

November 17, 2011

MEMORANDUM TO: Timothy R. Lupold, Chief  
Piping and NDE Branch  
Division of Engineering  
Office of Nuclear Reactor Regulation

FROM: David W. Alley, Senior Materials Engineer                    /RA/  
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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 October 20, 2011, the 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, 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, and ML11137A171. A list of meeting attendees is enclosed. The meeting notice and agenda is available at ADAMS Accession Number ML112790020.

At the beginning of the meeting, NRC staff reviewed the status of the NRC's Buried Piping Action Plan (ADAMS Accession number ML110910462). The staff described the action plan activities, schedule for action, and reiterated NRC objectives with respect to buried piping: the safety-related function of buried piping continues to be maintained and any releases of radioactive material from buried piping remain well below NRC regulatory limits. Current regulations and industry activities remain compatible with those objectives. The staff will continue to monitor operating experience to verify the objectives are being met. The staff described a temporary instruction for NRC to perform inspections of licensee activities related to the Buried Piping and Underground Piping and Tanks Integrity Initiatives. Staff and industry discussed comments on the draft temporary instruction.

Enclosure:  
As stated

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The industry provided updates on the implementation status of the current Buried Piping and Underground Piping and Tanks Integrity Initiatives and discussed future changes to "Guidelines for the Management of Piping Integrity," NEI buried piping initiative administrative document NEI 09-14.

The industry discussed its "Reasonable Assurance Document" which describes a graded process that permits risk ranking and line grouping to inform the selection of indirect and direct inspection samples. Current plans are to include this document as an appendix to NEI-09-14 when NEI 09-14 is next revised. EPRI and INPO reviewed operating experience related to degradation of buried piping. EPRI reviewed the status of activities to develop non-destructive inspection techniques and processes for buried and underground piping. EPRI plans to publish a revision to their Buried Pipe Nondestructive Examination Reference Guide.

NEI discussed efforts to coordinate activities between the Groundwater Protection Initiative and the Buried Piping and Underground Piping and Tanks Integrity Initiatives. NEI indicated they would consider any staff comments.

The NRC staff summarized its efforts to use industry and NRC information to determine a rate of occurrence for significant buried piping degradation events. The NRC is trying to determine a pre-initiative rate of occurrence as a baseline to evaluate the overall management of buried and underground piping. Compatibility issues between databases and changing recording standards have complicated this effort.

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. 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.

All presentations made at the meeting are available in ADAMS Accession number ML11297A001 (part of the package).

Since the previous meeting, the following actions item were completed:

- 1) Staff requested a response to its August 18, 2010 information request to NEI. NEI submit a response on May 17, 2011 (ML111470630).
- 2) Industry was afforded an opportunity to review the temporary instruction.

During this meeting the following new action items were recorded:

- 1) The NRC will continue discussions with industry related to determining a pre-initiative rate of occurrence of significant buried piping degradation events.
- 2) The NRC will continue discussion with industry related to recording criteria for tabulating, categorizing and sorting instances of degradation of buried and underground piping.
- 3) NEI will provide the NRC an opportunity to comment on the Groundwater/Underground Piping Initiative coordination document. A draft of this document was sent to the NRC on October 20, 2011.

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