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MEMORANDUM TO: Craig G. Erlanger, Director  
Division of Fuel Cycle Safety, Safeguards,  
and Environmental Review  
Office of Nuclear Material Safety  
and Safeguards

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SUBJECT: SELF ASSESSMENT RESULTS OF REQUESTS FOR  
ADDITIONAL INFORMATION PROCESS FOR THE DIVISION OF  
FUEL CYCLE SAFETY, SAFEGUARDS, AND ENVIRONMENTAL  
REVIEW

The Division of Fuel Cycle Safety, Safeguards, and Environmental Review (FCSE) conducted a self-assessment of its Request for Additional Information process to evaluate consistency of this process with other U.S. Nuclear Regulatory Commission's (NRC) licensing organizations and identify potential improvements. The staff reviewed the internal policies described in the recent U.S. Government Accountability Office report and interviewed subject matter experts in the Office of Nuclear Reactor Regulation, the Office of New Reactors, and the Office of Nuclear Material Safety and Safeguards. The results of this assessment including staff's recommendations and proposed actions for implementing recommended improvements are documented in Enclosure 1. Among the recommendations are the continuation of existing good practices, and reinforcement of others. Enclosure 2 provides the proposed revisions to Chapter 13 of the FCSE Licensing Review Handbook. Enclosure 2 is located in the NRC Agencywide Documents Access and Management System under ML081130292.

If you have any questions regarding the self-assessment results and recommendations, please contact Mr. Nick Baker at: (301) 415-7119, or via e-mail at: [Merritt.Baker@nrc.gov](mailto:Merritt.Baker@nrc.gov).

Enclosures:

1. Self-Assessment Results
2. Handbook Proposed Revisions to Chapter 13

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SELF ASSESSMENT RESULTS OF REQUESTS FOR ADDITIONAL INFORMATION  
 PROCESS FOR THE DIVISION OF FUEL CYCLE SAFETY, SAFEGUARDS, AND  
 ENVIRONMENTAL REVIEW

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**OFFICIAL RECORD**

# **SELF ASSESSMENT RESULTS OF REQUESTS FOR ADDITIONAL INFORMATION PROCESS FOR THE DIVISION OF FUEL CYCLE SAFETY, SAFEGUARDS, AND ENVIRONMENTAL REVIEW**

## **PURPOSE**

This memorandum documents a self-assessment of the Division of Fuel Cycle Safety, Safeguards, and Environmental Review (FCSE) Request for Additional Information (RAI) process. The purpose of the self-assessment is to evaluate consistency with RAI processes in other U.S. Nuclear Regulatory Commission's (NRC) licensing organizations and identify potential improvements. This self-assessment also discusses plans for implementing recommended improvements.

## **REVIEW PROCESS**

The NRC's Office of the Inspector General (OIG) audit report "OIG-15-A-06: *Audit of NRC's Oversight of Spent Fuel Pools*" (Agencywide Documents Access and Management System [ADAMS] Accession Number ML15041A567) cited specific concerns about the NRC's RAI processes. FCSE staff reviewed OIG-15-A-06 and a subsequent letter from the U.S. Senate Committee on Environment and Public Works to the U.S. Government Accountability Office (GAO) requesting a study of NRC's RAI process. FCSE staff reviewed the GAO "Statement of Facts" (GAO Job Code 100910) and the FINAL GAO Report GAO-17-344, "*U.S. Nuclear Regulatory Commission: Efforts intended to Improve Procedures for Requesting Additional Information for Licensing Action are Underway*", dated May 25, 2017, and found that they contained no errors in its description of how RAIs are handled in the NRC, and no adverse findings were identified.

FCSE also examined the internal policies described in the GAO report that are used by the Office of Nuclear Reactor Regulation (NRR), the Office of New Reactors (NRO), and the Division of Spent Fuel Management (DSFM) in the Office of Nuclear Material Safety and Safeguards (NMSS), and other groups regarding RAIs. The staff also interviewed key Branch Chiefs, Project Managers, and Technical Reviewers in all the aforementioned organizations regarding the practices currently in use and potential process improvements.

## **BACKGROUND**

In adhering to the NRC's Principles of Good Regulations and values, all organizations within the NRC are empowered to enhance effectiveness and efficiency in their work activities including its licensing processes. Over the years, FCSE has undertaken a number of initiatives designed to improve the licensing and inspection processes.

In 2010, FCSE completed a Lean Six Sigma project as a tool to adjust the division-wide approach for licensing, better integrate work efforts, and improve efficiency. The cause and effect analysis identified RAIs as an area to be improved. The recommendations included training, changes to the FCSE Licensing Review Handbook, reinforcement of expectations for use of the handbook, and divisional awareness meetings. The Lean Six Sigma final report can be found at ADAMS Accession Number ML103130388.

Following a number of high visibility licensing actions, including the NFS and NIST license renewals, the FCSE Lessons Learned Task Force recommended a number of improvements to increase the effectiveness of technical reviews and writing Safety Evaluation Reports (SERs). The report endorsed periodic meetings at least twice a year with the staff to discuss topics in the

Handbook that will improve the quality of licensing products. To date, the meetings have included presentations on: (1) lessons learned from recent reviews and how they were dispositioned; (2) the docketing process; (3) managing scope and schedule; and (4) RAIs. The meetings also represent an opportunity to solicit input from the staff regarding potential follow-up actions to resolve the lessons learned. Positive lessons learned and good practices are also discussed at these meetings. The FCSE Lessons Learned Task Force final report can be found at ADAMS Accession Number ML14252A243.

## **CONCLUSIONS AND RECOMMENDATIONS**

The following conclusions and recommendations are based on the RAI process self-assessment:

- 1. FCSE RAI process and guidance are adequate and generally consistent with RAI processes across the agency.**
- 2. Staff determined that the licensing seminars are an effective forum for sharing guidance and expectations on key licensing topics, including the FCSE RAI process.**

### RECOMMENDATION:

- a) Periodically reinforce expectations of key aspects in the RAI process during licensing seminars or division meetings.
- 3. FCSE has already identified and documented a number of good practices that are included in the FCSE Licensing Review Handbook.**

One recommendation from the Lean Six Sigma project that was not added to the handbook in 2010 was the use of direct or closed questions during the RAI process which is intended to reduce the number of subsequent RAIs. Following an initial review, it was concluded that the following text in the handbook, Section 13.4: "A concise statement of the information needed. RAIs should be statements rather than questions and should use action verbs..." was satisfactory if properly enforced. However, during this self-assessment staff has determined that a number of the suggested verbs in Chapter 13 of the handbook are passive and do not support that statement.

### RECOMMENDATION:

- b) Promote and enforce a more consistent and uniform use and application of the guidance in the handbook, particularly following the instructions on interactions with the licensee, drafting the safety evaluation report as a tool to identify any RAIs, having a sound regulatory basis for the RAIs, and maintaining licensing reviews aligned with its scope.

PROPOSED SUPPORTING ACTION: Delete certain passive verbs from Table 1 of Chapter 13 of the handbook, such as: *describe*, *discuss*, *summarize*, and *use*.

- 4. The expectation of a single round of RAIs with a 30 day response was overly restrictive or unrealistic for some licensing actions, such as Environmental Assessments and license renewals. This expectation was also challenged when RAI responses are inadequate.**

After consultation with numerous staff in NRR, NRO, and NMSS (FCSE, DUWP, DSFM), staff concluded that the expectation of a single round of RAIs with a 30 day response was

overly restrictive or unrealistic in complex reviews or reviews with significant deficiencies in the application or licensee's analyses. Staff pointed out several advantages to staggering RAIs in which answers to some early RAIs may eliminate the need for later ones not yet issued but planned. Some technical RAIs don't take long to answer compared to environmental RAIs which may require consultation or modeling. In addition, issuing a large number of RAIs to the licensee or applicant with a short response timeline is unrealistic. The practice of staggering RAIs should be limited to major actions or renewals, not routine amendments with fewer unknowns. It was noted that section 13.3 of the handbook recommends working with the licensee to establish a suitable response schedule between 30 and 60 days. No changes to the handbook are recommended since the suggested timeline included has an acceptable range for responding which supports this practice.

RECOMMENDATION:

c) Allow for staggered or sequential RAIs practice for major licensing actions such as new license applications, renewals, or complex amendments.

PROPOSED SUPPORTING ACTION: Update Licensing Review Handbook to include and describe the RAI staggering practice for FCSE and provide training to the staff.

**5. Unlike other offices, the FCSE practice does not restrict RAIs to information not available elsewhere.**

The practice of prohibiting follow-up RAIs that may increase the scope of the review without justification is mentioned in section 13.3 of the handbook but it does not prohibit asking for information the reviewer could find elsewhere.

RECOMMENDATION:

d) A clear instruction should be added to the FCSE Licensing Review handbook clarifying that RAIs should not request information available elsewhere.

PROPOSED SUPPORTING ACTION: Update Licensing Review Handbook to include guidance to the staff that will prohibit the use of RAIs to request information that is available elsewhere. Sample handbook language is provided in Enclosure 2.

**6. Some practices in use by other organizations, such as Division-level review for all RAIs, are not suitable for FCSE and should not be adopted.**

In NMSS, DSFM uses Office Instruction SFST-3 which is very similar in practices to the FCSE Licensing Review Handbook because the licensing products for these NMSS divisions are similar. DSFM is adopting a new job aid to clarify the role of draft RAIs and teleconferences prior to sending them formally. In FCSE, RAIs are normally reviewed by the Project Manager and Technical Reviewer. Concurrence of RAIs in FCSE is at the licensing Branch Chief level.

NRR uses its Office Instruction LIC-101, "License Amendment Review Procedures." This Office Instruction contains the expectations for RAIs, and does not differ significantly from the expectations in FCSE. LIC-101 was recently revised to reinforce that RAIs may not request information that is available elsewhere, as well as to require Division Director approval for a second round of RAIs.

NRO has adopted an additional quality check step, requiring multiple reviews up to the Division Director level, and in some instances, the Office Director level. A discussion with a Branch

Chief and Deputy Director in NRR's Division of License Renewal confirmed that NRR doesn't have such a senior management review step and their current practice has been effective and efficient.

Staff reviewed NRO-REG-101, "Processing Requests for Additional Information," which includes an e-RAI workflow process, but in most respects does not differ widely from the current FCSE practices and guidance. NRO has also created a job aid that does not differ greatly from the information already provided in their guidance. For example, some "best practices" included in their guidance are also repeated in the examples provided in the job aid.

RECOMMENDATIONS:

- e) Continue with current management oversight practice for RAIs process as they have been effective but establish expectations for elevating any challenges encountered during RAI process to Division management for their awareness and involvement.
- f) Utilize the applicable portions of the newly created DSFM job aid and adapt it to FCSE.

PROPOSED SUPPORTING ACTION: Prepare a concise FCSE RAIs job aid and update Licensing Review Handbook to include or reference this job aid.