

OHara, Timothy

From: OHara, Timothy *ET*
Sent: Wednesday, April 14, 2010 3:25 PM
To: Tsao, John
Cc: Lupold, Timothy
Subject: RE: Guided wave inspection and finite element analysis

Hello John,

Thanks for getting back to me. The situation here at Salem U1 has changed somewhat. They will be doing a FEA on the degraded piping. The FEA should be available for review on Friday or Saturday. I'm going to get an electronic copy sent to me and I'll forward it to you.

I have many more details which I'll send tomorrow about the code applicability.

Tim OHara

From: Tsao, John *NR*
Sent: Wednesday, April 14, 2010 1:10 PM
To: OHara, Timothy
Cc: Lupold, Timothy
Subject: Guided wave inspection and finite element analysis

OK ↓

Tim O.,

I received your voice mail. You asked about whether the ASME Code permits guided wave inspection results be used in the finite element analysis.

Another way of looking at your question is whether an NDE method needs to be qualified in order for its results to be used in the flaw evaluation (i.e., the finite element analysis).

I will use the 2004 edition of the ASME Section XI for this discussion because this is the latest edition that is approved in 10 CFR50.55a

When a licensee detects an indication in, say Class 1, piping, he would go to IWB-3130 to disposition that indication by either using the acceptance standards of Table IWB-3514 or by analysis per IWB-3600. IWB-3514 or IWB-3600 does not require or specify the qualification of the NDE, although I think that it is understood that a flaw that is allowed to remain in service is detected by a qualified method.

Also IWA-2000 requires that the NDE be qualified. Therefore, indirectly, a licensee needs to use an NDE that is qualified to perform inspection and that the inspection results would be used in a flaw evaluation.

The problem is that ASME Section xi has not requirements for the buried pipe except in IWA-5244 (for the pressure tests of buried pipe).

I think that the ASME is working on the requirements for the inspection of buried pipe.

As for Salem, I think that we will need to establish whether (1) the guided wave technology has been qualified by some standards, if not by the ASME. (2) how accurate the guided wave inspection results.

John