



NUCLEAR ENERGY INSTITUTE

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NUCLEAR GENERATION DIVISION

May 17, 2011

Ms. Michele G. Evans
Director, Division of Component Integrity
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Subject: Response to Request for Underground Piping Information

Project Number: 689

Dear Ms. Evans:

On August 18, 2010, you sent a letter to NEI requesting information related to the design and leakage history of underground piping at nuclear power plants. The NEI Buried Piping Integrity Task Force worked with your Staff to clearly define the information requested and to develop a spreadsheet to capture the desired data. The purpose of this letter is to submit the spreadsheet that summarizes the data received.

The following general points pertain to the information in the attached spreadsheet. See attachment 1 for an explanation of how the data was entered into the spreadsheet, a list of abbreviations, and observations.

- The underground piping data was obtained by survey using the following process. A spreadsheet similar to the one attached to this letter was distributed to every utility. The spreadsheet was completed for each unit according to instructions similar to those included in the attachment to this letter. The completed spreadsheets were assembled by NEI into an Excel workbook and the summary information obtained by processing the data received using spreadsheet functions. The resulting workbook contains four worksheets: BWR Totals, PWR Totals, Overall Totals, and Charts.
- Responses were received from all 104 units. Utilities and plant names are not identified in the attached spreadsheet and will not be provided per our agreement with your Staff.
- The NEI Buried Piping Integrity Task Force reviewed all the data provided in an attempt to reduce inconsistency and inaccuracy, however the data was not verified and would best be used to obtain general trends. Questions on the input received were addressed prior to submitting the information to you.

Ms. Michele G. Evans

May 17, 2011

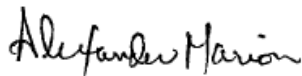
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- The information was obtained for "important" systems with underground piping segments.
 - "Important" systems are defined as those that are safety related, contain or are contaminated with licensed material, or contain environmentally hazardous material.
 - Underground Piping is defined in NEI 09-14, revision 1 as: "*All piping that is below grade, not accessible, and outside of buildings.*"

Note that Utility characterization of a system as "important" or not "important" was not challenged by the task force unless it was an apparent error.
- The "importance" categorization of some generic systems differed between plants (fire protection is the best example). As a result, information on the number of plants that bury those systems and the leakage trend for the systems can be misinterpreted if not understood in this context. For example, the information in the spreadsheet indicates that 9 plants have portions of their fire protection system underground. In fact, portions of the fire protection system piping are located underground at all plants, but only 9 plants categorized the fire protection system as "important".
- Many plants listed plant specific important systems in their response to the information request. The Buried Piping Integrity Task Force changed these types of responses in the following ways so that all the plant specific input was captured.
 - To the extent possible, information on plant specific systems was applied to one of the generic system names listed in the spreadsheet that most closely matched the function of the plant specific system.
 - Several new generic system names were added to the last 5 lines of the spreadsheet and the rest of the plant specific information was moved to these lines.
- Our evaluation of the data did not reveal any surprising information. For example, the systems that are most frequently buried, the materials of fabrication, and the number of leaks were generally what was expected.

If you have any questions on this matter, please contact me or Jim Riley at 202-739-8137; jhr@nei.org.

Sincerely,



Alexander Marion

Attachments

c: Mr. John W. Lubinski, NRR/DCI, NRC
Mr. Robert O. Hardies, NRR/DCI, NRC

Buried Piping Integrity Task Force
Buried Piping Integrity Working Group