AP1000DCDFileNPEm Resource

From: Loza, Paul G. [lozapg@westinghouse.com]
Sent: Monday, March 08, 2010 4:04 PM
To: Buckberg, Perry
Cc: DeBlasio, John J.; Butler, Rhonda
Subject: RE: RAI-SRP 5.2.3-CIB1-01 Revision 2

Perry,

I acknowledge receipt for Westinghouse of RAI-SRP5.2.3-CIB1-01, R2.

Thanks,

Paul

From: Buckberg, Perry [mailto:Perry.Buckberg@nrc.gov]
Sent: Tuesday, March 02, 2010 11:02 AM
To: Loza, Paul G.; DeBlasio, John J.
Cc: 'John Oddo'; Wiseman, Dale A.; McKenna, Eileen; Jaffe, David
Subject: RAI-SRP 5.2.3-CIB1-01 Revision 2

John/Paul,

Based on your letter dated December 31, 2009, in response to RAI SRP 5.2.3-CIB1-01, Revision 1, the staff has the following supplemental requests for additional information (numbered - RAI SRP 5.2.3-CIB1-01, Revision 2), please acknowledge receipt:

1) In response to RAI Rev 1 **question 2**, Westinghouse's modification to Table 5.2-1 (Sheet 2 of 5) of the DCD did not clarify that the SA-508, CL 1a material is only for the small nozzle pressure forgings on the steam generator. Please clarify this table by listing the "Pressure forgings-small nozzles(5)" with the SA-508, CL1A material specification separately from "Other Pressure Boundary Forgings and Tubesheet" which has the material specification SA-508, GR3, CL2. Also, confirm that DCD paragraph 5.2.3.2.2, which states that carbon steel used in principal pressure-retaining applications which is exposed to reactor coolant will be clad with corrosion resistant cladding, applies to these carbon steel small nozzle forgings.

2) The following is in regards to Westinghouse's response to RAI Rev 1 **question 3**:
a. The filler metal classifications, e.g., EH11K, etc., for carbon and low alloy steels should be included in Table 5.2-1, similar to the filler metal classifications listed for stainless steel materials.
b. Weld filler material specification SFA5.9, classification ER309 is used for the weld buttering on the RCP stator shell, which is subsequently post weld heat treated. Typically, filler material classification ER309L is used when it is exposed to a heat treatment in the sensitization temperature range of 800ºF to 1500ºF, as discussed in RG 1.44. Therefore, revise Table 5.2-1 to state that ER309L is used when exposed to post weld heat treatment that could sensitize the stainless steel material.

3) The following is in regards to Westinghouse's response to RAI Rev 1 **question 4**:
a. Westinghouse stated that the stator can is made of Hastelloy C276 (ASTM B-575, UNS N10276) material. Provide operational experience for this material since it is exposed to the reactor coolant and also prevents the carbon steel pressure boundary parts from being exposed to the reactor coolant.
b. Westinghouse stated that it could be possible for 2 gallons of water to accumulate in the bottom end of the stator region. If this occurs, will the proposed carbon steel pressure boundary be exposed to reactor coolant? If so, discuss why degradation mechanisms, such as general corrosion, pitting and boric acid corrosion, will not affect the integrity of the carbon steel pressure boundary.

4) Concerning Westinghouse's response to RAI Rev 1 **question 6**, if consumable inserts are not used for alloy 52 welding of the alloy 690 safe-end, provide the method and weld joint used to ensure complete weld penetration. It should be noted that this weld is the field weld (closure weld) joining the stainless steel piping to the alloy 690 safe-end.

5) Since Westinghouse's response to RAI Rev 1 **question 7** states that filler material specification SFA 5.1 is only used for making weld repairs and base material repairs, Table 5.2-1 should be revised accordingly, so that this or any filler material specification that contains flux is not used for welding the root pass of welds.

Thanks,

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From: Loza, Paul G.

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Recipients:
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"Butler, Rhonda" <Rhonda.Butler@nrc.gov>
Tracking Status: None
"Buckberg, Perry" <Perry.Buckberg@nrc.gov>
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