



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

January 28, 2020

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

FROM: Michael D Orenak, Project Manager **/RA/**
Licensing Processes Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF DECEMBER 4, 2019, PUBLIC MEETING TO DISCUSS
THE PUBLIC COMMENTS RECEIVED ON THE INTERIM STAFF
GUIDANCE ATF-ISG-2019-XX THAT WAS PUBLISHED IN THE
FEDERAL REGISTER ON OCTOBER 24, 2019

On December 4, 2019, a Category 3 public meeting was held to discuss the public comments received on the Interim Staff Guidance (ISG) ATF-ISG-2019-XX, "Supplemental Guidance Regarding the Chromium-Coated Zirconium Alloy Fuel Cladding Accident Tolerant Fuel Concept," that was published in the *Federal Register* on October 24, 2019 (84 FR 57057).

The meeting notice and agenda, dated November 7, 2019, are available at Agencywide Documents Access and Management System (ADAMS) Accession No. ML19338C908. The NRC staff's presentation slides are available in ADAMS at Accession No. ML19338C882. Enclosed is a list of meeting attendees.

Meeting Summary

After introductions, the U.S. Nuclear Regulatory Commission (NRC) staff presented their slides on the comments received on ATF-ISG-2019-XX. The NRC staff had a specific discussion regarding risk-informing fuel licensing. The ISG is only one document used by reviewers drafting a safety evaluation, and several others describe the level of assurance necessary to make a safety finding. Specifically, NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants: LWR Edition," states that the staff is to make a determination of reasonable assurance of adequate protection. The staff also stated that fuel licensing is risk informed, such that the specified acceptable fuel design limits (SAFDLs) are generally performance based; the phenomena identification and ranking tables that will be used by reviewers uses importance assigned by a panel of experts; the guidance for lead test assemblies and their allowance within power reactors is inherently risk-informed; and SAFDLs are an intrinsic part of defense in depth, which is an integral part of the NRC's approach to considering risk in decision-making.

A member of the Nuclear Energy Institute (NEI) discussed one of NEI's comments on the ISG, specifically regarding the insertion of, "such that the entirety of the fuel in concert with the supporting systems maintains the reasonable assurance of adequate public health and safety,"

in three locations within the ISG. NEI felt that it was a modest comment and didn't understand why it was not being accepted. The NRC staff replied that "reasonable assurance of adequate protection" review standard is already in NUREG-0800, so there is no reason to double-include it, and that is also the standard the NRC uses for all reviews.

NEI also discussed its other comment that manufacturing processes should not be included in the licensing criteria. The NRC staff responded that it all depends on how the application specifies the definition of the material to be reviewed. With oversight for coatings, there needs to be a standard for which inspectors can inspect against. If in the topical report, one of those standards is contained within the manufacturing process, then the NRC will inspect there. If the coating instead can be described in a more performance-based manner through examination of the end product, then this may also be an acceptable alternative.

A staff member from the U.S. Department of Energy (DOE) asked if the ISG implied that manufacturing processes only needed to be included in a submittal when credit for the coatings was taken. The NRC staff responded that the section of the ISG in question simply points out that, if credit is being taken for a coating it should be shown to be adherent, and that no requirements about manufacturing are linked to this statement.

After all comments, NEI provided a closing statement that it feels the ISG provided sufficient guidance to the industry, but continues to feel that the guidance goes too far into the manufacturing processes. The NEI representatives stated that as long as an appropriate quality assurance program is used, the current controls are sufficient. They also stated that the proposed risk-informed language should be inserted into the ISG.

Finally, a member of a nuclear utility stated that since chromium-coated fuel is the first accident tolerant fuel concept to be evaluated by the NRC, it is very important to get this process correct.

Multiple members of the public were in attendance, but all were from the nuclear industry or the DOE. No Public Meeting Feedback Forms were received.

Please direct any inquiries to me at 301-415-3229 or Michael.Orenak@nrc.gov.

Enclosure:
List of Attendees

LIST OF ATTENDEES
DECEMBER 4, 2019, PUBLIC MEETING
REGARDING THE PUBLIC COMMENTS RECEIVED
ON THE INTERIM STAFF GUIDANCE ATF ISG-2019-XX

NAME	ORGANIZATION
Michael Orenak	U.S. Nuclear Regulatory Commission (NRC)
Josh Whitman	NRC
Andrea Veil	NRC
MJ Ross-Lee	NRC
Brandon Wise	NRC
Jason Drake	NRC
Joe Donoghue	NRC
Al Csontos	Electric Power Research Institute
Ben Holtzman	Nuclear Energy Institute (NEI)
Nima Ashkeboussi	NEI
Kent Halac	Global Nuclear Fuel (GNF)
Gary Peters	Framatome, Inc. (Framatome)
Don Helton	NRC (telephone)
Madeline Feltus	U.S. Department of Energy (telephone)
Robert Daum	EPRI (telephone)
James Stavley	Public Service Enterprise Group Nuclear (telephone)
Zeses Karoutas	Westinghouse Electric Company (telephone)
Rebeca Steinman	Exelon Corporation (telephone)
Mike Cook	GNF (telephone)
Ian Porter	GNF (telephone)
Rhona Lane	Framatome (telephone)

Enclosure

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PUBLIC COMMENTS RECEIVED ON THE INTERIM STAFF GUIDANCE
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OFFICE	NRR/DORL/LPL2-1/PM	NRR/DORL/LLPB/LA	NRR/DSS/SNPB/BC	NRR/DORL/LLPB/BC
NAME	MOrenak	DHarrison	RLukes	DMorey
DATE	12/07/2019	01/27/2020	01/28/2020	12/10/2019
OFFICE	NRR/DORL/LPB/PM			
NAME	MOrenak			
DATE	01/28/2020			

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