

Discussion with Fuel Facilities on Safety Margin, Smarter Licensing, and Low Safety Significance Issue Resolution

June 15, 2021

Public Meeting With Nuclear Energy Institute, Nuclear Fuel Cycle Industry Representatives,
and the Public

Jonathan Rowley, Project Manager
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Meeting Category and Public Participation

This is an Observation meeting. The public can ask questions to the U.S. Nuclear Regulatory Commission (NRC) staff or make comments about the meeting topics at designated points on the agenda.

Agenda

Topic	Time	Speakers
Introduction (Purpose, Rules for Meeting) Opening Remarks	10:00 AM	Jonathan Rowley, Project Manager Division of Fuel Management Office of Nuclear Material Safety and Safeguards U.S. Nuclear Regulatory Commission (NRC) Shana Helton, Director Division of Fuel Management Office of Nuclear Material Safety and Safeguards NRC Janet Schlueter Nuclear Energy Institute (NEI)
Safety Margins	10:05 AM	Francis (Paul) Peduzzi, Chief Inspection and Oversight Branch Division of Fuel Management NEI/Industry
Public Q & A	11:35 AM	
Break	11:40 AM	
Smarter Licensing Status Update	11:50 AM	Matthew Bartlett, Project Manager Division of Fuel Management
Issues of Low Safety Significance Status Update	12:20 PM	Donnie Harrison, Senior Level Advisor Division of Fuel Management NEI/Industry
Public Q & A	12:50 PM	
Summary and Closing Remarks	12:55 PM	Jonathan Rowley, NRC Shana Helton, NRC Janet Schlueter, NEI
Adjourn	1:00 PM	

Opening Remarks

Shana Helton, Director
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Janet Schlueter, Senior Director
Fuel and Radiation Safety
Nuclear Energy Institute

Safety Margins

F. Paul Peduzzi, Chief
Inspection and Oversight Branch
Division of Fuel Management
Office of Nuclear Material
Safety and Safeguards

Key Messages

- Provide the final staff position for management measures compliance related to the discussion of Safety Margin.
- Communicate the staff's final position on the assessment of significance for failure of a management measure and failure to meet the requirements of 10 CFR 70.61(e) (failure of an IROFS) as a result of the failure to meet 70.62(d) (management measures).
- Closeout the discussion of Safety Margins and move forward.

Management Measures Compliance

- A licensee fails to meet 70.62(d) when management measures are inadequately designed, implemented, or maintained, such that they will not ensure that items relied on for safety (IROFS) are available and reliable to perform their function when needed, even when the performance requirements of 70.61(b), (c), and (d) are satisfied.

Staff's Position

- While the index of protection for a collection of IROFS for an accident sequence may exceed the minimum value needed to demonstrate compliance with 70.61(b), (c), and (d), that margin does not eliminate the performance requirement of 70.61(e) that *each* IROFS be available and reliable to perform its intended function when needed and in the context of the performance requirements.
- The NRC's position on 70.61(e), is that the phrase "...when needed and in the context of the performance requirements of this section." does not alleviate a licensee from meeting the management measures requirements of 70.62(d) for all designated IROFS simply because 70.61(b), (c), and (d) are met.

Staff's Position (cont.)

- The intent of 70.61(e) and 70.62(d), in part, is to provide assurance that the performance requirements of 70.61(b), (c), and (d) are met. Conversely, meeting the performance requirements of 70.61(b), (c), and (d) does not necessarily mean all requirements of 70.61(e) and 70.62(d) have been met.
- Margin provided by a collection of IROFS is not sufficient to ensure that each IROFS is available to perform its function in the context of the performance requirements.

Assessing Significance

- A failure of a management measure that does not result in the failure of an IROFS in many cases is a low safety significance violation and is often dispositioned as having minor significance.
- There may be instances in which a failed management measure that does not result in the failure of an IROFS could result in a more than minor violation, for example if deemed to be a programmatic deficiency.

Assessing Significance (cont.)

- A failure to meet the requirements of 10 CFR 70.61(e) (failure of an IROFS) as a result of the failure to meet 70.62(d) (management measures) will likely result in a SL IV or minor violation even if the performance requirements of 70.61 (b), (c), and (d) are met.

Safety Margins Discussion

Summary

Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments on the following topic:

- Safety margins

Status of the Smarter Licensing Program

Matthew Bartlett, Project Manager
Fuel Facility Licensing Branch
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

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NMSS/DFM/FFLB

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Smarter Licensing Program

- Status Update
 - The NRC staff are working to implement the recommendations based on the following schedule:
 - Near-Term – Fall, 2021
 - Mid-Term – Spring, 2022
 - Long-Term – to be determined based on resources and priorities
 - Current focus is to incorporate the Near-Term recommendations into the Division Instructions (DI):
 - LIC-FM-1 Licensing Overview,
 - LIC-FM-2 Acceptance Review Process,
 - LIC-FM-3 Requests for Additional Information (RAIs), and
 - LIC-FM-4 Safety Evaluation Reports (SERs)

Smarter Licensing Program

- Near-Term Activities

- Staff is working to incorporate the following recommendations into the DIs
 - NT-0 (16, 19, and 31) – Update, implement, and publish DIs
 - NT-1 (1, 2, 3, 6, and 29) – Align on schedule and the scope of reviews
 - NT-2 (4, 7-P2, and 27-P1) – Support early interactions
 - NT-3 (5, 10-P2, 17, and 28) – Provide for flexibility and tracking of metrics
 - NT-4 (7, 8, 9, 10-P1, 11, 12, 13-P2, and 28) – Ensure consistent development of RAIs and SERs
- After implementation, the staff will review the DIs to determine what portions can be made publicly available

Smarter Licensing Program

- Mid-Term Activities
 - Staff will develop additional guidance to facilitate implementation of the recommendations.
MT-1 (15, 18, 21, 25-P1, and 27-P2)
 - Provide training on the DIs.
 - Develop job-aids for key topics (scope of the SER, early alignment, etc.)
 - Create a roadmap with instructions/templates to facilitate license reviews.
 - Some activities are on-going and will increase as the DIs are finalized

Smarter Licensing Program

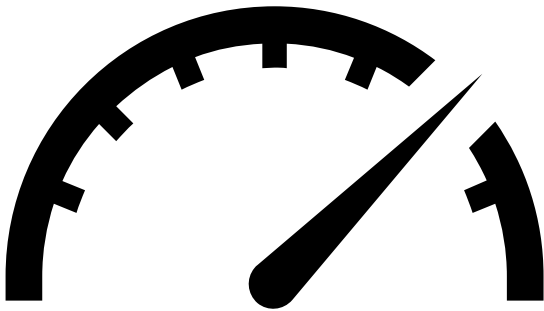
- Long-Term Activities
 - Work on these recommendations will be processed as resources and priorities allow
 - Several recommendations are currently under development including:
 - Guidance for management turn-over (LT-1_13)
 - Standard review plan for greater than critical mass facilities (LT-3-20)
 - The remainder of activities are pending, subject to a decision to move forward:
 - Capture and utilize lessons learned (LT-2_14)
 - Update NUREG-1520 (LT-2_23)
 - Create a licensee specific roadmap for regulations, guidance, procedures, job aids, etc. (LT-4_24 and LT-4_25b)
 - Develop guidance for new types of applications (LT-4_29)

Smarter Licensing Program

QUESTIONS/COMMENTS

Issues of Low Safety Significance

ACTIVITY STATUS UPDATE



Donnie Harrison, Senior Level Advisor
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

LSSIR – Inspection



High-level “Enabling Guidance” incorporated into Inspection Manual Chapters



Aspects of inspection scoping and issue screening could also address LSSIR



Draft progressive screening questions with supporting frequency-consequence matrices developed to help screening process

**Tabletop
Exercises to Test
and Refine
Process**

LSSIR – Inspection

Welcome Industry examples –
Send to
Mirabelle.Shoemaker@nrc.gov



Working Group
Talked Through
Process for 1 Issue



Questions worked, but each
invoked discussion & multiple
different considerations



Need implementation
guidance to understand intent
of process & level of effort

**Tabletop
Exercises to Test
and Refine
Process**

LSSIR



More Tabletops?



Very few issues
identified - mining TAR
and URI logs



Working Group
considering if more useful
to focus on the licensing
area

Discussion & Questions



Public Participation

At this time, the public is afforded an opportunity to ask questions and/or provide comments on the following topic:

- Smarter licensing status update
- Issues of low safety significance status update

Summary and Closing Remarks

Jonathan Rowley, NRC

Shana Helton, NRC

Janet Schlueter, NEI