

March 25, 2015

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

FROM: Matt Bartlett, Project Manager **/RA/**  
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SUBJECT: SUMMARY OF MARCH 4 AND 5, 2015, MEETING WITH THE  
INDUSTRY AND STAKEHOLDERS TO DISCUSS FUEL CYCLE  
REGULATORY ACTIVITIES AND THE CUMULATIVE EFFECTS OF  
REGULATION

The staff of the U.S. Nuclear Regulatory Commission (NRC) met with representatives of the Nuclear Energy Institute (NEI), fuel cycle industry, and members of the public on March 4 and 5, 2015, in Atlanta, Georgia. The purpose of the Category 2 public meetings was to discuss the draft Acute Chemical Exposures and Natural Phenomena Interim Staff Guidance (ISG), Fuel Facility Inspection Program Activities, Revised Fuel Cycle Oversight Process, and Cumulative Effects of Regulation. The meeting announcement is available in the Agencywide Documents Access and Management System (ADAMS) under the accession number ML15041A056. In addition to the above meetings, the NRC also conducted a Category 3 public meeting on the afternoon of Thursday, March 5, 2015, on the current Title 10 of the *Code of Federal Regulations* (10 CFR) Part 74 rulemaking. The Part 74 meeting summary will be provided separately.

**Acute Chemical Exposures:**

The workshop on Acute Chemical Exposures Interim Staff Guidance (ISG) provided an overview of the guidance contained in the draft ISG addressing all relevant chemical hazards regulated by the NRC. Industry and NRC agreed that the ISG only applies to chemicals regulated by the NRC and the scope of the NRC jurisdiction is not being expanded. The NRC described a number of information sources that staff would use when evaluating the proposed

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standards for acute chemical exposures. Some of the information sources include the Emergency Response Planning Guidelines, the Globally Harmonized System of Classification and Labelling of Chemicals, and the National Institute for Occupational Safety and Health Skin Notations, among others. Databases and standards identified in the ISG are established by national and international organizations. Industry noted that many of these databases differed from each other and thus could result in different licensees developing different standards for the same chemical.

Also, industry noted that there is limited information that provides risk-informed thresholds for the complex mixture of chemicals that exist at some fuel cycle facilities. The NRC indicated that the agency would be willing to consider a broad range of proposals for chemical standards, as long as the basis was traceable, documented and provided sufficient information to the NRC for review. The NRC noted that there is no requirement that all licensees use the same standard and there are instances where different licensees use different standards in their Integrated Safety Analysis (ISA). In the absence of a broadly accepted standard and significant safety benefit, industry continues to view the requirement to address acute chemical exposure pathways as requiring a significant amount of effort to develop and justify a reasonable threshold. The NRC stated that 10 CFR Part 70 regulations for an ISA require licensees to address all credible accidents and mitigate or prevent those that are intermediate- or high-consequence. The NRC also noted that the identification of the hydrogen fluoride dermal standards used by most licensees did not require a significant effort. The NRC also stated that accidents from acute chemical exposures should include all credible exposure pathways. Industry stated that a qualitative approach to acute chemical exposures should be used for workers and that the inhalation pathway be considered all inclusive for these purposes. The NRC did not support this position as there have been accidents in fuel cycle facilities where the consequences have been dominated by the dermal exposure pathway and not the inhalation pathway. The NRC stated that staff would consider any approach that provides a reasonable basis for classifying accident consequences consistent with 10 CFR 70.61. Industry intends to provide comments by the May 18, 2015, due date.

#### **Natural Phenomena Hazards:**

The workshop facilitated interaction between the NRC and industry on the fuel cycle facilities draft Generic Letter (GL) and draft ISG on Natural Phenomena Hazards (NPH). During the meeting, the NRC presented a summary of the GL and ISG and provided draft responses to several NEI comments on the Draft GL that had been received during the public comment period (the comment period was open from August 8, 2014, to November 6, 2014).

During discussions related to the NPH GL, industry requested verification that if no new accident sequences were identified during the evaluation required by the set of requested actions in the GL, then no additional documentation would be required. The NRC staff stated that sufficient justification must be submitted to the NRC to verify compliance with the NPH performance requirements. References to existing documentation, including the ISA can be used to provide such justification. Some members of industry expressed concern that the GL would require facilities to define buildings as items relied on for safety (IROFS). The NRC

indicated that the designation of IROFS would be (and has always been) facility-specific, but that all items relied on to meet the performance requirements would need to be IROFS, consistent with the regulations. If a licensee relies upon a system, structure, or component (e.g., a building) to meet a performance requirement, it needs to be designated as an IROFS. Certain licensees have defined their process buildings as IROFS; however, doing so is not the only method for meeting the performance requirements when considering the effects of NPH.

During its remarks, the NRC staff indicated that the draft ISG on NPH has been published for public comment, with a due date of April 10, 2015, for comments. The NRC staff re-affirmed its intentions to issue the final ISG in the same timeframe as the final GL. Industry intends to submit comments on the draft ISG by the April 10, 2015, due date.

During the workshop, industry inquired as to what types of reviews would be conducted to close out the GL and Unresolved Items (URIs) that were identified as part of the staff's inspections under Temporary Instruction 2600/015, "Evaluation of Licensee Strategies for the Prevention and/or Mitigation of Emergencies at Fuel Facilities." The NRC staff responded that the agency plans to conduct vertical slice reviews of the NPH portions of the ISA and the licensee's response to the GL. The URIs would most likely be closed out in an inspection report with or without a site audit. The NRC emphasized that in some cases, the licensee may only identify documentation deficiencies which would not require a change to the design basis of the facility, just improvements to the facility documentation.

### **Region 2 Inspection Program:**

Region II provided an overview of the Division of Fuel Facility Inspection (DFFI) and a summary of the Material Control and Accounting, Nuclear Criticality Safety and Information Security inspection program areas that transferred from Headquarters to the Region. The Region also discussed the continued use of teams to perform inspections. Industry representatives noted benefits of the team, such as a single point of contact for inspections, but also noted the need to have more consistency e.g., in the scope and timing of information requested prior to inspections and the number of hours to conduct the inspections. In addition, the NRC agreed to initiate action to assure that requests for licensee documents are made well in advance of inspections to allow licensees sufficient time to compile and provide documents to staff. Industry also requested the NRC to consider coordination with the licensee in advance of developing the schedule for routine inspections and license performance reviews in the fall of the preceding year. Region II agreed that the draft schedule should be provided to licensees early in the process for planning purposes. The industry also noted that they preferred the use of URIs to apparent violations because the URI allows more time to determine if performance requirements in 10 CFR 70.61 were met, and thus, require fewer retracted licensee reports.

### **Revised Fuel Cycle Oversight Process:**

The NRC staff gave a presentation on the draft cornerstones element of the Revised Fuel Cycle Oversight Process (RFCOP). This presentation was a continuation of a presentation given during a February 25, 2015, public conference call ADAMS Accession Number ML15058A122). The staff acknowledged the public feedback received during the February call, and announced

that it would issue the draft Cornerstones Technical Document in the spring of 2015 for a formal public comment period. The NRC indicated that the project plan for the RFCOP is considered a living document that will be periodically updated. The NRC staff has a deadline to provide a SECY paper to the Commission by January 2016.

### **Cumulative Effects of Regulations:**

The NRC provided updates to the various rulemakings and regulatory activities. For 10 CFR Part 21, industry requested a meeting after issuance of the revised regulatory basis to discuss the impacts specific to fuel cycle facilities. The NRC agreed this could be arranged, perhaps in June 2015. Industry asked if the NRC plans to issue a separate regulatory guide (RG) to describe the Part 21 requirements for fuel cycle facilities. The NRC stated that only a single RG would be developed for all applicable NRC licensees, but the RG would contain a specific section on fuel cycle facilities. The 10 CFR Part 26 rulemaking due dates have been extended by 1 year to allow the Commission to consider alternate approaches to the rulemaking. However, if the staff (by spring 2015) cannot come to an agreement with the Category I licensees on the necessary fatigue measures for security officers, the staff will focus on completing its regulatory basis. The NRC staff confirmed that a SECY paper has been submitted to the Commission recommending that the 10 CFR Part 40 rulemaking be discontinued. The 10 CFR Part 61 proposed rulemaking is under review by the Commission. Once the review is completed, the NRC staff will establish additional meeting dates and milestones.

The discussion also addressed development of guidance documents. Industry noted that the values for soluble uranium addressed in 10 CFR Part 70.61 should be consistent with values in the ISG. Industry reemphasized that the NRC should issue the ISG for NPH at about the same time as the GL is issued. The NRC agreed that the documents should be issued as close to the same time as possible. Industry requested the NRC to use the integrated schedule to be forward looking in planning milestones. They also requested the NRC staff identify under what conditions new initiatives would displace items tracked on the integrated schedule. The NRC staff committed to continue to use the integrated schedule and supplement to track high priority items that are being processed to completion and work with industry to determine and adjust milestones to minimize the effects of cumulative effects of regulations for ongoing regulatory activities.

The NRC staff also committed to review the information on the integrated schedule and supplement, to post these documents on the public website (<http://www.nrc.gov/materials/fuel-cycle-fac/regs-guides-comm.html#cumeffects>) and update the information at least quarterly.

M. Bailey

5

The slides for the meeting presentation are included in Enclosure 1 and the attendees list is available in Enclosure 2. No regulatory decisions or commitments were made during the meeting.

Enclosures:

1. Attendance List
2. Slide Presentations
3. March 5, 2015, Fuel Cycle Integrated Schedule
4. March 5, 2015, Supplement to the Fuel Cycle Integrated Schedule

cc w/enclosures:  
Janet Schlueter

M. Bailey

5

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cc w/enclosures:  
Janet Schlueter

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