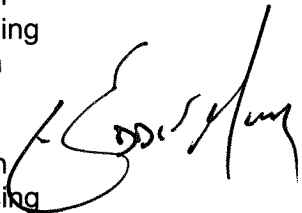




UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 20, 2019

MEMORANDUM TO: Michael D. Orenak, Acting Chief
Special Projects and Process Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: G. Edward Miller, Project Manager
Special Projects and Process Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation 

SUBJECT: SUMMARY OF JULY 18, 2019, PUBLIC MEETING WITH
NUCLEAR ENERGY INSTITUTE REGARDING NUREG-1855,
"GUIDANCE ON THE TREATMENT OF UNCERTAINTIES
ASSOCIATED WITH PRAS IN RISK-INFORMED DECISION
MAKING"

On July 18, 2019, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting¹ with representatives from the Nuclear Energy Institute (NEI). The purpose of the meeting was to discuss usage and interpretation of NUREG-1855,² "Guidance on the Treatment of Uncertainties Associated with PRAs [Probabilistic Risk Assessments] in Risk-Informed Decision Making."

During the meeting, the NRC staff presented slides that provided feedback from NRC staff to industry about the regulatory guidance that the NRC staff uses to review whether the licensee has appropriately identified and resolved key assumptions and sources of uncertainty in licensing submittals.³ In a subsequent discussion following an industry question about what specifically the NRC staff needs in a license amendment request (LAR). The NRC staff noted that a simple statement that the high level, generic guidance in NUREG-1855 was followed and that no key assumption or sources of uncertainty were identified provide insufficient information to support a conclusion that the licensee have identified all key assumptions and sources of uncertainty for a specific application. Conversely, if a reasonable application-specific discussion about how the licensee has identified and evaluated its assumptions and source of uncertainty is included in the LAR, then there is specific information that can be reviewed to support a conclusion that the licensee has appropriately addressed uncertainties. Alternatively, if the LAR includes detailed evaluations about the potential impact on the specific risk-informed application for a number of specific assumptions, then there is also specific information about the licensees process to identify and evaluate uncertainties that can be reviewed to support a conclusion that the licensee has appropriately addressed uncertainties. Industry proposed that

¹ The original meeting notice is available in the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML19171A282.

² NUREG-1855 is available under ADAMS Accession No. ML17062A466.

³ The NRC slides are available under ADAMS Accession No. ML19198A342.

application-specific guidance should be developed that could be used (and referenced) in an LAR; the NRC staff agreed that application-specific guidance would be very useful.

Following the NRC staff presentation, NEI staff gave a presentation of their feedback on usage of NUREG-1855.⁴ This was followed by a presentation of Exelon Generation Company, LLC staff that provided lessons learned from use of NUREG-1855 in the application of the risk-informed completion times LARs for Byron and Braidwood Stations.

The Pressurized Water Reactor Owners Group (PWROG) staff provided a presentation providing the results of a pilot performed using NUREG-1855. There was additional discussion about information that should be provided by licensees who have total core damage frequencies close to or slightly over 1E-4 per year. Lastly, a presentation was given by Xcel Energy staff⁵ that provided lessons learned from application of NUREG-1855 in the 10 CFR 50.69 reviews for Monticello Nuclear Generating Plant and Prairie Island Nuclear Generating Plant.

No regulatory decisions were made in the meeting.

Following the discussion, an opportunity was afforded to any other participants who wished to ask questions or make comments. No questions or comments were received from the public.

Enclosure:
List of Attendees

⁴ The NEI, Exelon, and PWROG slides are available under ADAMS Accession No. ML19198A341.

⁵ The Excel Energy slides are available under ADAMS Accession No. ML19198A344.

ENCLOSURE

LIST OF ATTENDEES

Sign In Sheet

Public Meeting to discuss
NUREG-1855

DATE: July 18, 2019

Name	Organization
Ed Milcon	NRC/NRR/DORL
Ray Schneider	Westinghouse
Sunil Weorakkodi	SDH
Mary Drouin	Wiley
RyLinthicum	PIROG
Thomas Morgan	ENERCON
Allen C Moldenhauer	Dominion Energy
Victoria Anderson	WEI
Adrienne Brown	NRC
Jeff Leary	Enercon
FARAMARZ Pournia	Southern Nuclear
Dave Russel	Tenex/Hughes/Exelon
Julia Sharma	Enercon
Stephen Kimbrough	Duke Energy
DON VANOVER	TENEX HUGHES/EXELON
Luke Karten	Dominion Energy
Jill Soniker	" "
Hari Kodali	NRC/NRR/DE
Zach Coffman	NRR/DRA/ARB
Heather Stew	DUKE ENERGY
Casey Smith	NRC/NRR/DRA
Russell Jones	STPNOC
Robert Boyer	Duke Energy
Tom Nakanishi	NRE
Paul Whiteman	Framatome

Thinh Dinh NRC/NRR/TPUB

Sign In Sheet

Public Meeting to discuss NUREG-1855

DATE: July 18, 2019

[illegible]

SUBJECT: SUMMARY OF JULY 18, 2019, PUBLIC MEETING WITH NUCLEAR ENERGY INSTITUTE REGARDING NUREG-1855, "GUIDANCE ON THE TREATMENT OF UNCERTAINTIES ASSOCIATED WITH PRAS IN RISK-INFORMED DECISION MAKING" DATED AUGUST 20, 2019

DISTRIBUTION:

PUBLIC

PM Reading File

RidsACRS_MailCTR Resource

RidsNrrDorl Resource

RidsNrrDorlLspb Resource

RidsNrrDraApla Resource

RidsNrrLAJBurkhardt Resource

RidsOpaMail Resource

ADAMS Accession No.: ML19203A293***via e-mail**

OFFICE	NRR/DORL/LSPB/PM	NRR/DORL/LSPB/LA	NRR/DRA/APLA/BC
NAME	GEMiller	JBurkhardt	SRosenberg
DATE	08/12/19	07/26/19	08/05/19
OFFICE	NRR/DORL/LSPB/BC	NRR/DORL/LSPB/PM	
NAME	MOrenak	GEMiller	
DATE	08/20/19	08/20/19	

OFFICIAL RECORD COPY