Ops Policy 600-04. | Licensee determined that no change to Ops Policy was required to satisfy commitment, but Ops Policy and close-out AR do not cite commitment. (Traceability issue.) |
| 562336-17 | Commitments associated with RPS/ESFAS LAR: Time extensions - revise procedures. | No issues noted. |

| Table 2: Audited Open Commitments | | |
|--|---|------------------|
| Assignment Report (AR) Number | Description | Comments |
| 282077-57* | Complete GL 2004-02: Downstream effects related modifications to the ECCS throttle valves and the CS cyclone separators prior to the completion of B1R15. | No issues noted. |
| 674907-03 | CAL 1-07-005: Conduct SCWE survey on security force after transitioning to Exelon employees. | No issues noted. |

* **NOTE:** Open when selected, but closed the week before the audit; reviewed as an open commitment.

Table 3: Audited Reported Commitment Changes

| Commitment Change Number | Description | Comments |
|--------------------------|---|--|
| 05-001 | CommEd response to NRC GL 89-13 dated 1/29/90: Commitment to change the flow regime from intermittent to continuous for the periodic operation of the motor driven AF pump. | Commitment change package was completed satisfactorily. |
| 05-003 | LER 97-001-00: Commitment to ensure the RF floor drain system will not clog due to debris in the containment drain. | Commitment change package was completed satisfactorily. |
| 05-009 | Response to GL-89-13: Commitment to modify the system to allow continuous SX flow through the 2A AF heat exchanger. | Commitment deletion was justified satisfactorily. |
| 06-002 | Response to GL-89-13: Commitment to periodically review maintenance practices, procedures, and training for the SX system to ensure adequacy. | Commitment deletion was justified satisfactorily. |
| 06-019 | CommEd response to NRC IN 84-55 dated 9/29/84: Commitment to perform defined maintenance only under certain specific temperature and pressure conditions, and Modes. | Commitment deletion was justified satisfactorily, but the Commit Change Eval Form dated 2006 mentions procedure BMP3300-16, which was deleted in 1987. |
| 06-005 | Diesel Fuel Oil Testing Program: Commitment to perform a 50.59 review before modifying or deleting information from the procedure. | Commitment deletion was justified satisfactorily. |

Table 3: Audited Reported Commitment Changes (Continued)

| Commitment Change Number | Description | Comments |
|--------------------------|--|---|
| 06-006 | Diesel Fuel Oil Tank Cleaning: Commitment to write procedure to clean the outdoor fuel oil storage tanks in accordance with the Improved Technical Specifications. | Commitment deletion was justified satisfactorily. |
| 08-009 | Corrective Action from LER 87-008-00: Commitment to revise procedures to instruct operator to reset ESF signal to control room ventilation system prior to starting supply fan or shutting down makeup unit. | Commitment deletion was justified satisfactorily. |