From: Miller, Ed
Sent: Wednesday, August 24, 2011 2:13 PM
To: 'thomas.loomis@exeloncorp.com'
Subject: Oyster Creek Flaw Evaluation Draft RAI Questions

Tom,
Here are the draft questions. I'm sending them to you ensure that they are understandable, that the regulatory basis is clear, and to determine if the information has been previously docketed. Please let me know when you have had a chance to review them and we can discuss a schedule date for the response. Thanks.

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By letter dated December 15, 2010, (Agencywide Documents Access and Management System (ADAMS) Accession Number ML103500359), with supplement dated June 27, 2011, (ADAMS Accession Number ML111790025), Exelon Nuclear (the licensee) submitted an evaluation of a circumferential indication found in weld NG-E-007 of the reactor recirculation line in scheduled non-destructive examinations conducted during the 2010 refueling outage (1R23) at the Oyster Creek Nuclear Generating Station. After reviewing the licensee's supplement dated June 27, 2011, the NRC staff has identified the following draft questions.

1. In the June 27, 2011 letter, in response to NRC's RAI Question No. 1, the licensee stated that the indication in weld NG-E-007 was not detected in the inspection performed in 1996. Since the indication was characterized as embedded, discuss why the indication was detected in 2010 but not in 1996.

2. Section 4.3 of the flaw evaluation in the December 15, 2010 submittal stated that the examination performed was not qualified for through wall sizing of planar flaws detected on the far side of a weld. Discuss whether any part of the ultrasonic examination was qualified. Discuss the ASME Code, Section XI requirements (reference the subarticles of the Code) that were used to qualify for the 2010 inspection, if any. If the ultrasonic testing (UT) was not qualified to size the indication, discuss/demonstrate the accuracy of the initial (detected) flaw size used in the flaw evaluation.

3. (a) Discuss the UT transducer type that was used (e.g., phased arrary, shear/longitudinal single angle). (b) Discuss whether the examination was performed from the outside surface or inside surface of the pipe. (c) Discuss whether the UT was performed to examine through wall and not only inner one-third of the pipe wall thickness. (d) Discuss whether the inspection surface (either ID or OD surface) was ground smooth prior to UT. (e) Discuss whether the UT transducer was moved onto the weld (covering the entire width) to examine the cast austenitic stainless steel valve. (f) Provide the drawing(s) of the weld volumes that were examined, including the location of the indication. (g) Submit the nondestructive examination report.

4. Section 6.0 of the flaw evaluation stated that the detected indication is embedded in the cast austenitic stainless steel material. (a) Discuss whether a surface examination (dye penetrant or eddy current) was performed to verify that the indication is embedded. (b) If a surface examination was not performed, discuss why and how the indication was determined to be embedded.

5. Discuss whether a measurement uncertainty/error was added to the length and depth of the indication because the UT used in the 2010 inspection was not qualified. If an uncertainty was not added, demonstrate that the indication size used in the flaw evaluation is conservative.