### September 30, 2013

MEMORANDUM TO: Stephen D. Dingbaum

Assistant Inspector General for Audits

Office of the Inspector General

FROM: Eric J. Leeds, Director /RA/ (Jennifer L. Uhle for)

Office of Nuclear Reactor Regulation

SUBJECT: STATUS OF RECOMMENDATIONS: AUDIT OF THE NRC'S

MANAGEMENT OF LICENSEE COMMITMENTS (OIG-11-A-17)

This memorandum responds to the document dated March 26, 2013,<sup>1</sup> transmitting the Office of the Inspector General's (OIG) analysis and status of the recommendations, as discussed in the U.S. Nuclear Regulatory Commission's (NRC) letter dated March 4, 2013.<sup>2</sup> The OIG audit report dated September 19, 2011,<sup>3</sup> included the following recommendations regarding the NRC's management of licensee commitments:

- (1) Revise the section of LIC-105,<sup>4</sup> "Managing Regulatory Commitments Made by Licensees to the NRC," on conducting triennial commitment management audits to include detailed sampling direction, such as a checklist of sources to be used in identifying a universe of commitments from which to sample.
- (2) Revise LIC-105, "Managing Regulatory Commitments Made by Licensees to the NRC," to include well-defined expectations and guidelines regarding the conduct of commitment management audits. The guidelines should include an expectation that audited commitments are reviewed to ensure that they have been appropriately implemented in the plant facility, procedures, program, or other plant documentation.
- (3) Develop training that sufficiently addresses the definition and use of commitments and provide it to all agency staff involved in reviewing reactor licensee commitments.

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<sup>1</sup> Agencywide Documents Access and Management System (ADAMS) Accession No. ML13085A002.

<sup>&</sup>lt;sup>2</sup> ADAMS Accession No. ML13042A127.

<sup>&</sup>lt;sup>3</sup> ADAMS Accession No. ML112620529.

<sup>&</sup>lt;sup>4</sup> ADAMS Accession No. ML13193A358.

- (4) Identify actions to determine the extent to which commitments that are considered safety significant and/or necessary for approval of proposed licensing actions exist. This could be accomplished by either: (1) The Office of Nuclear Reactor Regulation (NRR) project managers (PMs) identifying any such commitments as part of the triennial commitment management audits, or (2) conducting a review of all existing commitments and identifying any inappropriately applied commitments. Any such commitments should be identified to NRC management for appropriate action.
- (5) Depending on the outcome of the efforts to meet Recommendation 4, develop and utilize a tool for systematically tracking the status of commitments that are deemed safety significant and/or necessary for approval of proposed licensing actions.

The OIG status and review memorandum dated March 26, 2013, states that Recommendations 1, 2, and 4 were previously closed and that Recommendations 3 and 5 remain in resolved status. The OIG memorandum requests that the NRC staff provide an updated status for Recommendations 3 and 5, which is included below.

# **Recommendation 3:**

Develop training that sufficiently addresses the definition and use of commitments and provide it to all agency staff involved in reviewing reactor licensee commitments.

### <u>Updated Status</u>

The NRC staff responded to Recommendation 3 with the following corrective actions and respective due dates:

September 28, 2012: Complete interim training for key staff involved in the commitment management processes.

September 30, 2013: Implement training module on the use of licensee commitments.

The OIG analysis of the NRC staff's proposed corrective actions determined that Recommendation 3 remains resolved.

The NRC staff's updated status letter dated March 4, 2013, discussed the training that regional staff received on March 1, 2012, and June 6, 2012. The Division of Operating Reactor Licensing (DORL) staff received training on July 17, 2012, and the Division of Engineering technical staff received training on September 4, 2012. The Office of the General Counsel (OGC) staff requested the regulatory commitment training presentation materials, because it plans to consider this information in developing OGC-specific training. The Division of License Renewal (DLR) also provided DLR-specific regulatory commitment training to its staff based on discussions and collaborations with DORL staff. The NRR executive management team received a comprehensive briefing on regulatory commitments on September 27, 2012.

In addition, Section 4.1 of Revision 4 of LIC-105, approved on September 10, 2012, <sup>5</sup> includes instructions on the definition and appropriate use of regulatory commitments. LIC-105 was distributed to all NRR staff through an office notice on September 14, 2012. Therefore, NRR considers the corrective action associated with Recommendation 3 and its schedule completion to be met.

DORL has implemented and deployed a training module in iLearn that provides instruction for NRC personnel on the proper identification and use of regulatory commitments made by licensees to the NRC (Course ID-35143: Proper Use of Regulatory Commitments Made by Licensees to the NRC (Web-Based)). The objective of the training is to establish a consistent understanding among all NRC staff involved in reviewing, utilizing, auditing and managing regulatory commitments. Emphasis is placed on determining the types of actions that are appropriate for characterization as regulatory commitments. The training also identifies why, when and how NRC staff may use actions, proposed as regulatory commitments, in such a manner that they are required to be elevated and controlled as legal obligations or incorporated into a mandated licensing document such as a licensee's Updated Final Safety Analysis Report.

This training module was implemented and deployed in iLearn in accordance with the NRR corrective action due by September 30, 2013, to address OIG Recommendation 3. The training is available for use by all NRC staff. Therefore, NRR requests that OIG revise the status of Recommendation 3 from "resolved" to "closed."

NRR is also implementing additional actions to require that DORL PMs complete the training, through iLearn, every 2 years. The NRR technical staff listed below will be required to complete the training, at least once.

- Division of Inspection and Regional Support: Reactor Inspection Branch, Performance Inspection Branch, Operator Licensing and Training Branch, and Operating Experience Branch
- Division of License Renewal: all branches
- Division of Engineering: all branches
- Division of Risk Assessment: all branches
- Division of Policy and Rulemaking: Generic Communications Branch, Licensing Processes Branch, Research and Test Reactors Licensing Branch, and Research and Test Reactors Oversight Branch
- Division of Safety Systems: all branches
- Japan Lessons Learned Directorate: all branches

<sup>&</sup>lt;sup>5</sup> ADAMS Accession No. ML12251A203.

Mitigating Strategies Directorate: all branches

The biennial training requirement is recommended for DORL PMs because they typically issue the final correspondence associated with the NRR-related reviews for the various licensing actions that may include regulatory commitments. The one-time training requirement is considered appropriate for other NRR technical staff to ensure that they are cognizant of the proper use of regulatory commitments when performing reviews and interacting with the licensing staff. As noted above, the training is readily accessible to all NRC staff through iLearn. OGC and the regional offices will be requested to consider the value of the training to their staff.

# **Recommendation 5:**

Depending on the outcome of the efforts to meet Recommendation 4, develop and utilize a tool for systematically tracking the status of commitments that are deemed safety significant and/or necessary for approval of proposed licensing actions.

#### **Updated Status**

The NRC staff responded to Recommendation 5 with the following corrective action and associated due date:

January 31, 2013:

Issue an action review memorandum to the DORL Division Director that compiles the results of the actions from Recommendation 4 for a period of 9 months after the commitment identification memorandum is issued. Include an assessment of the data and recommendations for further actions as needed.

The OIG analysis of the NRC staff's proposed corrective action determined that Recommendation 5 remains resolved.

In accordance with the corrective action associated with Recommendation 5 above, data was gathered and assessed from the 14 triennial commitment management audits issued in the 9 month period (from April 2012 through December 2012) following issuance of the DORL guidance memorandum on March 30, 2012. Additional information from three relief requests, which the NRC staff granted, and from one regulatory commitment audit report, issued after the 9-month assessment period, were also reviewed. The information was evaluated to determine the extent to which misapplied commitments may exist and was used to recommend future actions based on the conclusions of the assessment, as discussed below. The assessment and recommendations were provided to the DORL Division Director in a memorandum dated January 31, 2013, as required by the corrective action associated with this recommendation.

The regulatory commitment audits issued during the 9-month assessment period did not identify any misapplied commitments. However, the audit report subsequently issued for the Limerick Generating Station (Limerick)<sup>7</sup> identified six misapplied commitments. The regulatory commitments were determined to have been misapplied by NRC staff because they were relied

<sup>&</sup>lt;sup>6</sup> ADAMS Accession No. ML13014A413.

<sup>&</sup>lt;sup>7</sup> ADAMS Accession No. ML13037A581.

on for the finding of public health and safety in the NRC staff safety evaluation (SE) issued April 8, 2011. The SE was associated with the license amendments for measurement uncertainty recapture power uprate and standby liquid control system changes at Limerick, Units 1 and 2. The audit report determined that, although the regulatory commitments were misapplied, the actions associated with the commitments were appropriately implemented. Therefore, no impact resulted from the misapplied commitments and the NRC staff requires no further action to address the misapplied regulatory commitments. While these results do not confirm that there are no misapplied commitments presently active, they indicate that the process is capable of identifying misapplied commitments, and that the misapplication of commitments is not pervasive.

DORL reviewed additional documents, as described below, to complete it's assessment of the extent of misapplied commitments. Specifically, DORL evaluated the treatment of regulatory commitments associated with several recently issued relief requests.

The assessment and recommendation memorandum dated January 31, 2013, also evaluated three relief requests that the NRC staff issued during the 9-month assessment period. The first two relief requests (granted on April 4, 2012,<sup>9</sup> and April 19, 2012,<sup>10</sup>) were to Joseph M. Farley Nuclear Plant, Unit 1 (Farley) and Braidwood Station, Units 1 and 2 (Braidwood), respectively. NRC staff issued requests for additional information (RAI) asking the licensees to provide regulatory commitments to perform flaw evaluations if these were required during upcoming inspections. The NRC staff considered this information necessary to grant the relief requests and the licensees provided the requested regulatory commitments. The associated SEs stated that granting the relief was "subject to" the licensee supplying the flaw evaluations, if required, as documented in the licensee's regulatory commitment.

The concern with the issuance of the reliefs, described above, is that the process of the NRC requesting and the licensee providing a regulatory commitment to complete a future action as a basis for granting the relief, may be misconstrued as reliance on the commitment for NRC staff approval. However, discussions with the responsible DORL PM, Branch Chief and OGC staff affirmed that the inclusion in the SE of the phrase "subject to" with regard to the action, and not the regulatory commitment, legally obligated the licensee to perform the action as a condition of the relief. However, NRC staff interviewed also agreed that characterizing the future action of performing the flaw evaluations (if required) in terms of a regulatory commitment, could cause confusion because the action was elevated to an obligation. Additionally, in both instances described above, the commitments only applied to inspections that have now been completed. Therefore, the regulatory commitments are no longer active.

On July 18, 2012,<sup>11</sup> the NRC staff issued the same relief request to the Beaver Valley Nuclear Station, Unit 2 (Beaver Valley). Similar to the Farley and Braidwood relief requests, the licensee included a regulatory commitment to complete flaw evaluations, if required. However, based on the NRC staff discussions described above, the DORL PM for Beaver Valley included specific and deliberate language in the SE to articulate that the action associated with the licensee's

<sup>&</sup>lt;sup>8</sup> ADAMS Accession No. ML110691095.

<sup>&</sup>lt;sup>9</sup> ADAMS Accession No. ML12094A281.

<sup>&</sup>lt;sup>10</sup> ADAMS Accession No. ML12108A123.

<sup>&</sup>lt;sup>11</sup> ADAMS Accession No. ML12188A110.

proposed regulatory commitment was elevated to a legal obligation. The SE included the following:

In its letter dated June 1, 2012, the licensee modified the relief request to include a flaw evaluation submittal, if required, for NRC review and approval, prior to the expiration of the relief. In addition to including this as part of the relief request, the licensee categorized the flaw evaluation submittal as a "regulatory commitment." The NRC staff considers the flaw evaluation submittal, and the associated NRC review and approval of the flaw evaluation submittal prior to startup, to be integral to the granting of this relief request. Thus, the licensee's flaw evaluation submittal, should it be required under this relief request, is an obligation that is not changeable under the licensee's commitment management program.

In addition, the Beaver Valley example was provided to, and discussed with, NRC technical staff involved in evaluating and preparing the SE input for the subject relief requests, as well as with the DORL PMs.

The results of the assessment, described above, indicate that the existence of misapplied regulatory commitments, especially active commitments, is not pervasive. These results can be explained by the following observations:

- (1) NRC staff SEs often do not discuss regulatory commitments proposed in the licensee's submittal. Therefore, no documented, legal reliance on the commitment exists.
- (2) Regulatory commitments relied on for approval, of a proposed action, are often relatively short-term, time-limited actions. Therefore, these actions typically have been completed and the associated regulatory commitment has been closed and is no longer an active commitment. The regulatory commitments associated with the Limerick license amendments and the Farley and Braidwood relief requests, discussed above, illustrate this observation.
- (3) The OIG audit report identified that approximately 20 to 30 percent of the NRC staff interviewed exhibited a lack of understanding about the proper use of regulatory commitments. Since the majority (70 to 80 percent) did understand the proper use of regulatory commitments, it is reasonable to expect that, in most instances, knowledgeable NRC staff will ensure that regulatory commitments are used appropriately in the course of the review and approval of a licensee request.

For the reasons discussed above, the NRC staff has concluded that misapplied regulatory commitments do not exist to a great extent, and have occurred on a limited basis. In addition, going forward, the training and knowledge-sharing sessions that have been conducted, as well as the Web-based iLearn training course described in the Recommendation 3 status above, place particular emphasis on clearly articulating, in NRC staff SEs, that a regulatory commitment has been elevated to an obligation.

Guidance was incorporated into Revision 4 of LIC-105 that instructed DORL PMs to expand the scope of the documents to be reviewed during the commitment audit to include the NRC SEs

issued since the previous audit. It also instructed DORL PMs to screen the licensee's list of open commitments to specifically determine if any regulatory commitments were misapplied. This periodic exercise provides the appropriate tools for DORL PMs to appropriately characterize the elevation of regulatory commitments to obligations in NRC SEs and to identify historical regulatory commitments that have been misapplied.

The guidance in Nuclear Energy Institute (NEI) 99-04, 12 which industry developed to manage regulatory commitments, directs NRC staff to be notified of changes to regulatory commitments involving safety significance or NRC reliance. The NRC staff has observed that licensees have largely adopted this guidance and it has been proceduralized in commitment management programs. From a qualitative, risk-informed perspective, these notification-of-change guidelines provide a defense-in-depth mechanism to alert NRC staff to historical regulatory commitments that might have been misapplied and subsequently modified by licensees.

It is noted that the DORL regulatory commitment audit report reviewed for Grand Gulf Nuclear Station, Unit 1,<sup>13</sup> (Item No. 6 in the table included in the January 31, 2013, DORL assessment and recommendation memorandum) supplied information that illustrates the vast number of regulatory commitments that each licensee initiates and tracks. Section 2.2 of the report notes the following:

Since the system was created, the licensee has entered more than 36,000 licensee-defined commitments. At the time of the audit, the licensee was tracking approximately 5.300 items in the LRS [Licensing Research System] as regulatory commitments of which 77 were designated as "OPEN" actions items. There are also approximately 900 items that are being tracked as "continuing" compliance."

This information demonstrates the impracticality of NRC staff constructing a database that compiles and evaluates the thousands of regulatory commitments that all of the licensees have made for misapplied commitments. Moreover, the NRC staff believes that this approach is not effective for identifying misapplied commitments promptly, while the 3-year retrospective review in the revised audit process accomplishes this in a much more effective and efficient manner. Based on this assessment, the NRC staff does not consider it prudent to pursue developing a regulatory commitment tracking database.

Section 4.3 of LIC-105 requires DORL PMs to generate an internal branch memorandum, or an e-mail placed in ADAMS, that describes any misapplied commitment identified during the commitment audit and any actions taken to resolve the misapplied commitment. The commitment audit report template, contained in LIC-105, was also revised to include a section that includes the findings of the misapplied commitment review and documentation of any corrective actions taken.

Per the assessment results above, the NRC staff anticipates that, in the majority of cases, resolution of identified misapplied commitments will not require follow-on actions past issuance

<sup>&</sup>lt;sup>12</sup> NEI 99-04, "Guidelines for Managing NRC Commitment Changes," July 1999 (ADAMS Accession No. ML003680088). <sup>13</sup> ADAMS Accession No. ML12228A516.

of the commitment audit report. However, through discussions between OIG and NRC staff, it was also recognized that some type of systematic tracking is appropriate for any identified misapplied commitments that require follow-on actions after the associated commitment audit report has been issued. Therefore, in the March 4, 2013, status update memo, the NRC staff recommended the following, additional corrective action and associated due date to address Recommendation 5:

September 30, 2013: Revise LIC-105 to include the requirement that a docket-specific technical assignment code (TAC) will be opened to track the completion of any follow-on actions to address an identified misapplied commitment after the associated commitment audit report has been issued. The TAC will be categorized under the planned accomplishment code "Other Licensing Tasks," (OLT) and documented in the associated commitment audit report.

OLT TACs are monitored by NRC management for completion according to congressionally-mandated metrics and are initiated, tracked and documented as complete within the Time, Resource, and Inventory Management system. Therefore, the above corrective action provides an effective management control to systematically track tasks that are required to be completed, after the issuance of the commitment audit report, to address any identified misapplied commitments.

NRR has approved Revision 5 of LIC-105<sup>14</sup> to implement the additional corrective action stated above. Specifically, Section 4.3 and the audit report template in Enclosure 4 of LIC-105 were updated with the requirement for DORL PMs to open a not fee billable TAC to track final disposition of any identified misapplied commitments after the audit is completed.

The NRC staff has determined that in lieu of a tracking database to identify misapplied commitments, more effective tools exist through the revisions of LIC-105. These revisions were initially made to determine the extent to which misapplied commitments exist, and are now permanently in place, to provide both a retrospective review of likely candidates for misapplied commitments, and to ensure that current and future approvals do not include misapplied commitments. Furthermore, the staff believes that the criteria provided to licensees in NEI 99-04, provide an additional, effective tool in identifying historically misapplied regulatory commitments. The NRC staff has completed an additional corrective action to implement an effective management control to ensure systematic tracking of any follow-on tasks that are required to address identified misapplied commitments. This corrective action was implemented with the approval of Revision 5 to LIC-105. Based on the completion of all corrective actions associated with Recommendation 5, NRR requests that OIG revise the status of Recommendation 5 from "resolved" to "closed."

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<sup>&</sup>lt;sup>14</sup> ADAMS Accession No. ML13193A358.

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NRR has completed all corrective actions established to address each recommendation associated with OIG Audit Report OIG-11-A-17. Therefore, NRR considers all actions required to address the audit report complete.

cc: Chairman Macfarlane Commissioner Svinicki Commissioner Apostolakis Commissioner Magwood Commissioner Ostendorff SECY EDO EDO

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cc: Chairman Macfarlane Commissioner Svinicki Commissioner Apostolakis Commissioner Magwood Commissioner Ostendorff SECY

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