

October 31, 2000

MEMORANDUM TO: Cynthia A. Carpenter, Chief
Generic Issues, Environmental, Financial &
Rulemaking Branch
Division of Regulatory Improvement Programs, NRR

FROM: Joseph L. Birmingham, Project Manager/**RA**
Generic Issues, Environmental, Financial &
Rulemaking Branch
Division of Regulatory Improvement Programs, NRR

SUBJECT: SUMMARY OF MEETING WITH NUCLEAR ENERGY INSTITUTE (NEI)
AND INDUSTRY REPRESENTATIVES CONCERNING OKONITE
CABLE TEST FAILURES

On October 12, 2000, representatives of industry and NEI met with Nuclear Regulatory Commission (NRC) staff members to discuss results of an industry survey on the installation of Okonite cable. The survey was initiated because of a concern for Okonite cable test failures reported by Brookhaven National Laboratories. The survey was conducted by NEI to determine the location and environment in which the cable was installed. The survey results were to be used as input to determine the actions needed to resolve the concern for the test failures. Meeting attendees are listed in Attachment 1. Slides presented by NEI are in Attachment 2.

Dick Wessman, NRC, began the meeting with introductions and an overview of the history of the concern. Mr. Doug Walters, NEI, then presented the results of the industry survey. High lights of the results were: 100% of licensees responded, 80 of 103 units determined they did not have this cable installed, and only 5 units have the cable installed in a service environment greater than 60 degrees Centigrade. The 5 units with the cable are reviewing corrective actions. NEI will issue the survey results in a paper to industry by the end of October. Additional details on the 5 units with the cable are in Attachment 2.

NRC staff asked whether the term "average service environment" was a numerical averaging over the length of the cable such that hotspots could exist. NEI indicated that this was not a numerical averaging over the length of the cable and agreed to provide more information on this question in the paper to be issued. NRC indicated that it intended to issue a Regulatory Issue Summary after the NEI paper was issued. NRC questioned Okonite on the Part 21 aspect of the issue. Okonite responded that they intended to resolve that question within 30 days after receiving the NEI report.

Having concluded the discussion on the survey results the meeting was adjourned.

Project No. 689
cc: See list
Attachment: As stated

cc: Mr. Ralph Beedle
Senior Vice President
and Chief Nuclear Officer
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Ms. Lynnette Hendricks, Director
Plant Support
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Alex Marion, Director
Programs
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Charles B. Brinkman, Director
Washington Operations
ABB-Combustion Engineering, Inc.
12300 Twinbrook Parkway, Suite 330
Rockville, Maryland 20852

Mr. David Modeen, Director
Engineering
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Anthony Pietrangelo, Director
Licensing
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. H. A. Sepp, Manager
Regulatory and Licensing Engineering
Westinghouse Electric Corporation
P.O. Box 355
Pittsburgh, Pennsylvania 15230

Mr. Jim Davis, Director
Operations
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Arthur Pack, Jr.
Vice President of Engineering
The Okonite Company
Post Office Box 340
Ramsey, NJ 07446

Having concluded the discussion on the survey results the meeting was adjourned.

Project No. 689
cc: See list
Attachment: As stated

Distribution: Mtg. Summary NEI Survey on Okonite Cables, October 12, 2000

PUBLIC/ADAMS

RGEB R/F

OGC

ACRS

Email

SCollins/RZimmerman

BSheron

JJohnson

DMatthews/CAder

MTschiltz, OEDO

RWessman

JCalvo

CHolden

PShemanski

DSkeen

SAggarwal

JMitchell, OEDO

MFields

FCoffman

EHackett

JVora

JBirmingham

Document Name: G:\RGEB\JLB\MSUM NEI_OKONITE_CABLE_MTG_ 10-12-2000.wpd

OFFICE	RGEB/DRIP/NRR	RGEB/DRIP/NRR	EEIB/DE/NRR
NAME	J. Birmingham	S. West	C. Holden
Date	10/26/00	10/31/00	10/31/00

OFFICIAL RECORD COPY

**List of Attendees for October 12, 2000, Meeting
Okonite Cable Failures and NEI Survey Results**

NAME	ORGANIZATION
Doug Walters	NEI
Tony Pietrangelo	NEI
Alex Marion	NEI
John Butler	NEI
Millar Straka	NUSIS
Francis Guiliano	Okonite Counsel
Arthur Pack	Okonite
Phi Holtzman	Star Inc. NUQEG
Bill Horin	Winston & Strawn/NUQEG
Paul Gunter	NIRS
Nancy Chapman	SERCH/Bechtel
Dick Wessman	NRC/NRR/DE
Jose Calvo	NRC/NRR/DE/EEIB
Paul Shemanski	NRC/NRR/DE/EEIB
Cornelius Holden	NRC/NRR/DE/EEIB
David Skeen	NRC/NRR/DRIP/REXB
Joe Birmingham	NRC/NRR/DRIP/REGB
Satish Aggarwal	NRC/RES/DET/MEB
Jit Vora	NRC/RES/DET/MEB

RESULTS OF NEI SURVEY ON OKONITE CABLES

NEI NRC MEETING

October 12, 2000

The NEI logo consists of the letters "NEI" in a white, bold, sans-serif font, centered within a solid black rectangular box.

NEI

NEI Survey

- Why
 - Okonite single conductor bonded jacket failures in the NRC staff cable testing program
 - NRC staff requested NEI assistance in identifying the location and use of these cables



NEI Survey

- When
 - Survey sent to NEI Administrative Points of Contact in July



NEI Survey

- What
 - The survey is aimed at determining the location and use of single conductor Okonite bonded jacket cables



NEI Survey

- How
 - Created three questions focused specifically on the Okonite bonded jacket cables tested in LOCA Test #5
 - Selected a service environment threshold of 60°C
 - Requested plant specific information if threshold exceeded
 - service environment
 - duration
 - function



Survey Results

- 100% response
- 80 of 103 units do not have the single conductor Okonite bonded jacket cable
- 18 of the units have it in a service environment that is less than 60°C; only 5 units have it in a service environment greater than 60°C



Survey Results

	Average Service Environment	Service Duration	Safety Summary	Is the Containment
Unit 1	1100	20 yrs	OK	No
Unit 2	1100	15 yrs	OK	Yes
Unit 3	1100	15 yrs	OK	Yes
Unit 4	1100	15 yrs	OK	Yes
Unit 5	1100	15 yrs	OK	Yes and No

- Unit 1 has a jacket thickness of 30 mills
- Units 2 and 3 plan to replace the cable in the next refueling outage
- Units 4 and 5 are marginal temperatures



Conclusions

- Does not appear to be a generic problem
- Will issue final report to NEI APCs and the NRC by end of October
- NRC should issue the Regulatory Issue Summary