

WORKING GROUP CHARTER FOR BUILDING A SMARTER FUEL CYCLE LICENSING PROGRAM

I. BACKGROUND:

The “Division of Fuel Cycle Safety, Safeguards, and Environmental Review [FCSE] Licensing Review Handbook [LRH]” provides a description of the procedures for completing licensing-related actions. The handbook is intended to assist project managers, technical reviewers, and supervisors by providing a comprehensive reference for understanding and implementing functions and responsibilities associated with licensing activities under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 40, “Domestic Licensing of Source Material,” and Part 70, “Domestic Licensing of Special Nuclear Material.”

NUREG-1520, “Standard Review Plan for License Applications for Fuel Cycle Facilities,” provides guidance to the staff reviewers who perform safety and environmental impact reviews of applications to construct or modify and operate nuclear fuel cycle facilities. NUREG-1520 is intended to be a comprehensive and integrated document that provides the reviewer with guidance that describes methods or approaches the staff has found acceptable for meeting NRC requirements. Each section of NUREG-1520 addresses the responsibilities of the staff reviewers, the matters that they review, the Commission’s regulations pertinent to specific technical matters, the acceptance criteria used by the staff, the process and procedures used to accomplish the review, and the conclusions that are appropriate to summarize the review.

On January 15, 2019, the Director of the Office of Nuclear Material Safety and Safeguards (NMSS) issued a memorandum to the NMSS staff on key principles for NMSS reviews. The memorandum states that the scope of staff reviews should be adjusted in the following ways:

- focus staff resources and expertise on the most safety-significant portions of a licensing decision;
- focus staff effort on reaching “adequate protection” or other regulatory conclusions based on reasonable assurance with respect to system performance, rather than an individual component; and
- enable the staff to acknowledge that a new technology may be safer than an existing technology, although operating experience with that new technology may be lacking and the new technology may not meet the regulatory review standards developed for the existing technology.

The memorandum goes on to state that “[i]n line with this discussion of our optimal review approach to licensing actions, I have asked the division directors to engage you in discussions on the need for continued innovation and transformation in our work, including enhancing our use of risk insights in making a finding of reasonable assurance.” The enclosure to the memorandum includes additional information on “reasonable assurance of adequate protection” and describes various principles the staff and management should consider in establishing the scope of licensing reviews, as well as performing and documenting the results of these reviews.

II. PURPOSE:

Charter a working group to conduct a holistic assessment of the Fuel Cycle Licensing Program for the purpose of improving the effectiveness and efficiency of the program consistent with the Office Director memorandum and other agency improvement activities (e.g., Risk-informed

Decision-Making (RIDM)). Accordingly, the working group will solicit and assess feedback from internal stakeholders and a broad range of external stakeholders (public, fuel cycle licensees, greater than critical mass licensees, medical isotope production facilities, industry organizations, other government agencies, etc.) on the proposed changes to the licensing program.

The working group will perform a review of the associated licensing review guidance documents, such as the LRH and NUREG-1520, and consider the findings from other related activities, such as the Westinghouse Lessons Learned reports and proposed implementation actions to determine if improvement to existing guidance or development of additional staff guidance, such as an Office Instruction for a specific type of review, is warranted. Additionally, the working group will leverage, as appropriate, operating experience and performance review information to determine whether the licensing program guidance applies the appropriate focus on areas of review for determining that a facility can operate safely in accordance with regulatory requirements.

In light of the Office Director memorandum, the working group will also consider enhancements to the licensing program guidance to improve the following aspects of reviews:

- establishing the scope, focus, and level of detail of staff reviews consistent with the significance of each review area for the specific application, and the documentation of the basis for each review area;
- confirming that the level of detail of staff review remains aligned with the relative margin to applicable regulatory limits, the significance of the review area in meeting applicable requirements, and reaching regulatory conclusions;
- ensuring work requests identify the appropriate technical staff and that resource estimates are consistent with the projected scope and focus of each review area;
- establishing milestones and resource estimates for the licensing action that are communicated to the applicant/licensee;
- providing for early identification of complexities or unique aspects of the review;
- integrating multiple steps of the review process, such as combining the acceptance and evaluation/approval letters, for simple, short-duration reviews;
- conducting reviews in an integrated manner, including frequent interactions among the supervisors, technical reviewers, and project managers, to ensure continuity throughout all phases of the review;
- ensuring reviews are performed and review findings are developed in a holistic manner to determine reasonable assurance of adequate protection;
- formulating draft safety evaluations as a means to identify specific areas needing requests for additional information (RAI) and limiting follow-on or additional RAIs;
- documenting the regulatory basis for RAIs and confirming that a formal applicant/licensee response is needed to determine reasonable assurance of adequate protection;
- prioritizing RAIs and clarifying the level of detail expected for applicant/licensee responses, consistent with the significance of the open item in the specific review area;
- documenting the staff review, including the scope and focus of the review (especially for aspects of “vertical slice” reviews); and
- clarifying additional aspects of the LRH, NUREG-1520, or other guidance, as identified in the Office Director memorandum or by the working group.

Finally, the working group will document any recommended changes to the Fuel Cycle Licensing Program and develop, as appropriate, metrics to measure the effectiveness and efficiency of the implementation of the recommendations.

III. TASKING:

- A. Review the LRH, NUREG-1520, and the Office Director memorandum.
- B. Identify areas that may need to be improved and/or revised to reflect the Office Director memorandum, and areas as described in Section II above, and from other insights and NRC risk-informed activities (e.g., the Office of Nuclear Reactor Regulation [NRR] RIDM activities and the NMSS Division of Spent Fuel Management [DSFM] activities). Consider the industry recommendations presented in the Nuclear Energy Institute letter dated April 12, 2019 (Agencywide Documents Access and Management System [ADAMS] Accession Number ML19114A288), and the URENCO USA letter dated April 24, 2019 (ADAMS Accession Number ML19115A349).
- C. Gather input from internal and external stakeholders and consider that input for the development of proposed draft revisions to the Fuel Cycle Licensing Program. Utilize the Cumulative Effects of Regulations (CER) public meetings as a means to obtain input and feedback from stakeholders, as well as other types of public meetings, such as a workshop, as activities progress. Solicit feedback from a variety of public and external stakeholders (e.g., Department of Navy, Electric Power Research Institute, Union of Concerned Scientists, Department of Energy, emergent technologies for nuclear fuel, etc.), as well as the various types of current NRC applicants/licensees including greater than critical mass and medical isotopes production facilities. In addition, conduct targeted engagement sessions to gain input and perspectives from a wide spectrum of NRC project managers and technical reviewers and consider including as team members staff representing other offices and divisions in the agency that are engaged in similar licensing process improvement activities (cf. III.B above).
- D. Determine if more efficient and effective means exist to accomplish agency goals consistent with the Office Director memorandum, input gathered from internal and external stakeholders, and other agency activities in the use of risk insights in decision-making.
- E. As appropriate, perform table top exercises of recent license amendments or renewals to identify best practices, lessons learned, and insights into additional areas for improvement. Table top exercises may also be considered for the identified potential improvements to the licensing program to determine their likely impact on program efficiency and effectiveness.
- F. Develop recommendations for changes to the current Fuel Cycle Licensing Program. Evaluate the recommendations for consistency with NRC Principles of Good Regulation. For each recommendation identify the pros and cons of implementation, considering the following aspects as applicable:
 - Independence
 - Mission impact (i.e., degree to which each option improves confidence in the licensing program decision-making in reaching reasonable assurance of adequate protection in reviews);
 - Reviewer focus, scope, and effort;

- Openness
 - Communication with stakeholders;
 - Compatibility with statutory obligations (e.g., Nuclear Energy Innovation and Modernization Act);
 - Documentation of regulatory findings;
- Efficiency
 - Effectiveness, timeliness, and structure of licensing reviews;
 - Potential changes in the number of licensing actions;
 - Potential changes in available resources and budgetary assumptions;
 - Flexibility and suitability of the licensing program to meet current and future needs, such as advanced fuel designs, new fuel processes, and medical isotopes;
- Clarity
 - Clear expectations, roles, and responsibilities;
 - Consistent terminology;
- Reliability
 - Program effectiveness and consistency; and
 - Adequate knowledge management.

G. As appropriate, develop recommendations for improvements to existing performance metrics and/or development of new performance metrics.

H. Develop a report to document conclusions and recommendations from the working group. The report should identify specific recommendations (i.e., specific proposed revisions to the guidance) that will improve the effectiveness and efficiency of the licensing program consistent with the NMSS Office Director memorandum and other NRC risk-informed activities.

The plan for collaboration with stakeholders and the timeline for implementation are shown in Section VIII below.

IV. WORKING GROUP MEMBERSHIP:

Mike King, NMSS/FCSE, Director (Sponsor)
 Jake Zimmerman, NMSS/FCSE/FLB (Chair)
 Donnie Harrison, NMSS/FCSE (Assistant Chair)
 James Downs, NMSS/FCSE/FLB (NMSS Lead)
 April Smith, NMSS/FCSE/LOB
 Samson Lee, NRR/DORL/LPL1
 Project Manager from NMSS/DSFM
 Attorney from OGC/GCRPS/HLWFCNS
 Project Manager(s) from NMSS/FCSE
 Technical Reviewer(s) from NMSS/FCSE

Additional team members may be identified to participate on the working group depending on the specific licensing program areas considered.

V. DURATION:

The charter will remain in effect until issuance of the report identified in Section III.H.

VI. LEVEL OF EFFORT:

Periodic meetings (or teleconferences) of the working group will be coordinated approximately monthly by the Chair. These meetings may be slightly more frequent during project startup and wrap-up. In addition, multiple public meetings will be scheduled, as reflected in the proposed project schedule in Section VIII. Active participation and meeting attendance is expected of all working group members.

The Chair will coordinate and engage periodically with the Chair of the Working Group for Building a Smarter Fuel Cycle Inspection Program to leverage areas of commonality between the licensing and inspection initiatives. In addition, the Chair will engage with the advisors on an as needed basis, to gather feedback on any of the proposed recommendations.

VII. CHARTER MODIFICATIONS:

The working group Chair will obtain approval from the working group Sponsor prior to making substantive changes to the charter, specifically identified tasks, or products.

VIII. PROPOSED WORKING GROUP SCHEDULE:

Activity	Target Date
Introduction of Initiative at the NRC Regulatory Information Conference	March 13, 2019
Develop Draft Working Group Charter	March 25, 2019
Engage Stakeholders: At the CER public meeting, discuss the purpose of the working group and the scope/focus of the charter, including future plans to seek stakeholder input.	April 3, 2019
Issue Final Working Group Charter	April 26, 2019
Identify areas within the guidance that may need to be improved and/or revised to reflect the Office Director memorandum and other risk-informed activities.	end of May 2019 & on-going
Engage Stakeholders: Hold a scoping workshop to consider and prioritize specific areas for potential improvement for the Fuel Cycle Licensing Program. To facilitate this discussion, the working group should update the public website (https://www.nrc.gov/materials/fuel-cycle-fac/public-involve.html#effects) roughly 1 week prior to this workshop with discussion materials.	May 2019
Engage Stakeholders: Hold a workshop to gain additional input from stakeholders regarding their perspectives on how the Fuel Cycle Licensing Program could be improved. To facilitate this discussion, the working group should update the public website (https://www.nrc.gov/materials/fuel-cycle-fac/public-involve.html#effects) 3 weeks prior to the workshop with discussion materials. The working group should request that stakeholder feedback on the discussion materials be provided such the correspondence can be posted on the public website 1 week prior to the workshop.	July 2019
Develop draft working group report with identification of proposed enhancements to licensing program.	September 2019

<p>Engage Stakeholders: (planned CER meeting) Present and discuss the draft proposed enhancements for the licensing program and gather additional stakeholder input for further consideration. Discuss the timeline for implementation. To facilitate this discussion, the working group should update the public website (https://www.nrc.gov/materials/fuel-cycle-fac/public-involve.html#effects) 3 weeks prior to the workshop with discussion materials. The working group should request that stakeholder feedback on the discussion materials be provided such the correspondence can be posted on the public website 1 week prior to the workshop.</p>	<p>September 2019</p>
<p>Issue working group proposed enhancements report.</p>	<p>November 2019</p>
<p>Implement enhancements (may be either short term or long term).</p>	<p>Calendar Years 2020-2021</p>

NRC contact for public engagements: James Downs (james.downs@nrc.gov or 301-415-7744)