



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 9, 2019

MEMORANDUM TO: Kevin Hsueh, Chief
Radiation Protection and Consequence Branch
Division of Risk Assessment
Office of Nuclear Reactor Regulation

FROM: Micheal Smith, Health Physicist */RA by David Garmon for*
Radiation Protection and Consequence Branch
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Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF NUCLEAR REGULATORY COMMISSION
PUBLIC MEETING ON JULY 23, 2019 TO DISCUSS THE
UPDATE OF INSPECTION PROCEDURE 71124, "RADIATION
SAFETY—PUBLIC AND OCCUPATIONAL"

On July 23, 2019, the U. S. Nuclear Regulatory Commission (NRC) staff conducted a category 2 public meeting (Agencywide Documents Access and Management System (ADAMS) Accession No. ML19193A009) to present to external stakeholders the key proposed changes the staff is recommending for the update of Inspection Procedure 71124, "Radiation Safety—Public and Occupational."

Purpose

Communicate the staff's key proposed changes for the update of Inspection Procedure (IP) 71124, "Radiation Safety—Public and Occupational," and provide external stakeholders the opportunity to provide feedback for the staff's consideration.

Meeting Summary

NRC staff's presentation (ADAMS Accession No. ML19189A035) began with a brief overview of the Reactor Oversight Process (ROP) and IP 71124 attachments (71124.01 – 71124.08). The NRC staff then discussed the IP revision process and discussed the staff's proposed changes to the inspection procedures.

Enclosure:
Meeting Attendance List

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The NRC staff explained how IP 71124 is typically updated every two years in preparation for each new biennial inspection cycle. These updates typically involve a large amount of coordination between the program office at NRC headquarters and regional inspectors to ensure that relevant inspection experience is incorporated within the update. Staff has not traditionally engaged external stakeholders as part of this effort. However, as part of the ROP Enhancement, industry representatives provided inspection program-related feedback for the staff to consider. In response to external stakeholder interest in this effort, the staff hosted a public meeting on May 30, 2019 to inform external stakeholders of the process and schedule and to seek input for the staff to consider during this effort.

During the NRC presentation the staff discussed six topics pertaining to the update of IP 71124.

- The staff informed external stakeholders that as a part of the ROP Enhancement Phase 1, as presented in SECY-19-0067, "Recommendations for Enhancing the Reactor Oversight Process," the staff is recommending that IP 71124.02, "ALARA [as low as is reasonably achievable] Planning and Controls," be retired and that selected portions of that procedure be transferred to another inspection procedure. The selected portions include: (1) ALARA aspects of significant radiological work, (2) implementation of ALARA work controls/worker practices and (3) evaluation of significant deviations from licensees' intended radiological outcomes. Historical industry performance and the low risk associated with ALARA issues supports the staff assessment that focused baseline inspection is no longer needed in this area, risk-informed, performance-based inspection of ALARA performance will continue as part of other inspection efforts. The staff emphasized that these changes are still pending the Commission's approval.
- Staff informed external stakeholders of its considerations regarding maintaining radiation monitoring instrumentation inspections as currently described in IP 71124.05. Staff acknowledges the advancements in technology and instrumentation design for certain types of radiation detection equipment but also noted that with these advancements in technology come some added complexities. The staff also discussed how radiation detection instrumentation is fundamental to radiation protection and how licensee data is used during oversight and event response. For these reasons the staff informed external stakeholders that there are no plans to change inspections of radiation monitoring instrumentation.
- Staff discussed a proposal to better risk-inform NRC oversight of radioactive effluents and radiological environmental monitoring by shifting the inspection frequency from biennial to triennial while maintaining the same scope of these inspections. The staff's proposal is based on operational data and the very low radiological risk associated with effluent and environmental monitoring. Staff presented how radioactive effluents from U.S. nuclear power plants represent a negligible amount of dose to the public and that effluents have continued to decrease since the advent of the ROP. In addition, staff informed external stakeholders that every licensee satisfies the ALARA criteria of Title 10, Chapter I, of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix I. The staff noted that the scope of the inspection would not be changed because in its current form it is effective in evaluating the outcomes of licensee processes in the areas of effluents and environmental monitoring. The staff also informed stakeholders that

licensees are required to submit annual reports to the NRC to describe their radioactive effluents and environmental monitoring program results. The NRC uses the annual effluent reports to develop NUREG/CR-2907, "Radioactive Effluents from Nuclear Power Plants," which provides industry-wide statistics regarding effluents.

- The staff discussed a proposal to introduce limited inspection of the physical protection of category 1 and category 2 quantities of radioactive material and provided an overview of the NRC's initial inspections of nuclear power plant performance in the area of Part 37. The staff determined, after a review of observations from these inspections, that category 1 and category 2 material is secure at U.S. nuclear power plants. The inspection efforts revealed no areas of concern at licensed facilities leading staff to conclude that implementation of the requirements of Part 37 at these facilities is adequate. The security apparatus at commercial nuclear power plant facilities is robust and exceeds the requirements of Part 37 for material that is stored inside of the Protected Area. Additionally, the presence of highly trained security personnel at these facilities provides an additional deterrent and is a security provision that may be considered when evaluating the risk significance of Part 37 issues. Staff shared with the external stakeholders that the inspection guidance for the oversight of Part 37 would be limited in scope and completed within the resources that are already allocated for existing radioactive material control and transportation inspections.
- Staff discussed the potential use of situational inspections in the radiation safety inspection procedures as well as additional guidance for when inspection requirements should be completed (e.g., outage, non-outage).
- Staff discussed how the current radiation safety IPs are not consistent with the format prescribed by IMC 0040 as of January 2018. More importantly, the current format of the radiation safety IPs does not readily allow inspectors to leverage agency information technology (IT) tools for inspection report development. The staff informed external stakeholders that format changes will better align the procedures with NRC IT applications that are used to develop inspection reports to will facilitate consistency in inspection reports across all NRC regions and foster efficiency in the development of inspection reports. As part of this reformatting effort, the staff determined that some existing inspections were better documented using multiple samples of the same requirement as opposed to the current format which includes multiple steps or sub-samples within a single inspection sample. The combination of these factors leads to IPs that, in some cases, include more requirement statements and samples than in the current inspection procedures; however, this is only a reflection of the new formatting. In summary, the reformatting changes do not change inspection scopes or level of effort.

After concluding the staff's presentation, industry representatives were allowed time to make a presentation entitled, "NRC Public Meeting: 2020: Inspection Procedure 71124," (ADAMS Accession No. ML19205A010). The presentation was provided to the NRC staff the day of the public meeting; therefore, the NRC staff were not able to make the presentation publicly available prior to the meeting.

A Nuclear Energy Institute (NEI) representative started the industry presentation by discussing the industry's performance and noting that nuclear power plant radiation protection programs are mature and robust, and that technology employed in radiation protection programs has improved since the inception of the ROP. During the presentation industry representatives commented that the use of improved technology and industry innovation has allowed the industry to identify lower levels of radiation earlier, thus resulting in reduced radiation exposure for occupational workers.

Industry representatives offered feedback regarding the burden associated with inspection planning. Specifically, industry representatives discussed that certain inspections and information requests from inspectors can be very time-consuming during outages. It was recommended that minor issues discovered during outages be dispositioned after the outage to alleviate burden on licensee staff during the outage. The NRC staff accepted the feedback for further consideration however, staff offered the following observations: (1) inspectors generally put forth effort to minimize the burden on licensee's during inspections; and (2) when performing inspections, it is not always initially apparent that an inspection issue is a minor issue.

The staff closed the meeting with a review of the schedule for the inspection procedure update effort. The procedures will be published to support implementation by January 1, 2020.

Public Comments

There were no comments from members of the public.

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ADAMS Accession No: ML19220B570

***via email**

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OFFICIAL RECORD COPY

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