



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

January 26, 2023

MEMORANDUM TO: Cindy Rosales-Cooper, Acting Branch Chief
Licensing Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

FROM: Siva P. Lingam, Project Manager */RA/*
Licensing Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JANUARY 19, 2023, PUBLIC MEETING WITH
NUCLEAR ENERGY INSTITUTE AND INDUSTRY TO DISCUSS
GENERAL VISUAL EXAMINATION OF CONTAINMENT SURFACES
COVERED BY INSULATION

On January 19, 2023, the U.S. Nuclear Regulatory Commission (NRC) staff held an observation public meeting with representatives from the Nuclear Energy Institute (NEI) and industry to discuss general visual examination of containment surfaces covered by insulation. The meeting notice and agenda dated December 22, 2022, are available in the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML22356A111. A list of attendees is provided in Enclosure 1.

The slides presented for this public meeting by NEI and NRC are available in ADAMS under Accession Nos. ML23012A138 and ML23012A221, respectively. A list of presenters is included in Enclosure 2. The details of the meeting are discussed in Enclosure 3.

No comments were provided by members of the public. No meeting feedback forms from the attendees were received.

No regulatory decisions or commitments were made at the meeting.

Please direct any inquiries to me at (301) 415-1564 or by e-mail at Siva.Lingam@nrc.gov, or Bryce Lehman at (301) 415-1626 or by e-mail at Bryce.Lehman@nrc.gov.

Enclosures:

1. List of Attendees
2. List of Presenters
3. Meeting Details

LIST OF ATTENDEES

JANUARY 19, 2023, PUBLIC MEETING WITH

NUCLEAR ENERGY INSTITUTE AND INDUSTRY

TO DISCUSS GENERAL VISUAL EXAMINATION OF

CONTAINMENT SURFACES COVERED BY INSULATION

Name	Affiliation
Nestor Feliz Adorno	U.S. Nuclear Regulatory Commission (NRC)
Gurjendra Bedi	NRC
Eric Benner	NRC
Paul Cataldo	NRC
Matthew Domke	NRC
Nik Floyd	NRC
Mel Gray	NRC
Christopher Hunt	NRC
Jeff Kulp	NRC
Bryce Lehman	NRC
Siva Lingam	NRC
Eric Magnuson	NRC
Joon Park	NRC
Andrew Prinaris	NRC
George Thomas	NRC
Ian Tseng	NRC
Brian Wittick	NRC
Wijay Heinemann	American Electric Power
John Conly	Certrec
Mirza Baig	Constellation
Timothy Beck	Constellation
Kristen Genson	Constellation
Jonathan Grennier	Constellation
David Gudger	Constellation
David Gullott	Constellation
Anthony Haney	Constellation
Abul Hasanat	Constellation
Mark Humphrey	Constellation
Scott Kvasnicka	Constellation
Peter Lautensack	Constellation
Rachel Luebbe	Constellation
Steve Miller	Constellation
Daniel Moreno	Constellation
Sailaja Mukkapati	Constellation
James Leuellyn Newcomb II	Constellation
Darani Reddick	Constellation
Angel Reyes-Cruz	Constellation

Name	Affiliation
Rebecca Rice	Constellation
Marcellus Ruff	Constellation
Ted Ryan	Constellation
Michael Salley	Constellation
Brian Sholly Jr	Constellation
Rebecca Steinman	Constellation
Richard Swart	Constellation
Mark Weis	Constellation
Christian Williams	Constellation
Mark Ferlisi	Consultant
Daniel Lamond	Consultant
Jim Boughman	Duke Energy
Anna Winslett Ginn	Duke Energy
Austin Keller	Duke Energy
Antoaneta Koleva	Duke Energy
Mark Pyne	Duke Energy
Angela Staller	Duke Energy
Kaitlyn Sullivan	Duke Energy
Rolland Tedder Jr	Duke Energy
Phil Couture	Entergy
Glenn Chatterton	Indiana Michigan Power Company
Douglas Jacobs	NAC International Inc.
Thomas Basso	Nuclear Energy Institute (NEI)
Jerry Bonanno	NEI
Aladar Csontos	NEI
Tim Riti	NEI
Steve Catron	NextEra
Brian O'Callahan	NextEra
Donna Slivon	NextEra
Michelle Alger	Southern Nuclear Company (SNC)
Tanner Cauthen	SNC
Sarah Champion	SNC
Marie Darling	SNC
Hien Do	SNC
Aaron Mitchell Knighton	SNC
Asif Patel	SNC
Matthew Ralstin	SNC
Scott Walden	SNC
Adam Keyser	Tennessee Valley Authority (TVA)
Matt White	TVA
Jana Bergman	Public
Garcia Heras Maria Luisa	Public

LIST OF PRESENTERS
JANUARY 19, 2023, PUBLIC MEETING WITH
NUCLEAR ENERGY INSTITUTE AND INDUSTRY
TO DISCUSS GENERAL VISUAL EXAMINATION OF
CONTAINMENT SURFACES COVERED BY INSULATION

Name	Affiliation
Bryce Lehman	U.S. Nuclear Regulatory Commission
Thomas Basso	Nuclear Energy Institute
David Gullott	Constellation
Mark Ferlisi	Consultant

MEETING DETAILS
JANUARY 19, 2023, PUBLIC MEETING WITH
NUCLEAR ENERGY INSTITUTE AND INDUSTRY
TO DISCUSS GENERAL VISUAL EXAMINATION OF
CONTAINMENT SURFACES COVERED BY INSULATION

Purpose

The purpose of this public meeting between the U.S. Nuclear Regulatory Commission (NRC) staff, and representatives from the Nuclear Energy Institute (NEI) and industry was to discuss general visual examination (VE) of containment surfaces covered by insulation.

During this meeting, the NEI representatives raised concerns of what they see as a sudden change in NRC's position requiring licensees to remove the insulation for VEs. The discussion focused on differing interpretations of the requirements documented in the American Society of Mechanical Engineers (ASME) Code by NRC and industry.

Background

On September 30, 2022, the NRC completed an inspection at Quad Cities Nuclear Power Station (Agencywide Documents Access and Management System (ADAMS) under Accession No. ML22307A161).

On November 3, 2022, the NRC issued the inspection report with a non-cited violation (NCV) and stated that the licensee's failure to perform a general VE of the accessible flued head component surface areas of containment penetrations specified in ASME Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," Table IWE-2500-1, "Examination Categories" of Subsection IWE, "Examination and Pressure Test Requirements," Examination Category E-A, "Containment Surfaces," was contrary to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.55a(g)(4) and was a performance deficiency. Because the insulation obstructed visual access by line of sight when performing general visual examinations, the inspectors determined the licensee was not performing the general visual examinations required by Subsection IWE, Table IWE-2500-1 (E-A).

A similar item was identified at Fitzpatrick Nuclear Power Plant and a similar NCV is being considered.

However, the industry feels that the NRC's issued violation for not removing insulation from penetrations for these general VEs have no clear regulatory bases. Further, the industry believes, based on a review of the different containment designs currently in service in the U.S., that at least one-third of the operating units contain process piping penetrations, which are insulated. Per industry's estimate, insulation removal is estimated to cost over \$500,000 per unit for each inspection interval.

Details

Bryce Lehman of the NRC presented the topics addressing the following:

- NRC and NEI have differing positions regarding removable insulations.
- In March 2014, ASME issued an interpretation saying that there is no need for removing the insulation for general VEs. The insulation should be removed for augmented inspections only. However, the NRC staff does not agree with this ASME interpretation, and states that insulation should be removed for general VEs unless the insulated area is sealed to prevent moisture intrusion.
- NRC should consider revising 10 CFR 50.55a, “Codes and standards” condition for better clarity to the industry.
- NRC may consider clarifying its position prior to the ASME Section XI, 2023 Edition rulemaking through generic communication.
- NRC should continue to engage industry and public via possible future public meetings.

Thomas Basso of NEI, David Gullott of Constellation, and Mark Ferlisi, a consultant, provided their presentation summarizing industry positions as noted below:

- NCVs are not supported by the requirements of ASME Section XI or 10 CFR 50.55a.
- Surface areas covered by insulation are considered inaccessible for general VEs based on review of ASME Code and the requirements of 10 CFR 50.55a.
- There is no ASME or NRC requirement to remove insulation to make the surfaces accessible for IWE-2500-1 (E-A) general VE.

Path Forward

As a result of the meeting, industry committed to providing additional information on how licensees are implementing the Code, and the NRC staff committed to review the information that industry provided during the meeting. The NRC staff plans to conduct future meetings to further understand the different interpretations and identify the appropriate regulatory path forward.

Eric Benner of NRC briefly explained the NRC’s intentions on the path forward during opening remarks and concluded the meeting with closing remarks emphasizing the same.

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ADAMS Accession Nos.:**Package: ML23024A264****Meeting Notice: ML22356A111****Meeting Slides: ML23012A138 (NEI) and ML23012A221 (NRC)****Meeting Summary: ML23024A262*****by e-mail**

OFFICE	NRR/DORL/LLPB/PM*	NRR/DEX/ESEB/TR*	NRR/DORL/LLPB/LA*
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NAME	ITseng	CRosales-Cooper	SLingam
DATE	01/26/2023	01/26/2023	01/26/2023

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