

May 21, 2013

MEMORANDUM TO: Patrick L. Hiland, Director  
Division of Engineering  
Office of Nuclear Reactor Regulation

FROM: Robert O. Hardies, Senior Level Advisor */RA/*  
Division of Engineering  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF CATEGORY 2 PUBLIC MEETING BETWEEN THE  
U.S. NUCLEAR REGULATORY COMMISSION AND INDUSTRY  
REPRESENTATIVES TO DISCUSS THE PROGRESS ON THE  
INDUSTRY'S BURIED PIPING AND UNDERGROUND PIPING AND  
TANKS INTEGRITY INITIATIVES

On April 25, 2013, the U. S. Nuclear Regulatory Commission (NRC) staff held a Category 2 public meeting with representatives from the Nuclear Energy Institute (NEI), the Electric Power Research Institute, the Institute for Nuclear Power Operations (INPO), the American Society of Mechanical Engineers, NACE International (formerly known as the National Association of Corrosion Engineers) and other industry representatives at NRC Headquarters in Rockville, MD. This public meeting was one in an ongoing series of interactions between NRC staff, industry representatives and other stakeholders to understand the scope and schedule for industry activities related to degradation of buried piping. Minutes of previous meetings are available at Agencywide Document Access and Management System (ADAMS) Accession Numbers ML093070162, ML100810295, ML103230366, ML11137A171, ML113210661, ML12116A043, and ML13050A590. A list of meeting attendees is enclosed. The meeting notice and agenda is available at ADAMS Accession Number ML13094A426.

At the beginning of the meeting, NRC staff reviewed the status of the NRC's Buried Piping Action Plan which was scheduled to be updated to reflect completion of items. The update, revision 3, is available at ADAMS Accession number ML13107A984. The staff described the action plan activities, schedule for action, and reiterated NRC objectives with respect to buried piping.

CONTACT: Robert O. Hardies, NRR/DE  
(301) 415-5802

The industry discussed NEI Buried Piping Integrity Task Force activities including the implementation status of the current Buried Piping and Underground Piping and Tanks Integrity initiatives. The Nuclear Strategic Issues Advisory Council of NEI recently issued a revision to the initiative that aligned action item completion dates and scope between the initiatives. NEI planned to issue a revision to NEI 09-14 to reflect changes in the initiatives, clarify reporting expectations and revise the document structure.

INPO described its assessment role, summarized industry performance and findings with respect to the initiatives, and reviewed the transition to a new operating experience database. The Electric Power Research Institute discussed progress and plans related to development and deployment of nondestructive examination equipment, processes and procedures. EPRI indicated they would be making the Buried Piping Nondestructive Examination Reference Guide publically available on the EPRI web site. EPRI requested further interaction with NRC staff to discuss the evolution of guided wave practices. The staff agreed to set up a meeting to review guided wave research progress.

EPRI also reviewed the Buried Piping Integrity Group activities, including progress in populating the buried piping inspection results database. Insights from the database were provided. EPRI also discussed the activities of the Cathodic Protection Users Group.

The staff discussed changes to interim staff guidance: "Aging Management of Internal Surfaces, Service Level III and Other Coatings, Atmospheric Storage Tanks, and Corrosion Under Insulation." A notice of request for public comment on Draft LR-ISG-2012-02 was published in the *Federal Register* on April 12, 2013 (78 FR 21980). The public has until June 16, 2013 to comment on the draft LR-ISG.

The staff described the temporary instruction (TI-182) for NRC to perform inspections of licensee activities related to the Buried Piping and Underground Piping and Tanks Integrity Initiatives. Phase I inspections were nearly completed. Phase II inspections have just started. Results from the few Phase II inspections that have been completed seem to indicate uniform implementation of the initiatives. The staff and industry discussed the impact on a plant's decision to permanently shut down on their commitment to the initiative. The industry is still evaluating this situation. The NRC may address this issue on a plant specific basis.

The American Society of Mechanical Engineers (ASME) discussed the status of Section XI buried piping activities, including plans and progress in the "Task Group Buried Component Inspection and Testing." This task group is developing potential changes to the ASME Boiler and Pressure Vessel Code to address inspection, testing, mitigation, repair, replacement and design of buried and underground piping.

NACE International described ongoing activities in NACE Task Group 404, "Nuclear Buried Piping," to develop buried piping inspection, assessment and corrosion prevention standards optimized for nuclear power plant applications.

Staff from the NRC Office of Research presented an international regulators activity to catalogue regulatory practices at nuclear sites in a variety of countries.

All presentations made at the meeting are available in ADAMS Accession number ML13133A206 (part of the package).

During the previous meetings the following action items were recorded, with the current status noted:

- 1) Industry will discuss and address whether the initiative continues to be applicable to a plant that decides to cease permanent operations (discussed at this meeting).
- 2) EPRI will determine whether EPRI report 1025220 can be made publically available (the report has been made publically available on the EPRI web site).
- 3) The NRC will revise TI-182 to reference revision 2 of NEI-09-14 (the staff is in the process of incorporating revision 3).
- 4) NRC and EPRI staff will initiate communications on guided wave inspections (discussed at this meeting).
- 5) NRC and EPRI staff will exchange information on saturated eddy current examination (ongoing).

During this meeting the following new action items were recorded:

- 1) NRC and EPRI to establish a date to discuss guided wave practices.

The next meeting is scheduled for October 9, 2013, at NRC headquarters.

Enclosure:  
List of Attendees

CONTACT: Robert O. Hardies, NRR/DE  
(301) 415-5802



<b>List of Attendees</b>		
<b>Name</b>	<b>Email</b>	<b>Affiliation</b>
David Alley	David.Alley@nrc.gov	NRC
Tim Lupold	Timothy.Lupold@nrc.gov	NRC
Rob Tregoning	Robert.Tregonign@nrc.gov	NRC
James Isom	James.Isom@nrc.gov	NRC
Richard Conatser	Richard.Conatser@nrc.gov	NRC
Bob Hardies	Robert.Hardies@nrc.gov	NRC
Curtis Blackwelder	Curtiss.Blackwelder@Duke-energy.com	Duke
Michael Sears	Michael.Sears@exeloncorp.com	Exelon
Doug Jones	Djones7@entergy.com	Entergy
Daniel Wittas	dwittas@apsc.com	APS
Viki Armentrout	Viki.Armentrout@dom.com	Dominion
Ronald Chrzanowski	chrzanowskira@inpo.org	INPO
Joseph Sears	searsjt@inpo.org	INPO
Amy Hull	Amy.hull@nrc.gov	NRC
Steve Kenefick	skenefic@epri.com	EPRI
Mike Quarry	mquarry@epri.com	EPRI
David Smith	dsmith@epri.com	EPRI
Jim Riley	jhr@nei.org	NEI
Dan Lamond	dlamond@aesengineering.com	AES

Enclosure