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

June 6, 2018

MEMORANDUM TO: Raj Iyengar, Chief
Component Integrity Branch
Division of Engineering
Office of Nuclear Reactor Research

FROM: Jay Wallace, Materials Engineer ***/RA/***
Component Integrity Branch
Division of Engineering
Office of Nuclear Reactor Research

SUBJECT: SUMMARY OF U.S. NUCLEAR REGULATORY COMMISSION FLUENCE COMPUTATIONAL METHODOLOGY PUBLIC MEETING

On May 24, 2018, the U.S. Nuclear Regulatory Commission (NRC) staff hosted a Category 2 public meeting with industry representatives. The participants included representatives from vendors, academia, National Laboratories and the Electric Power Research Institute (EPRI). This meeting took place at the NRC Headquarters, Three White Flint North, 11601 Landsdown Street, North Bethesda, Maryland.

The purpose of this meeting was to facilitate an exchange of technical information about current NRC-sponsored research on neutron fluence computational methodology. The meeting summary, participants, agenda and presentation are provided in Enclosures 1, 2, 3, and 4, respectively.

CONTACT: Jay Wallace, RES/DE
(301) 415-2418

SUBJECT: SUMMARY OF U.S. NUCLEAR REGULATORY COMMISSION FLUENCE COMPUTATIONAL METHODOLOGY PUBLIC MEETING

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OFFICE	RES/DE/CIB	RES/DE/CIB
NAME	JWallace	RIyengar
DATE	06/07/2018	06/08/2018

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U.S. Nuclear Regulatory Commission Public Meeting Summary

May 25, 2018

Title: Computation of Neutron Fluence Information Exchange

Meeting Identifier: 20180227

Date of Meeting: May 24, 2018

Location: NRC Three White Flint North
11601 Landsdown Street, 1C03
Rockville MD

Type of Meeting: Category 2

Purpose of the Meeting: To inform internal NRC stakeholders, industry, and the general public about current research on computational approaches to provide estimates of neutron fluence above and below the active core region.

General Details:

- Meeting participation was on-site, teleconference and GoToWebinar
- There were 61 attendees
- There were 23 NRC staff in attendance
- There were approximately 38 members of the public representing 14 organizations
- The meeting started at 1:30 PM and ended at 5:10 PM
- Approximately 8 members of the public asked questions or made comments

Summary of Presentations: Joel Risner (Oak Ridge National Laboratory) presented the current results of neutron fluence calculational methodology for both Boiling Water Reactors and Pressurized Water Reactors. He noted that the calculation of fluence levels outside the beltline region may be subject to phenomena that are not important for beltline region fluence calculations. The presentation discussed the analysis methodology for fluence calculations and presented the results of some parametric studies that illustrate effects of source, geometry, and materials that affect 'beyond the beltline' fluence calculations in ways that they do not affected beltline region calculations.

Action Items/Next Steps:

- Schedule a public meeting for March 2019

Attachments:

- Meeting agenda
- Attendees
- Presentation slides

.

AGENDA

COMPUTATION OF NEUTRON FLUENCE
INFORMATION EXCHANGE PUBLIC MEETING (CATEGORY 2)
AT U.S. NUCLEAR REGULATORY COMMISSION HEADQUARTERS
THREE WHITE FLINT NORTH (ROOMS 1C03), 11601 LANDSDOWN STREET
NORTH BETHESDA, MD 20852

1:30 – 1:40	Introduction, B. Thomas, J. Wallace (NRC)
1:40 – 4:00	Presentation, J. Risner (ORNL)
4:00 – 4:50	Discussion
4:50 – 5:00	Public Comments

ATTENDEES

FLUENCE COMPUTATIONAL METHODOLOGY PUBLIC MEETING (CATEGORY 2)
AT U.S. NUCLEAR REGULATORY COMMISSION HEADQUARTERS
THREE WHITE FLINT NORTH (ROOMS 1C03 – 1C05), 11601 LANDSDOWN STREET
NORTH BETHESDA, MD 20852

On-site attendees

A. Prinaris	NRC
R. Grove	ORNL
J. Risner	ORNL
A. Haghighat	Virginia Tech
J. Worsham	Framatome
K Roberts	Framatome
J. Chen	Westinghouse
C. Tomos	Dominion
K. Watkins	Transware
D. Jones	Transware
K. Amberge	EPRI
R. Dyle	EPRI
D Alley	NRC
N. Palm	EPRI
R. Carter	EPRI
T. Hardin	EPRI
C. Koehler	Excel Energy
B. Parks	NRC
A. McGenee	EPRI
D. Audell	Exelon
S. Cuadrado	NRC
W. Lunceford	EPRI
J. Nie	NRC
J. Pires	NRC
J. Poehler	NRC
R. Tregoning	NRC
A. Patel	NRC
N. Hall	SwRI
L. Smith	NRC
B. Wittick	NRC
M. Gavrilas	NRC
B. Thomas	NRC
J. Wallace	NRC

Telephone Bridge Attendees

N. Chapoutier	Framatome
R. Janowiak	Exelon

GoToWebinar Attendees

A. Alpan	Westinghouse
A. Butcavage	NRC
B. Lehman	NRC
B. Richardson	Structural Integrity
B. Wittick	NRC
C. Daily	ORNL
C. Edgar	GE
C. Moyer	NRC
D. Algama	NRC
D. Rudland	NRC
D. Speaker	SwRI
E. Rufus	Entergy
F. Abdul Rahman	GE
G. Broadbent	Entergy
G. Fischer	Westinghouse
G. Thomas	NRC
H. Malikowski	Exelon
I. Remec	ORNL
J. Yang	ORNL
K. Royston	ORNL
M. Manahan	MP Machinery and Testing
M. Sircar	NRC
P. Tamburro	Exelon
R. Janowiak	Exelon
R. Marcello	Exelon
Weyhmuller	Exelon