

Cumulative Effects of Regulation

October 28-29, 2020

Public Meeting With Nuclear Energy Institute
and Members of the Nuclear Fuel Cycle Industry

Osiris Siurano-Perez, Project Manager

Division of Fuel Management

Office of Nuclear Material Safety and Safeguards

Osiris.Siurano-Perez@nrc.gov

Tel. 301-415-7827

Meeting Category and Public Participation

This is a Category 2 meeting. The public is invited to participate in this meeting by discussing regulatory issues with the Nuclear Regulatory Commission (NRC) staff at designated points.

Agenda – October 28, 2020

Topic	Time	Speakers
Opening Remarks	12:00 PM	<p>Andrea Kock, Director Division of Fuel Management (DFM) Office of Nuclear Material Safety and Safeguards (NMSS) U.S. Nuclear Regulatory Commission (NRC)</p> <p>Janet Schlueter Nuclear Energy Institute (NEI)</p>
<p>Discussion Topics October 28, 2020</p> <ul style="list-style-type: none"> • Integrated Schedule Updates • NRC COVID-19 Response <ul style="list-style-type: none"> ➢ Remote & Follow Up On-Site Inspection Feedback & Lessons-Learned ➢ Path Forward • Fall Exemptions and Feedback on Exemption Process • Status of Draft NUREG-2159 on Cat II MC&A • Industry-Generated Inspection Program Topics <ul style="list-style-type: none"> ➢ NEI Letter 689, IMC 0616 Examples ➢ Credit/Flexibility for Good Performance • BREAK • Status of Smarter Licensing Program Teams' Work 	12:10 PM	<p>Presenters:</p> <p>Osiris Siurano-Perez, Project Manager, DFM NEI Staff</p> <p>Kevin Ramsey, Project Manager, DFM James Rubenstone, Branch Chief, DFM Leira Cuadrado, Branch Chief, DFM Eric Michel, Branch Chief, NRC RII Karl Sturzebecher, Project Manager, DFM</p>
Summary of Day 1 Proceedings and Discussions	5:15 PM	<p>Andrea Kock, DFM Janet Schlueter, NEI</p>
Adjourn	5:30 PM	<p>Osiris Siurano-Perez Project Manager, DFM</p>

Opening Remarks

Andrea Kock, Director
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Janet Schlueter
Nuclear Energy Institute

Integrated Schedule Chart and Supplement Updates

Osiris Siurano-Perez

Project Manager

Division of Fuel Management

Office of Nuclear Material Safety and Safeguards

Integrated Schedule Chart and Supplement Updates

- Updated October 21, 2020
 - List of regulatory activities remains unchanged
 - Four areas with minor changes/updates on both documents

Contact:

Osiris Siurano-Perez
NMSS/DFM/FFLB
301-415-7827

Integrated Schedule Chart Updates

- Part 61 - Low-level Waste Disposal
 - New contact: George Tartal, 301-415-0016
- Part 73 - Enhanced Security for SNM
 - Reflect status as of October 2020
- Part 73 - Cyber Security Rulemaking
 - Reflect status as of October 2020
- Enhanced Weapons
 - New contact: Martha Barillas, 301-415-2460

Contact:

Osiris Siurano-Perez
NMSS/DFM/FFLB
301-415-7827

Integrated Schedule Chart Updates

Regulatory Activity	Revised	2019												2020												2021												2022												Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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Part 61 - LLW Disposal POC: George Tartal	10/21/2020																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

* See ADAMS Accession Number ML20294A059 for detailed summary of the changes.

Contact:

Osiris Siurano-Perez
NMSS/DFM/FFLB
301-415-7827

Integrated Schedule Supplement Updates

- Part 61, Low-level Waste Disposal
 - Key contact
 - George Tartal replaces Martha Barillas
- Enhanced Weapons Rulemaking
 - Key contact
 - Martha Barillas replaces Robert Beall

Contact:

Osiris Siurano-Perez
NMSS/DFM/FFLB
301-415-7827

Integrated Schedule Supplement Updates (continued)

- American Nuclear Society Standard 57.11
 - Key information
 - Proposal to issue the standard for trial use only
- Regulatory Information Conference
 - Key contact
 - Haile Lindsay replaces Richard Jervey
 - Key information
 - Potential topics for the 2021 RIC listed

Contact:

Osiris Siurano-Perez
NMSS/DFM/FFLB
301-415-7827

Integrated Schedule Supplement Updates (continued)

- Smarter Inspection Program
 - Related documents
 - Reference NEI letter 689 dated July 24, 2020

Contact:

Osiris Siurano-Perez
NMSS/DFM/FFLB
301-415-7827

Updates to Integrated Schedule Chart and Supplement

- Updated information
 - Cumulative Effects of Regulation
 - <https://www.nrc.gov/materials/fuel-cycle-fac/regs-guides-comm.html#cumeffects>
 - Integrated Schedule (Chart)
 - <https://www.nrc.gov/docs/ML2029/ML20293A421.pdf>
 - Summary of the changes July - October 2020
 - ADAMS Accession Number ML20294A059
 - Integrated Schedule Supplement
 - <https://www.nrc.gov/docs/ML2029/ML20293A422.pdf>
 - Markup with updates July – October 2020
 - ADAMS Accession Number ML20293A423

Contact:

Osiris Siurano-Perez
NMSS/DFM/FFLB
301-415-7827

Updates to Integrated Schedule Chart and Supplement

QUESTIONS/COMMENTS

NRC COVID-19 Response

Remote & Follow Up On-Site Inspection

Feedback & Lessons-Learned

Roundtable Discussion
NRC Staff/Nuclear Energy Institute/Industry

NRC COVID-19 Response Path Forward

Kevin Ramsey
Project Manager
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

COVID Relief Path Forward

NRC staff will continue to process requests for relief as they are received. Requests for relief extensions must explain why licensee cannot comply with a requirement, explain how safety will be ensured, demonstrate good faith effort to return to compliance, and address degradation of conditions over time.

- Letter re: Methods for Providing Regulatory Relief During the 2019 Public Health Emergency, ML20094G166.
- Temporary Staff Guidance - Fuel Facility Regulatory Relief Requests Related to COVID-19, ML20108E911.
- Several letters on acceptable bases for granting relief from various regulations.
- Enforcement Guidance Memorandum 20-002, Dispositioning Violations During COVID Public Health Emergency, ML20083K794

Contact:

Kevin Ramsey
NMSS/DFM/FFLB
301-415-7506

COVID Relief Path Forward

QUESTIONS/COMMENTS

Fall Exemptions and Feedback on Exemption Process

Nuclear Energy Institute

Fall Exemptions and Feedback on Exemption Process

QUESTIONS/COMMENTS

Guidance for Material Control and Accounting Plan Required for Special Nuclear Material of Moderate Strategic Significance

James Rubenstone
Branch Chief

Material Control and Accounting Branch Chief
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Guidance for Material Control and Accounting Plan Required for Special Nuclear Material of Moderate Strategic Significance - NUREG-2159

- Issue for public comment - 60 days
 - January 2021
- Incorporate/address public comments
 - Completed by April 2021
- Issue final document
 - May 2021

Contact:

James Rubenstone
NMSS/DFM/MCAB
301-415-7231

Guidance for Material Control and Accounting Plan Required for Special Nuclear Material of Moderate Strategic Significance - NUREG-2159

QUESTIONS/COMMENTS

Industry-Generated Inspection Program Topics

Leira Cuadrado
Branch Chief
Inspection and Oversight Branch
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Eric Michel
Branch Chief
Division of Fuel Facility Inspection
Projects Branch 2 Chief
U.S. Nuclear Regulatory Commission
Region II

Main Discussion Topics

- Regulatory Requirements
 - Fuel Facility Program Violations
 - Performance Requirements
 - Management Measures
- Enforcement Policy
- Inspection Guidance

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Contact:

Eric Michel
RII/DFFI
404-997-4555

Regulatory Requirements

- 10 CFR 70.61(e) - Each engineered or administrative control or control system necessary to comply with paragraphs (b), (c), or (d) of this section shall be designated as an item relied on for safety. The safety program, established and maintained pursuant to § 70.62 of this subpart, shall ensure that each item relied on for safety will be available and reliable to perform its intended function when needed and in the context of the performance requirements of this section

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Contact:

Eric Michel
RII/DFFI
404-997-4555

Regulatory Requirements

- 10 CFR 70.62(d) - Management measures. Each applicant or licensee shall establish management measures to ensure compliance with the performance requirements of § 70.61. The measures applied to a particular engineered or administrative control or control system may be graded commensurate with the reduction of the risk attributable to that control or control system. The management measures shall ensure that engineered and administrative controls and control systems that are identified as items relied on for safety pursuant to § 70.61(e) of this subpart are designed, implemented, and maintained, as necessary, to ensure they are available and reliable to perform their function when needed, to comply with the performance requirements of § 70.61 of this subpart.

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Contact:

Eric Michel
RII/DFFI
404-997-4555

Fuel Facility Program Violations Performance Requirements and Management Measures

- A noncompliance such as the failure to meet 70.61(e) and 70.62(d) with respect to management measures can exist even when the performance requirements 70.61(b) & (c) are satisfied.
- Additional margin afforded by additional IROFS to what is needed to meet performance requirements 70.61(b) & (c) is already considered in determining the significance of a violation

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Contact:

Eric Michel
RII/DFFI
404-997-4555

Fuel Facility Program Violations Performance Requirements and Management Measures

- A failure to meet the requirements of 10 CFR 70.61 (b) and (c) results in escalated enforcement
- A failure to meet the requirements of 10 CFR 70.61 (e) and 70.62 (d) will likely result in a SL IV or minor violation if the requirements of 70.61 (b) and (c) are met

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Contact:

Eric Michel
RII/DFFI
404-997-4555

The NRC Enforcement Policy

- The NRC staff implements the Commission's Enforcement Policy
 - Escalated enforcement when performance requirements are not met
 - Severity Level IV or minor: if safety margin exists, (IMC 0616 assist in this screening)
 - Enforcement Policy Section 2.3.1 Minor Violation
 - Provisions for documenting minor violations can be found in the NRC Enforcement Manual, ... IMC 0616

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Contact:

Eric Michel
RII/DFFI
404-997-4555

Inspection Manual Chapter 0616

- The 2017 changes to this IMC provided additional guidance and examples for screening minor/more than minor (SL-IV) to increase consistency and transparency in documenting and dispositioning of violations

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Contact:

Eric Michel
RII/DFFI
404-997-4555

Fuel Facility Inspection Program Guidance

- IMC 2600, Fuel Cycle Facility Operational Safety and Safeguards Inspection Program
- IMC 0616, Fuel Cycle Safety and Safeguards Inspection Reports
- IMC 2606, Assessment of the Risk Resulting from a Potential Safety Noncompliance at a Fuel Cycle Facility
- IMC 2650, Fuel Cycle Inspection Assessment Program

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Contact:

Eric Michel
RII/DFFI
404-997-4555

Inspection Manual Chapters/Inspection Procedures Revision Process

- Significant public involvement in staff's assessment of the fuel cycle inspection oversight program
- Currently, revising all the fuel cycle inspection program procedures to implement smarter inspection program working group recommendations
- Staff continues to provide implementation updates

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Contact:

Eric Michel
RII/DFFI
404-997-4555

Discussion Topics

- NEI Letter 689, dated July 24, 2020 (ADAMS Accession Number ML20211L714)
 - IMC 0616 examples
- Credit for good performance presentation
 - Examples of criteria
 - What constitutes good performance?

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Contact:

Eric Michel
RII/DFFI
404-997-4555

Industry-Generated Inspection Program Topics

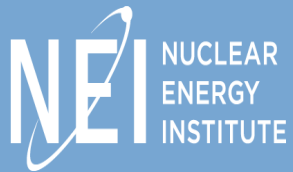
QUESTIONS/COMMENTS

Flexibility to Smarter Core Inspection Program for Good Performance

Nuclear Energy Institute

Flexibility to Smarter Core Inspection Program for Good Performance

October 28, 2020



Background

- *April 2019* - NRC Formed WG to Perform “Holistic Assessment” of Fuel Cycle Oversight Program
- *April-December 2019* - Multiple Public Meetings
- *March 2020* – WG Implementation Plan with Recommendations for Notable Adjustments to IMC 2600 & Appendix B
- *April & July 2020* – Public Meetings on Project & Status
- *October 2020* – Await NRC Proposed Revisions to IMCs and Related IPs

Inspection Program Principles

- Comprehensive NRC Oversight Program is Key Attribute of NRC's Principles of Good Regulation
- Risk and Performance-Based Insights Justify Efficiencies to Smarter Core Inspection Program
- Continued Use of Special or Reactive Inspections

Industry Respectfully Submits there Remains Potential Improvements with Regard to Flexibility of the Smarter Core Based on Licensee Performance

Fuel Cycle Fleet Risk Profile

Low Risk Profile in Many Program or Functional Areas, e.g.,

- *Radiation & Environmental Protection* – Low and Decreasing Doses to Worker and Public; Effective ALARA Programs
- *Material, Control & Accounting* – Low Strategic Significance of Category III Facilities' Material
- *Waste Management* – Facilities Continue Reducing Production and Volume of LLRW
- *Transportation* – Industry's Excellent Safety Record on Thousands of Shipments, e.g., LLRW, Nuclear Fuel, Radiation Sources

Concept of Flexible Adjustments

- Use Existing LPR Process to Assess and Evaluate Each Licensee in its Normal Review Cycle:
 - Determine Whether Flexible Adjustments Can be Applied to Reduce Frequency and/or Duration of Smarter Core Inspection Program
- During Each LPR, Staff Collects Performance Data to Include But Not Limited to:
 - Number of Violations, Reportable Events, and Both Self-Identified and Self-Revealing Safety or Security Events
- Review to Include Inspection Results and Consider NRC Observations as Recorded

Examples of Criteria* for Determining Potential Flexible Performance Based Adjustments

- No Escalated Violations (i.e., \geq SL III)
- If Licensee has Comprehensive CAP, Minor, Non-Cited and SL IV Violations Would Not Negatively Impact Consideration of Adjustments
- Reportable Events that Do Not Result in Significant Violations Would Not Negatively Impact Consideration of Adjustments
- Low Number of Contamination, Waste Management or Transportation Events
- Low Worker and Public Doses
- ISAs Rely on Defense-in-Depth (e.g., ≥ 2 IROFS) or Performance Criteria Margin
- Robust Management Measures Result in Available and Effective IROFS
- Effective Self or Independent Assessments Would be Additional Basis for Consideration of Adjustment
- Continued or Repetitive Periods of Performance under LPR Resulting in an “Area not Needing Improvement”

***Single, Stand-Alone Criteria**

Suggested Flexible Adjustments to Smarter Core Inspection Program

- Frequency or Duration of IP Would Be Reduced by 50% in a Given Area if:
 - 2 or More Sequential LPRs With “No Improvement Needed”
 - Zero Significant Violations
- Flexibility in a Given Area Can Be Waived (i.e., Not Granted) if There is a Formally NRC-Identified Generic Safety or Security Concern Across the Industry
- Adjustments Are Not Cumulative, i.e., Flexibility Must Be “Earned” Each LPR Period
- Special and Reactive Inspections Are Independent of Any Flexible Adjustments and Can Be Basis of Revocation of Any Flexibility

Future Actions

- Continue Public Dialogue to Reach Common Ground on Principles of Performance Based Adjustments
- Solicit Stakeholder Input for Assessment of Potential Changes
- Consider Whether “Piloting” Flexible Adjustments is Worthwhile
- Determine Timeline and Decision Points for Project

Thank You!!

Acronyms

ALARA – As Low As Reasonably Achievable

CAP – Corrective Action Program

IMC – Inspection Manual Chapter

IP – Inspection Procedure

IROFS – Items Relied on For Safety

ISA – Integrated Safety Analysis

LLRW – Low-Level Radioactive Waste

LPR – License Performance Review

SL – Severity Level

WG – Working Group

Industry-Generated Inspection Program Topics

QUESTIONS/COMMENTS

Public Participation

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

- Integrated Schedule Updates
- NRC COVID-19 Response
- Fall Exemptions/Feedback on Exemption Process
- Status of Draft NUREG-2159 on Cat II MC&A
- Industry-Generated Inspection Program Topics

Status of Smarter Licensing Program Teams' Work

Karl Sturzebecher
Project Manager

Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Smarter Licensing Program

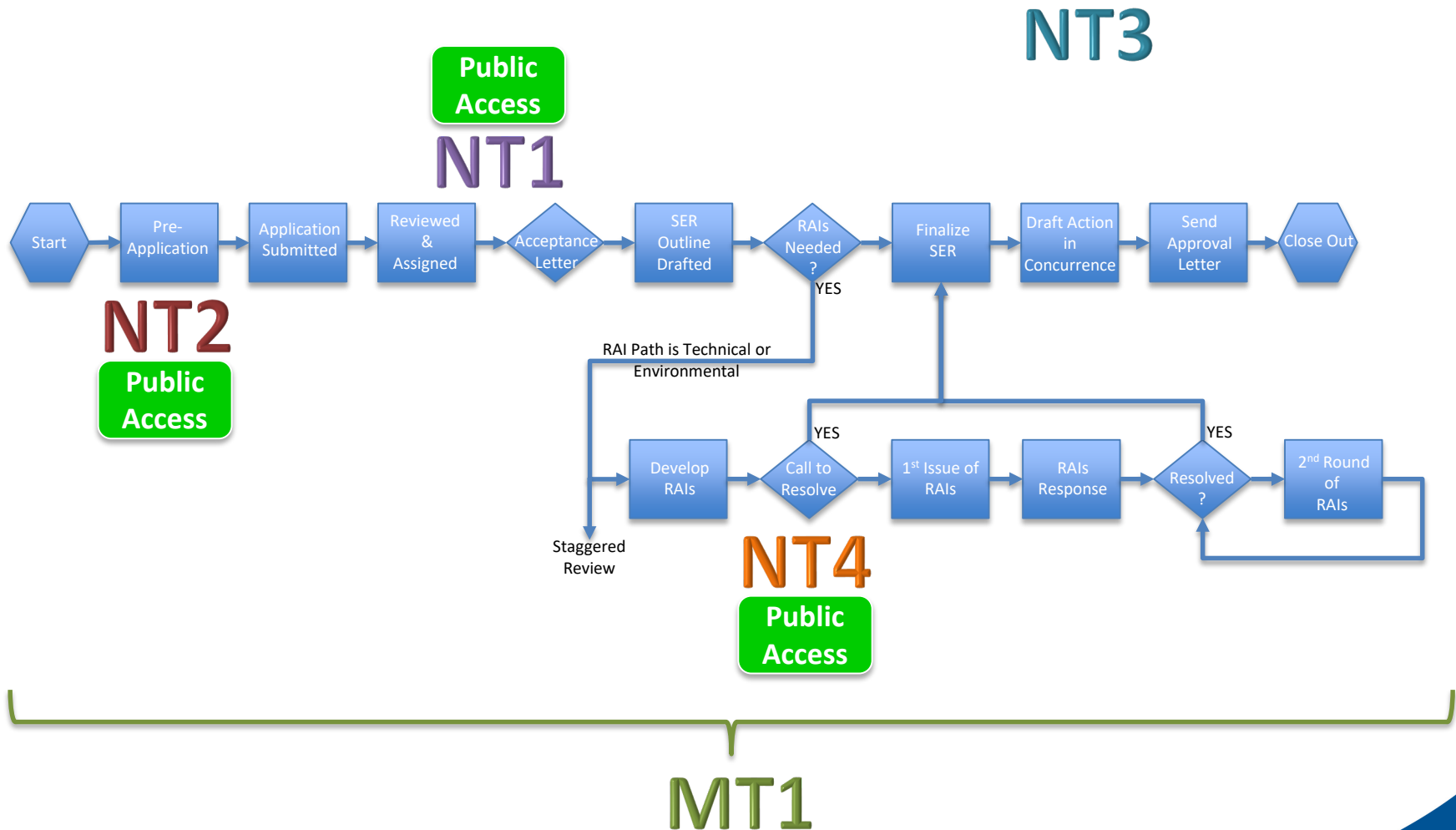
Objective: Implement recommendations with the best cost-benefit perspective

- Status
 - Near Term recommendations are nearing completion
 - Mid and Long Term action teams continue working on assigned recommendations
 - The recommendation improvements apply to each step of the licensing process
- Licensing Process demonstration (Next slide)
- Smarter Licensing Improvements to NRC guidance (Final slide)
- Schedule - Close Out: schedule, impact, benefits achieved & lessons learned
 - Near-Term by December 2020
 - Mid-Term by March 2021
 - Long-Term by January 2022

Contact:

Karl Sturzebecher
Organization
NMSS/DFM/FFLB
301-415-8534

Licensing Process



Contact:

Karl Sturzebecher
Organization
NMSS/DFM/FFLB
301-415-8534

Licensing Process

NT1_3 *Enhance communication practices with the licensee

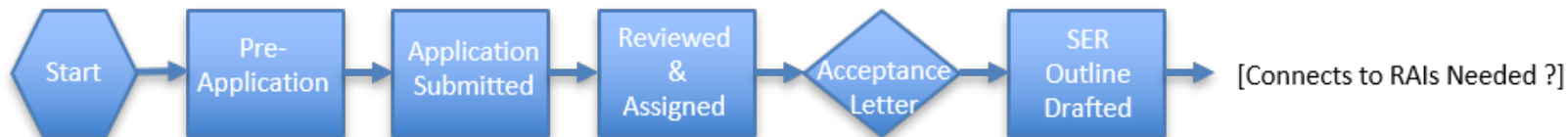
NT1_29 *Improve early processing alignment & communicate scope, focus & level of detail

NT1_6a –(NEI) *Involve COE's & Office input for milestones

NT1_1 –(NEI) *Communicate input & milestones with licensee

NT1_2 *Communicate estimated hours with licensee

NT1



NT2

NT2_4 *Support pre-application review meeting

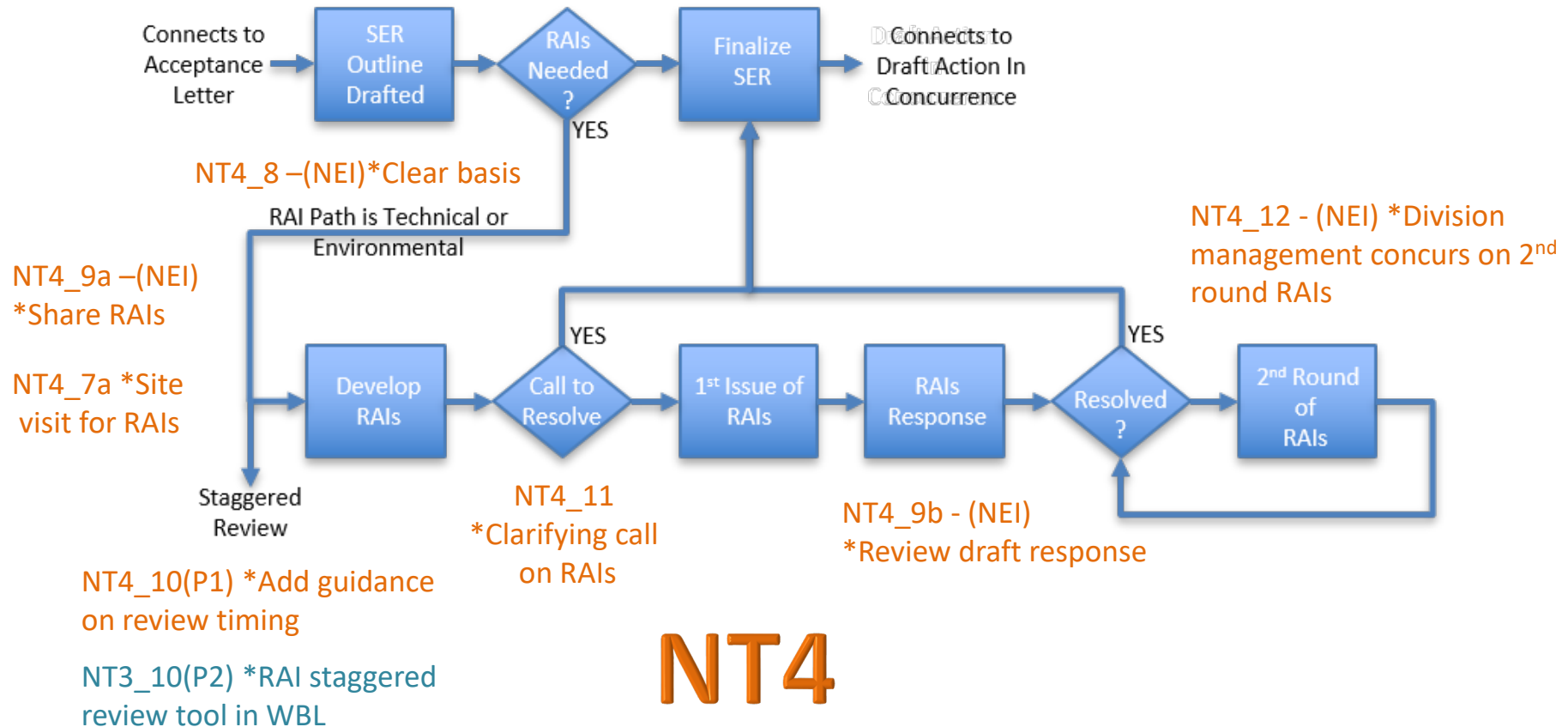
NT2_27 *Lead risk-informed & holistic NRC team meeting before pre-application meeting

NT2_7b *Conduct pre-application meeting @ site

Contact:

Karl Sturzebecher
Organization
NMSS/DFM/FFLB
301-415-8534

Licensing Process



Contact:

Karl Sturzebecher
Organization
NMSS/DFM/FFLB
301-415-8534

NT4_13a –(NEI)
***Staff Turnover**

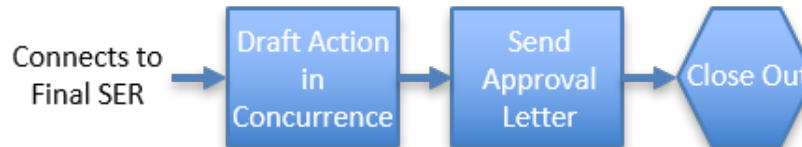
NT4_22 *Scope RAI dashboard needs for future work group

Licensing Process

NT3

NT3_5&28 *Add guidance on combining acceptance with approval

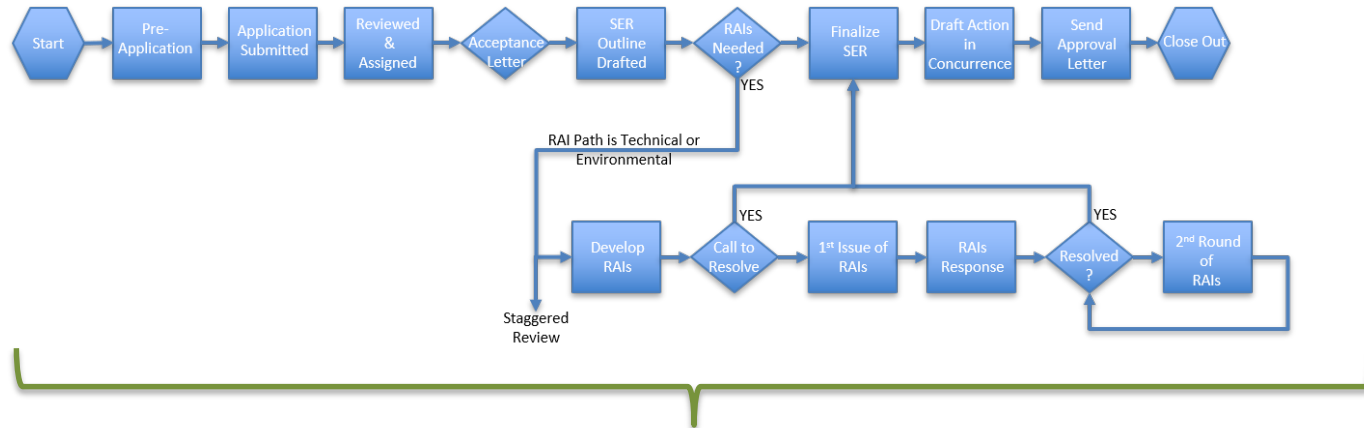
NT3_17 *Ensure WBL planning & tracking tool can address metrics requirements



Contact:

Karl Sturzebecher
Organization
NMSS/DFM/FFLB
301-415-8534

Licensing Process



MT1

MT1_29 *Develop job aids types for early alignment, focus, documenting, & communicate with licensee

MT1_31 *Develop job aids for risk-informing with support questions

MT1_30 *Develop job aids types for risk-informing reviewers and decision makers

MT1_27 *Improve review guidance for an early holistic approach

MT1_15 *Develop job aids considering per review level applicability

MT1_18 *Develop guidance for best job aid/instructions that apply to a review

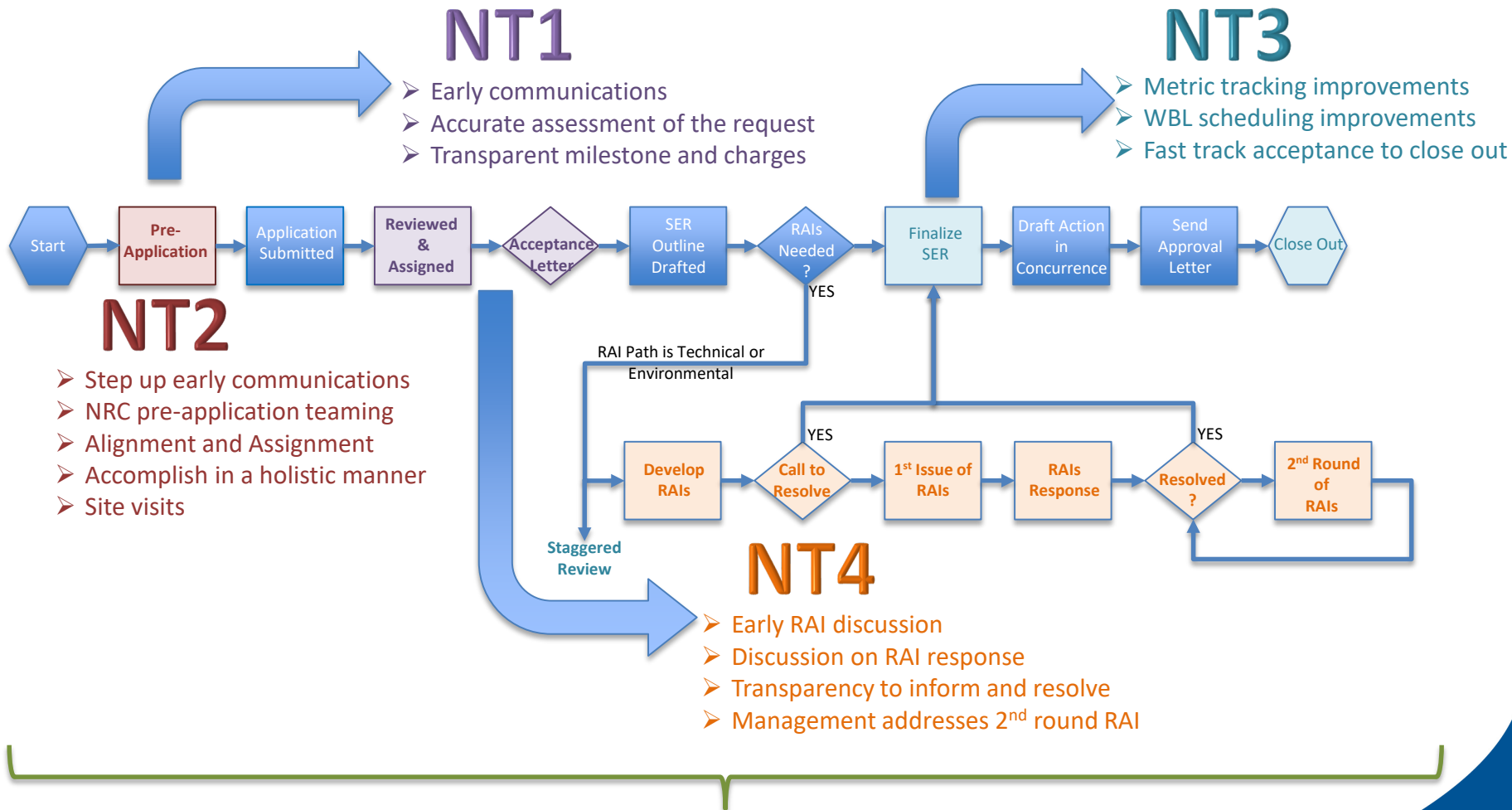
MT1_25 *Incorporate into guidance to include Inspectors involvement

MT1_21 *Augment guidance so review approach is cited in the SER

Contact:

Karl Sturzebecher
Organization
NMSS/DFM/FFLB
301-415-8534

Smarter Licensing Improvements



Contact:

Karl Sturzebecher
Organization
NMSS/DFM/FFLB
301-415-8534

MT1

- Support job aids & guidance
- Focus is NT1 and NT2

Status of Smarter Licensing Program Teams' Work

QUESTIONS/COMMENTS

Public Participation

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

- Status of Smarter Licensing Program Teams' Work

Cumulative Effects of Regulation

Summary of Proceedings

October 28, 2020, Session

Osiris Siurano-Perez
Project Manager
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Meeting Category and Public Participation

This is a Category 2 meeting. The public is invited to participate in this meeting by discussing regulatory issues with the Nuclear Regulatory Commission (NRC) staff at designated points.

Agenda - October 29, 2020

Topic	Time	Speakers
Opening Remarks	10:00 AM	<p>Andrea Kock, Director Division of Fuel Management Office of Nuclear Material Safety and Safeguards (NMSS) U.S. Nuclear Regulatory Commission (NRC)</p> <p>Janet Schlueter Nuclear Energy Institute (NEI)</p>
<p>Discussion Topics October 29, 2020</p> <ul style="list-style-type: none"> • Status of Inspection Modifications • Operating Experience Program • BREAK • Status of Non-Fee Billable Work • Status of Efforts on Low Safety Significance Issues • Regulatory Information Conference 2021 	10:10 AM	<p>Presenters:</p> <p>Leira Cuadrado, Branch Chief, DFM Kevin Ramsey, Project Manager, DFM Donnie Harrison, Sr. Level Advisor for Risk Assessment, DFM Haile Lindsay, Thermal Engineer, DFM</p>
Closing Remarks	1:15 PM	<p>Andrea Kock, DFM Janet Schlueter, NEI</p>
Adjourn	1:30 PM	<p>Osiris Siurano-Perez Project Manager, DFM</p>

Cumulative Effects of Regulation

Public Meeting With Nuclear Energy Institute and Members of the Nuclear Fuel Cycle Industry

October 29, 2020

Opening Remarks

Andrea Kock, Director
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Janet Schlueter
Nuclear Energy Institute

Smarter Inspection Program Status of Inspection Modifications

Leira Cuadrado
Branch Chief

Inspection and Oversight Branch
Division of Fuel Management

Office of Nuclear Material Safety and Safeguards

Smarter Inspection Program

Status of Inspection Modifications

- Working Group (WG) conducted a **holistic assessment** of the fuel cycle oversight program to:
 - Improve effectiveness and efficiency
 - Further integrate risk-informed insights to ensure that the appropriate focus is applied to the areas most important to safety
- DFM Director approved ([ML20079E064](#)) the WG's recommendations ([ML20078P093](#)) on March 19, 2020



Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Smarter Inspection Program Enhancement Effort

- Revise fuel cycle inspection guidance documents
 - Adjust the frequency of inspections + number of hours, according to the risk of the activity
 - Reduce inspection frequency for facilities with an approved corrective action program
- Train inspectors with revised guidance documents, with full implementation starting January 2021
- Complete assessment of the scope of the resident inspector program
 - Formalize process to incorporate operating experience into inspection program after revision of inspection guidance documents



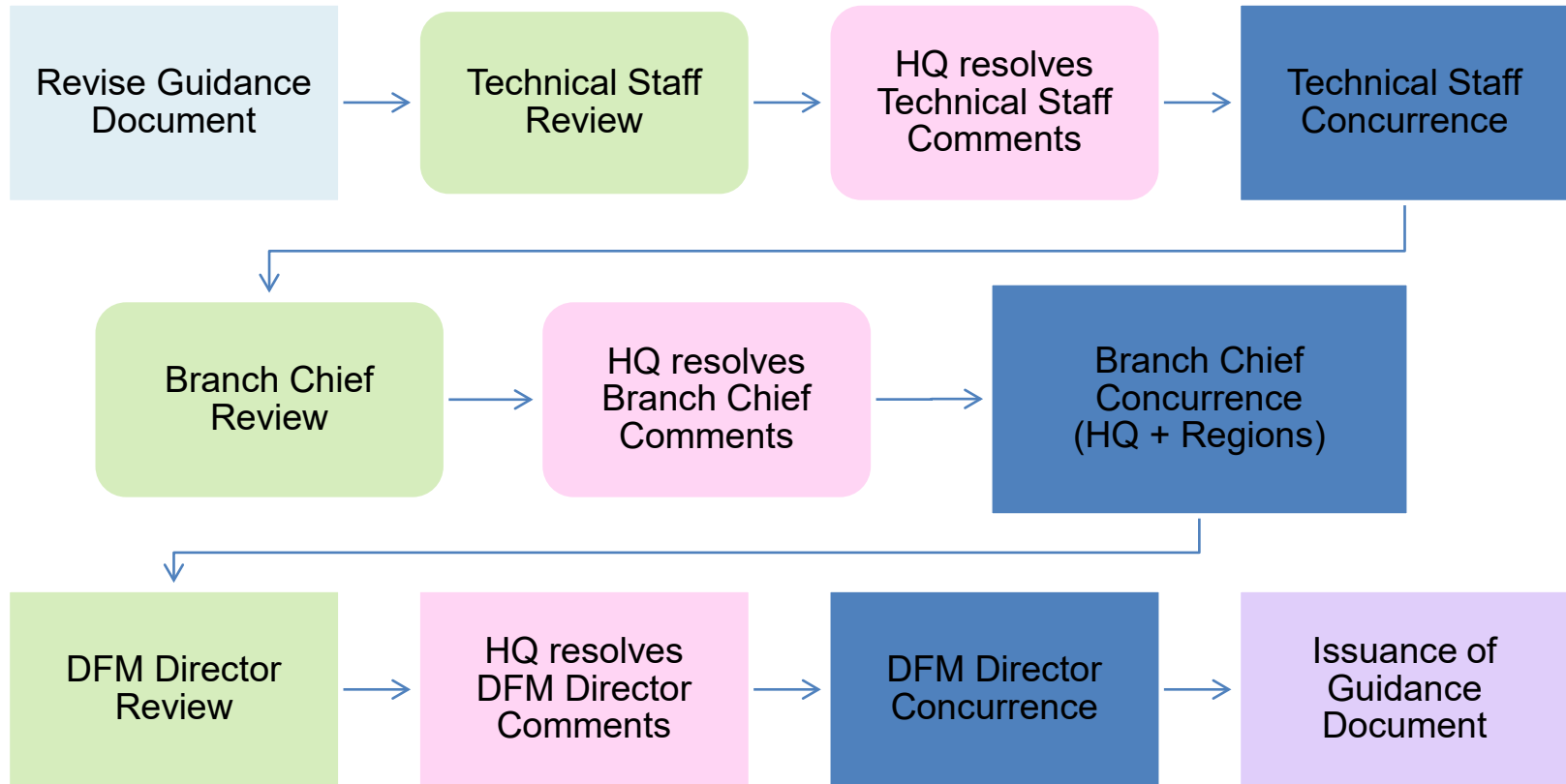
RECOMMENDATIONS

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Smarter Inspection Program

Revision Process



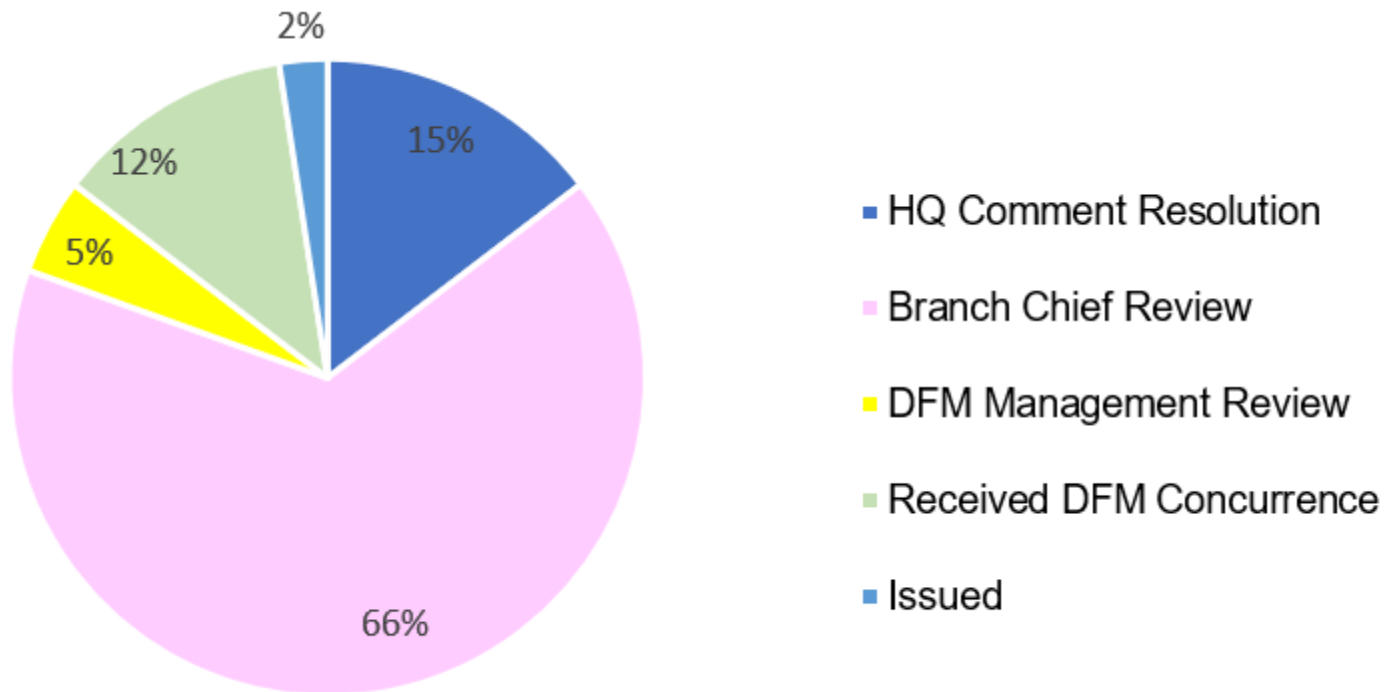
Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

 : May involve multiple iterations back and forth

Smarter Inspection Program

Status of Revisions



Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Smarter Inspection Program Proposed Changes

- IP 88135: Resident Inspector Program
 - Adjust inspections to focus on areas of higher risk-significance
 - Utilizing the Integrated Safety Analysis
 - Emergent plant issues
 - Current equipment problems
 - Approximately 752 hours of direct inspection, with variance of $\pm 10\%$



Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Smarter Inspection Program Proposed Changes

- IP 88135: Resident Inspector Program (continued)
 - Rewrites to IP 88135 Attachments to align with recommendations
 - Consolidation of the “Identification and Resolution of Problems” guidance to IP 88135.02, “Plant Status,” only, to eliminate duplication in remaining IP 88135 Attachments
 - NRC staff will pilot incorporating issues of low safety significance as part of the IP revisions
- Formal assessment of the resident program to be completed in 2021



Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Smarter Inspection Program

Proposed Changes (continued)



- IP 88045: Environmental Protection
 - Inclusion of aspects from IP 88030, “Radiation Protection”
 - Additional scope related to decommissioning planning during operations

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Smarter Inspection Program

Proposed Changes (continued)

- IMC 2600: Fuel Cycle Facility Operational Safety and Safeguards Inspection Program
 - Flexibility for remote oversight activities
 - New Appendix E to IMC 2600
 - Guidance for inspections during pandemics and other wide-spread illnesses
 - Incorporates guidance issued for COVID-19



Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Smarter Inspection Program Proposed Changes (continued)

- Retirement of Guidance Documents

Retiring Guidance Documents	Information to Be Incorporated Into
IP 88025, "Maintenance and Surveillance of Safety Controls"	<ul style="list-style-type: none">IP 88020, "Operational Safety"IP 88015, "Nuclear Criticality Safety"IP 88030, "Radiation Protection"
IP 88035, "Radioactive Waste Processing, Handling, Storage, and Transportation"	<ul style="list-style-type: none">IP 88030, "Radiation Protection"IP 88045, "Effluent Control and Environmental Protection"

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Smarter Inspection Program

QUESTIONS/COMMENTS

Fuel Cycle Operating Experience Program

Leira Cuadrado
Branch Chief

Inspection and Oversight Branch
Division of Fuel Management

Office of Nuclear Material Safety and Safeguards

Fuel Cycle Operating Experience Program

- Overview
 - Background
 - Fuel Cycle (FC) Operating Experience (OpE) Program Purpose
 - FC OpE Program Description
 - FC OpE Data Evaluation Process
 - OpE Program Products
 - Future OpE

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

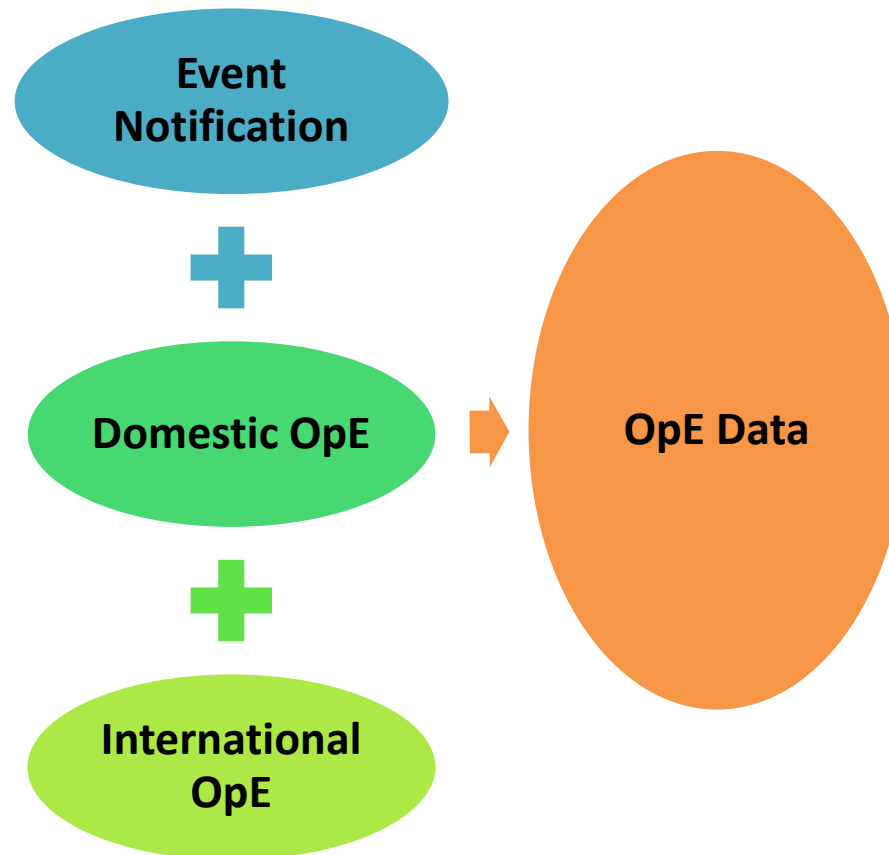
Fuel Cycle Operating Experience Program

- OpE Program Purpose
 - Collect, evaluate, and trend OpE for continuous improvement of regulatory processes
- OpE Components
 - Implementing procedures and guidance for the data screening process using NMSS P&P 6-14, “Fuel Cycle Operating Experience Program”
 - Database

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

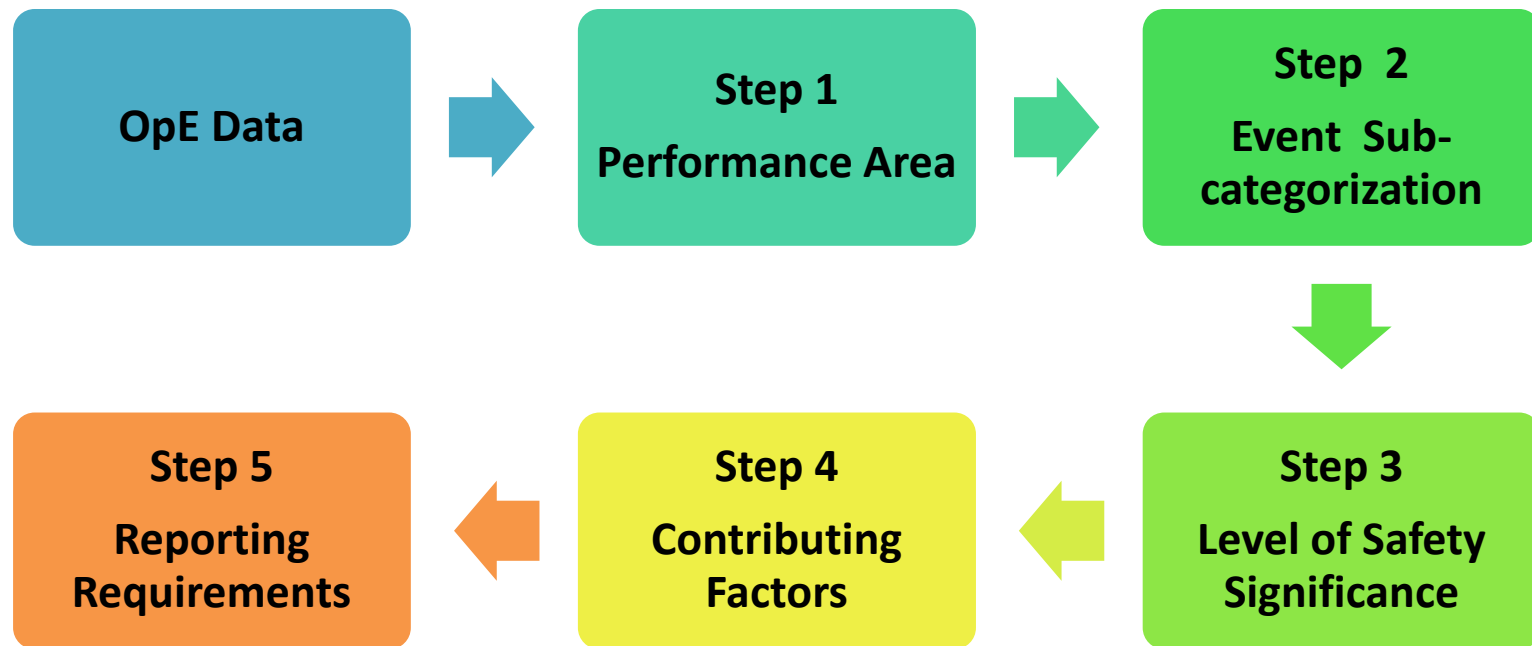
Fuel Cycle Operating Experience Program



Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program



Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

Screening Step 1: Performance Area

- Criticality Safety
- Operational Safety
 - Chemical Hazard
 - Fire Hazard
- Emergency Preparedness
- Radiation Protection Program
 - Occupational
 - Public
- Material Control and Accounting (MC&A)
 - Shipping
 - Onsite
- Natural Phenomena Hazard (NPH)
- Construction

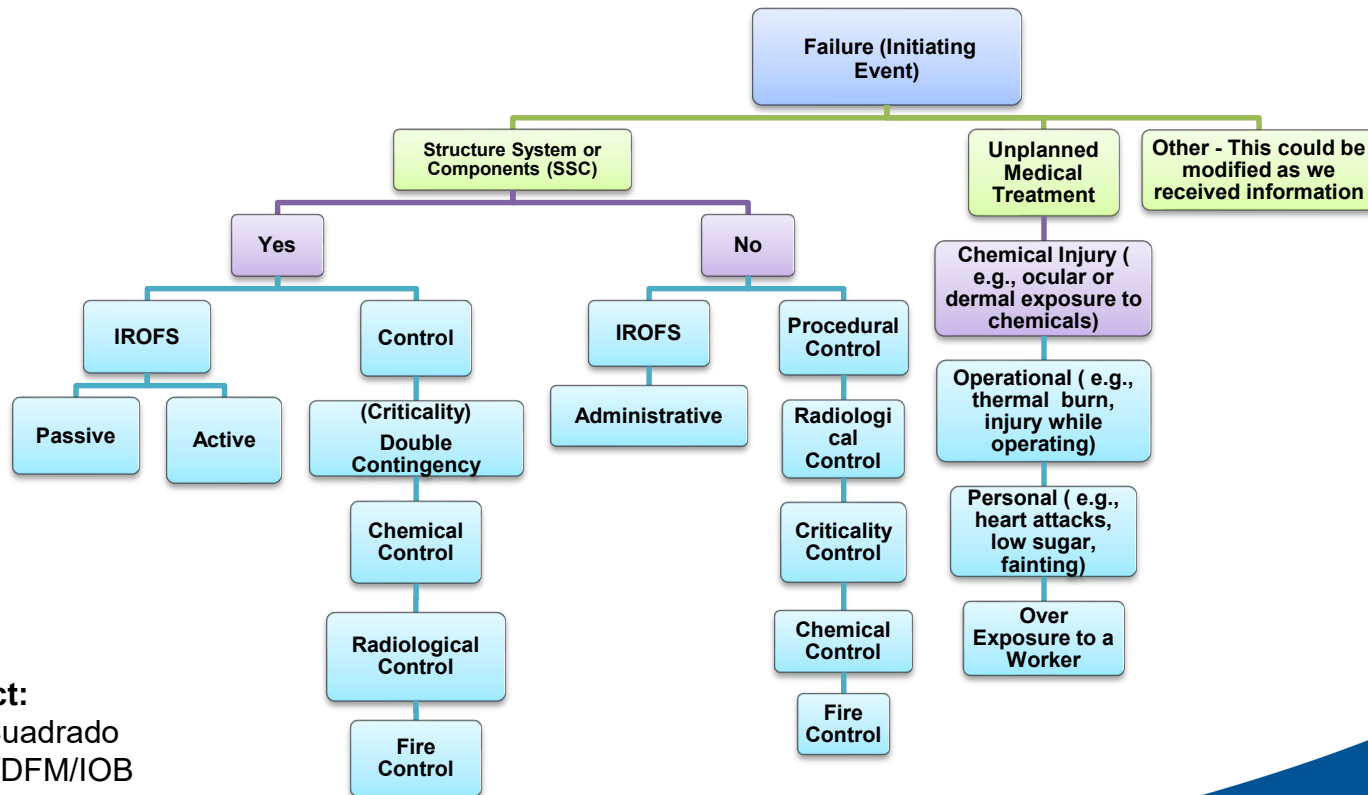
Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

Screening Step 2: Sub-Categories

- The sub-categories provide additional screening criteria to describe specific traits of the event and are available as searchable terms in the FC OpE database.



Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

Screening Step 3: Level of Safety Significance

- **Level A:** An event that resulted in or could have resulted in consequences commensurate with a high consequence event as defined by 10 CFR 70.61, “Performance Requirements,” as a result of licensed materials or hazardous chemicals produced from licensed materials.
- **Level B:** An event that resulted in or could have resulted in consequences commensurate with an intermediate-consequence event as defined by 10 CFR Part 70.61. These events usually include escalated enforcement actions, such as Severity Level III violations and may include multiple Level C events of a similar nature.
- **Level C:** An event that is less serious than a Level B event and resulted in a low safety consequence. These events can include Severity Level IV violations, Non-Cited Violations, Minor Violations and events with no associated violations. Safety significance Level C should not include escalated violations.

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

Screening Step 4: Contributing Factors

- Maintenance
- Procedures and Work Packages
- Configuration Management (CM)
- Design
- Training and Qualifications
- Human Factors
- Integrated Safety Analysis (ISA)
- Not Applicable (N/A)

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

Screening Step 5: Reporting Requirements

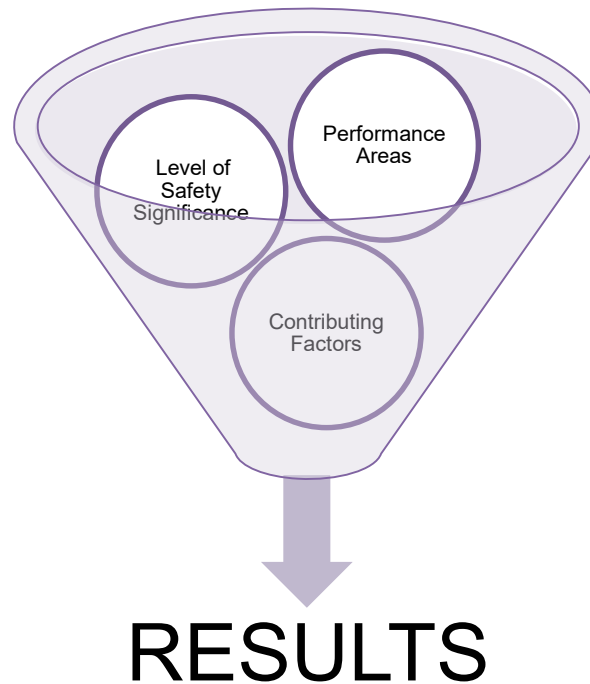
- The FC OpE Program applies procedures for event reporting to determine if an event is reportable by the NRC
- Reporting Material Events to the International Nuclear Event Scale
- Abnormal Occurrences Reporting

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

Trending Analysis



Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

Program products

- Primary
 - Generates the annual FC OpE report.
 - Supports international event reporting activities (e.g., FINAS, INES)
- Secondary
 - Provides a source of information to support continuous improvement of the regulatory processes and oversight program
 - Supports the development of generic communication for internal and external stakeholders
 - Assists the process for generating or reviewing guidance documents

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

2019 Fuel Cycle OpE Report - ML20010E782

- A total of 21 events were reported
 - 4 events were retracted
 - 8 events were reported under 10 CFR 70 Appendix A (c) “Concurrent Report”
 - 9 events to analyze
 - Criticality safety (3)
 - Chemical processes (2)
 - Fire safety (2)
 - MC&A (2)

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

Future of OpE

- The WG recommends formalizing into the inspection program the results of the Operating Experience Program and the Fuel Cycle Inspection Assessment Program to determine, on a frequent basis, if changes to core inspection program are needed.

Smarter Inspection Program Report - ML20073G659

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

Future of OpE (continued)

- Benchmark other programs, including ROP and materials
 - Scope and data sources
 - How feedback is incorporated into inspection program
- Obtain stakeholder feedback
 - How does industry use operating experience?
 - What sources of data are considered?
 - How are the insights or results of your operating experience program leveraged?

Contact:

Leira Cuadrado
NMSS/DFM/IOB
301-415-0324

Fuel Cycle Operating Experience Program

QUESTIONS/COMMENTS

Status of Non-Billable Work

Kevin Ramsey
Project Manager

Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Self-Assessment of Non-Billable Work in the Fuel Facilities Business Line

- Self-Assessment Report issued April 15, 2019
- Closure Report for Corrective Actions issued December 23, 2019
- Effectiveness Review Report issued August 4, 2020
- Charges without Enterprise Project Identifier
 - Licensing declined from 97% to 50%
 - Oversight declined from 99% to 36%
 - Rulemaking declined from 64% to 54%

Contact:

Kevin Ramsey
NMSS/DFM/FFLB
301-415-7506

New Billable Cost Accounting Code for Routine Inspection Related Communications

- Self-Assessment identified inconsistent billing between Project Managers (PMs) and Project Inspectors (PIs)
- Both perform similar duties (schedule management, routine communications, briefing packages, etc.)
- PM time billed, but PI time not billed
- Operating Reactor business line uses billable code for routine inspection related communications
- We have defined a new CAC 001710 (FB-FF-Routine Inspection Related Communications)

Contact:

Kevin Ramsey
NMSS/DFM/FFLB
301-415-7506

Status of Non-Billable Work in the Fuel Facilities Business Line

- Product Line 1 - Event Response (1786 hours)
 - Event Response Operations
 - Incident Response Exercises
- Product Line 2 - Generic Homeland Security (Off Fee Base)
- Product Line 3 - International Activities (9475 hours)
 - Conventions & Treaties
 - Import/Export Licensing
 - International Cooperation
 - International Liaison

Contact:

Kevin Ramsey
NMSS/DFM/FFLB
301-415-7506

Status of Non-Billable Work in the Fuel Facilities Business Line

- Product Line 4 - Licensing (16,950 hours)
 - Emergency Preparedness (EMP Activities, etc.)
 - Codes and Standards Meetings
 - Develop and Maintain Licensing Guidance (Cat II MC&A, Smarter Licensing, Critical Mass SRP, etc.)
 - Environmental Reviews (Environmental Center of Expertise, Licensing Assistant Support, etc.)
 - Non-Billable Licensing Actions (Licensing Assistant Support, Technical Assistant Duties, CER Program, Fee Exempt Universities, etc.)
 - Policy Outreach (Evidence Act Working Group, etc.)
 - Security (MOU with DHS and DOT, Advance Notice of Shipments, etc.)

Contact:

Kevin Ramsey
NMSS/DFM/FFLB
301-415-7506

Status of Non-Billable Work in the Fuel Facilities Business Line

- Product Line 5 - Oversight (23,247 hours)
 - Allegations & Investigations
 - Enforcement (Enforcement Policy Revision, etc.)
 - Codes and Standards Document Review
 - Develop & Maintain Inspection Guidance (Risk-Informed Inspection Program, Low Safety Significance Issue Resolution, etc.)
 - Enforcement Related Order Follow-up (GNFA, BWXT, etc.)
 - Inspection (Project Inspector Duties, Smarter Inspection Program, DFFI Office Tasks, Technical Assistant Duties, etc.)
 - Security (Project Inspector Duties, Accepting Risk in Decision-making, DFFI Office Tasks, etc.)

Contact:

Kevin Ramsey
NMSS/DFM/FFLB
301-415-7506

Status of Non-Billable Work in the Fuel Facilities Business Line

- Product Line 7 - Rulemaking
 - Pre-Rulemaking (COVID-19 response, FY 2021 Fee Rule, etc.)
 - Proposed Rules (Cyber Security for Fuel Facilities, etc.)
 - Final Rules (Enhanced Weapons, FY 2020 Fee Rule, etc.)
 - Rulemaking Support (Post rulemaking for Part 74, Administrative Support, etc.)
- Product Line M - Support Staff (25,282 hours)
 - Non-Supervisory Staff (NextGen Activities, Fee Billing Support, Staff Meetings, etc.)
 - Supervisory Staff
 - Administrative Assistants

Contact:

Kevin Ramsey
NMSS/DFM/FFLB
301-415-7506

Status of Non-Billable Work in the Fuel Facilities Business Line

QUESTIONS/COMMENTS

Status of Efforts on Low Safety Significance Issues

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

Status of Efforts on Low Safety Significance Issues



Low Safety
Significant
Issue
Resolution
(LSSIR)

What is being addressed?

- Low safety significant issues that, in some cases, result in an excessive effort (resources and time) to resolve

What is the objective?

- Put in place process enhancements to mitigate (risk-inform) these situations

Contact:

Donnie Harrison
NMSS/DFM
301-415-2470

Status of Efforts on Low Safety Significance Issues

Background

- Through 2019/2020 NRR led an effort on LSSIR
 - Provided approach and recommendations (subsequently approved by NRR Office director) on approach to address these issues
 - Implemented concept and used a handful of times
- NMSS representative on NRR team
 - Concept could also apply in NMSS; with some modifications
 - Identified activities pursuing similar intent over multiple business lines

Contact:

Donnie Harrison
NMSS/DFM
301-415-2470

Status of Efforts on Low Safety Significance Issues

Background (continued)

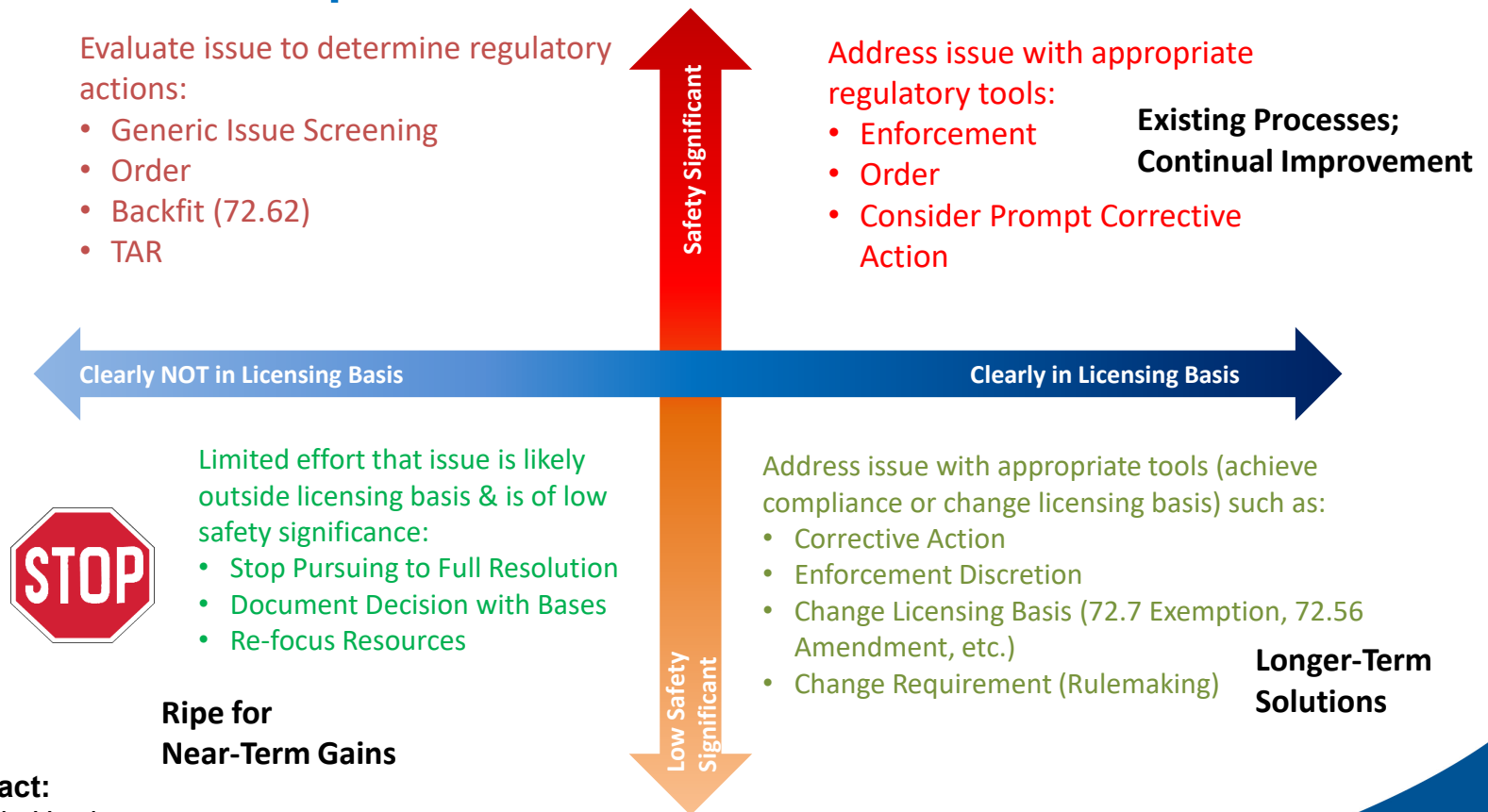
- NMSS working team formed with staff across business lines to share insights on implementing a consistent approach while recognizing differences in business lines
 - Andrea Kock (NMSS Leadership Champion)
 - Alayna Pearson (DFM)

Contact:

Donnie Harrison
NMSS/DFM
301-415-2470

Status of Efforts on Low Safety Significance Issues

Concept of the Universe of Issues

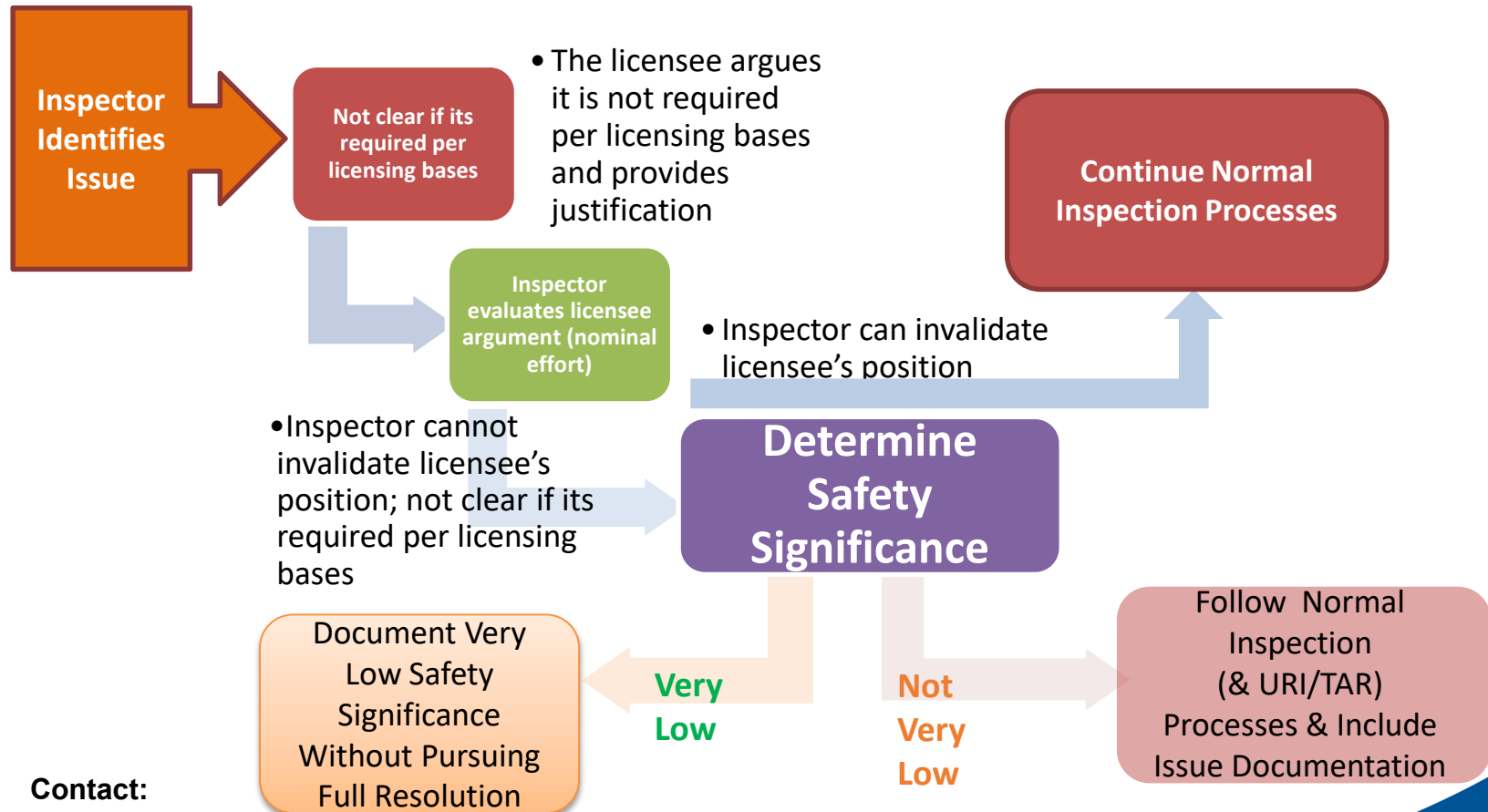


Contact:

Donnie Harrison
NMSS/DFM
301-415-2470

Status of Efforts on Low Safety Significance Issues

INSPECTION PROCESS FLOW FOR DISPUTED LICENSING BASIS ISSUES



Contact:
Donnie Harrison
NMSS/DFM
301-415-2470

Status of Efforts on Low Safety Significance Issues

QUESTIONS/COMMENTS

Regulatory Information Conference 2021

Haile Lindsay
Thermal Engineer
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Regulatory Information Conference 2021

March 8 - 11, 2021

Potential Panel Sessions	Panel Topics	Panelists	Panel Type	Panel Chair	DFM Point of Contact
Front and Back End ATF (joint with NRR lead)	Preparations for licensing ATF	NRC (NMSS and RES), EPRI, NEI, DOE	Discussion	Marilyn Diaz	Ricardo Torres
Preparing for Advanced Reactor Fuels	Preparations for advanced reactor fuels (front and back end)	NRC, DOE, Fuel Vendor, DOT	Discussion	Tom Boyce	Jonathan Marciano

Contact:

Haile Lindsay
 NMSS/DFM/CTCFP
 301-415-0616

Regulatory Information Conference 2021

QUESTIONS/COMMENTS

Public Participation

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

- Status of Inspection Modifications
- Operational Experience
- Status of Non-Fee Billable Work
- Status of Efforts on Low Safety Significance Issues
- Regulatory Information Conference 2021 and Fuel Cycle Topics

Closing Remarks

Andrea Kock, Director
Division of Fuel Management
Office of Nuclear Material Safety and Safeguards

Janet Schlueter
Nuclear Energy Institute