



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

November 7, 2019

MEMORANDUM TO: Dennis Morey, Chief
Licensing Processes Branch
Division of Licensing Projects
Office of Nuclear Reactor Regulation

FROM: Leslie C. Fields, Senior Project Manager *L.C. Fields*
Licensing Processes Branch
Division of Licensing Projects
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF SEPTEMBER 12, 2019, PUBLIC MEETING
BETWEEN THE NUCLEAR REGULATORY COMMISSION AND THE
PRESSURIZED WATER REACTOR OWNERS' GROUP TO
DISCUSS INDUSTRY'S PROPOSED CHANGES TO REGULATORY
GUIDE 1.133, "LOOSE-PART DETECTION PROGRAM FOR THE
PRIMARY SYSTEM OF LIGHT-WATER-COOLED REACTORS"

On September 12, 2019, the U.S. Nuclear Regulatory Commission (NRC) staff held a Category 2 public meeting with the Pressurized Water Reactor Owners' Group (PWROG) to discuss industry's proposed changes to modify the licensing basis for PWRs and maintain a loose-part detection program as described in Regulatory Guide (RG) 1.133, "Loose-Part Detection Program For The Primary System Of Light-Water-Cooled Reactors" located in Agency-wide Documents Access and Management System (ADAMS) under Accession No. ML003740137. To introduce the relevant information the PWROG gave a presentation entitled, "PWROG-Modify Licensing Basis to Maintain A Loose Parts Detection System Per RG 1.133" available in ADAMS under Accession No. ML19255E208. The meeting agenda and background materials are available in the public meeting notice located in ADAMS under accession No. ML19246A164.

Background

To present the historical perspective, the PWROG referred to the NRC-approved topical report that was submitted for the Boiling Water Reactor (BWR) fleet entitled, Topical Report NEDC-32975 (P), "Regulation Relaxation for BWR Loose Parts Monitoring Systems", dated January 2001, ADAMS Accession No. ML010310355. The BWROG topical report requested that NRC provide generic approval to remove the Loose Parts Detection System requirements from the licensing basis which is similar to the concept being presented for PWRs. The PWROG stated that the main objective for the meeting was to obtain NRC staff input for consideration regarding a future topical report which is currently being prepared for submittal to NRC and the PWROG described the basis for removal of Loose Parts Detection System from the PWR licensing basis.

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During the presentation, it was mentioned that as stated in RG 1.133, the primary purpose of the loose-part detection program is the early detection of loose metallic parts to avoid or mitigate damage to safety-related fuel and primary system components. Presentation materials explained that the loose-part detection program intends to minimize radiation exposure to station personnel, by enabling the early detection and extraction of loose parts before there is any damage to fuel or primary system components. It was also mentioned that most plants licensed in the 1980's have loose-part detection systems installed as part of their licensing basis to meet the requirements of RG 1.133.

Results of Industry Survey

The PWROG stated that the industry conducted a survey in 2019 and gathered information on the reliability, maintenance, and cost associated with the loose-part detection system. The PWROG contended that the results of the survey presented during the meeting concluded that the expected safety benefits of the loose-part detection system have not been realized by the PWR fleet, therefore, alternative means for detection of loose parts are being proposed as a result of the survey.

Schedule for Topical Report Submittal

The PWROG stated that are planning to submit a future PWR Topical Report on this topic in 2020. In February 2020, the PWROG is planning to request a topical report pre-submittal meeting, followed by the topical report submittal to the NRC in April of 2020.

NRC Comments/Feedback

NRC staff mentioned that industry could consider reviewing the regulatory purposes behind the issuance of RG 1.133 and include that information in the future topical report discussion, along with a description of the appropriate alternatives plants have in place for addressing this regulatory criteria to ensure that the regulatory criteria are still being met.

Public Comments and Closing Remarks

Before the conclusion of the meeting, NRC made a request for public comments. No public comments were received during this time.

At the conclusion of the meeting it was stated by representatives of the PWROG that they plan to submit a future topical report in April of 2020.

An agenda and list of meeting attendees are enclosed with this memorandum.

Docket No. 99902037

Enclosures:

1. Agenda
2. List of Attendees

**PUBLIC MEETING BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND
PRESSURIZED WATER REACTOR OWNERS' GROUP TO DISCUSS PROPOSED
CHANGES TO REGULATORY GUIDE (RG) 1.133**

AGENDA

**September 12, 2019
9:00 a.m. – 12:00 p.m.
OWFN-6B02**

Opening Remarks

Introductions

Meeting Objective and Desired Outcome

Background

Results of Industry Survey

Topical Report Submittal Schedule

Open Discussion

Next Actions

Public comment period

Adjournment

**PUBLIC MEETING BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND
PRESSURIZED WATER REACTOR OWNERS' GROUP TO DISCUSS PROPOSED
CHANGES TO RG 1.133**

NRC

L. Fields
G. Singh
D. Rahn
T. Brimfield
C. Tilton
D. Blair

PWROG/ Industry

C. Holderbaum, Westinghouse
J. Andrachek, Westinghouse
J. Vavghan, Duke Energy
G. Peters, Framatome
P. Orsal, Framatome
P. Brocheny, Framatome
J. Fahren, Exelon

SUBJECT: SUMMARY OF SEPTEMBER 12, 2019, PUBLIC MEETING BETWEEN THE NUCLEAR REGULATORY COMMISSION AND THE PRESSURIZED WATER REACTOR OWNERS' GROUP TO DISCUSS INDUSTRY'S PROPOSED CHANGES TO REGULATORY GUIDE 1.133, "LOOSE-PART DETECTION PROGRAM FOR THE PRIMARY SYSTEM OF LIGHT-WATER-COOLED REACTORS" DATED NOVEMBER 7, 2019

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***Via email**

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