

Conte, Richard

From: OHara, Timothy ^{RT}
Sent: Monday, April 12, 2010 6:14 AM
To: 'Berrick, Howard G.'
Cc: Conte, Richard
Subject: Additional Questions on AFW Piping

Good Morning Howard,

I'd like to have the following information concerning the AFW piping and system. Please put these into your question bank. I'll check with you later today to see when you can provide the information or answers as necessary:

(1) Please provide a copy of the original AFW piping design specification.

(2) Please provide a copy of the original AFW piping installation procedure.

(3) Please provide all of the assumptions which will be used in the FEA. What sensitivity analyses will be performed to test these assumptions?

(4) Please provide the FSAR design basis and system description for the original AFW system?

(5) Please provide all design loads used in the original design of the AFW system.

(6) Please provide all design loads which will be used on the new FEA.

(7) Does PSEG consider the use of FEA a change in a calculational method? Has a 50.59 review and/or evaluation been completed? If so can PSEG please provide a copy?

(8) Please provide the basis for the 1950 psi design pressure for the AFW system.

(9) What portions of the AFW system will have the design pressure changed to 1275 psi? What accident analyses have been completed to support this change of design pressure?

(10) If the design pressure is changed to 1275 psi how will PSEG ensure that this pressure is not exceeded? Will this change have an affect on existing accident analyses?

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- (11) If the AFW system design pressure is changed from 1950 psi to 1275 psi please quantify and explain in detail the change in accident analysis margin?
- (12) Does PSEG anticipate changing the system design pressure for all 4 AFW supply headers?
- (13) Can you confirm that the present AFW piping was the originally installed piping during plant construction?
- (14) Has this latest incident been the only known corrosion discovered on the AFW piping on either Salem Unit 1 or Unit 2?

Thanks for your help.

Tim OHara

Conte, Richard

From: OHara, Timothy *RT*
Sent: Sunday, April 11, 2010 12:01 PM
To: Conte, Richard; Wilson, Peter
Cc: Schroeder, Daniel; Balian, Harry; Modes, Michael; Burritt, Arthur; Ennis, Rick
Subject: AF Issues At Salem 1 & 2

Rich,

I will be back on site at Salem approx. 10:00 AM tomorrow (Monday). I need to get a routine blood test early tomorrow. I haven't been able to reach the Residents or Howard Berrick today to get an update but I assume they are still on schedule with the excavation at Unit 1.

Here is my summary and several issues which I have:

Unit 1:

- (1) I'll be asking several questions concerning the excavation and UT measurements and the upcoming FEA. Do we want to pursue an independent FEA through Research and Sandia?
- (2) Do you anticipate a conference call with NRR & LR on the buried piping this week? I would favor any day at approximately 3:00 PM.
- (3) I'll continue to follow the excavation and measurements on Unit 1. On Friday, 4/9, PSEG estimated 4 full days would be needed to complete the excavation and UT measurements.
- (4) PSEG appears to be proceeding without addressing the perceived causes of the corrosion. I've been told that the cause determination will be completed when the repair has been completed. This seems to be backward.
- (5) Oh yeah, I'll also be working on completing the 7111108P inspection requirements. Should be some EC inspections to look at this week.

Unit 2:

- (1) I provided PSEG with multiple questions about the Unit 2 situation on Friday PM. A very limited amount of the data was provided yesterday and much more is needed. At this time, I believe that the Unit 2 AFW piping should be excavated and the coating inspected to ensure that the same condition doesn't exist on Unit 2.
- (2) I base (1) upon the fact that PSEG has not given a cause for the Unit 1 failure and that enough information has not been provided to make the judgement that Unit 2 is any better than Unit 1 was discovered to be. That being said, I can't say that there is an urgent need to inspect Unit 2's piping. This position may change depending upon the results of the UT characterization of the rest of the Unit 1 AF piping.
- (3) We have heard about soil chemistry data affecting both Units, however, I don't see chemistry concerns affecting or shaping the short term actions which are being taken.

Call me on my cell if you have any questions or need additional information.

Tim OHara (b)(6) *6*

Conte, Richard

From: OHara, Timothy *RT*
Sent: Saturday, April 10, 2010 11:00 AM
To: 'Berrick, Howard G.'
Cc: Conte, Richard; Schroeder, Daniel
Subject: RE: Questions on AF Piping Repair

Hello Howard,

Thanks. Do you have an estimate of the milestones and complete schedule for this effort?

Tim OHara

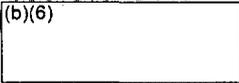
From: Berrick, Howard G. [mailto:Howard.Berrick@pseg.com]
Sent: Saturday, April 10, 2010 6:55 AM
To: OHara, Timothy
Cc: Conte, Richard; Schroeder, Daniel
Subject: RE: Questions on AF Piping Repair
Importance: High

Tim,

I have forwarded your email to Len so that he has your email address and phone number.

I will enter the questions you asked in our tracking database to ensure responses are not missed.

Howard

Howard Berrick
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Salem Regulatory Assurance
PSEG Nuclear - Salem Generating Stations
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(Fax) 856-339-1448
(Bpr) ^{(b)(6)} 

From: OHara, Timothy [mailto:Timothy.OHara@nrc.gov]
Sent: Saturday, April 10, 2010 9:29 AM
To: Berrick, Howard G.
Cc: Conte, Richard; Schroeder, Daniel
Subject: Questions on AF Piping Repair

Hello Howard,

I'm just catching up with the information Len presented in the brief yesterday. Can you please ensure that Len has my NRC email address and copies me on all information on the AFW piping issue? Thanks.

Regarding the proposed repair we heard about yesterday:

- (1) I'm assuming this will be a Section XI repair. If not please clarify what part of the code is being followed.
- (2) Does PSEG anticipate the need for relief request from any Code requirements? Has PSEG determined that this proposed repair conforms with 10 CFR 50.55a?
- (3) Assuming this will be a Section XI repair please provide the Section XI Repair Plan for my review? Please include all referenced drawings and procedures, including necessary analyses to support the plan.
- (4) I'm very interested in knowing how PSEG will determine future corrosion rates to apply. Please provide details on how this will be determined. If a linear rate is used, please show the basis for doing so.
- (5) Can you please verify that all wall thickness measurements used in the FEA analysis will be determined via Code qualified UT measurements?
- (6) Please describe, in detail, how the Guided Wave measurements will be used by the FEA?
- (7) Regarding the FEA, please be prepared to provide detail on the remaining margins in the AF piping design and how this degradation has affected the margin.
- (8) What system design pressure will the FEA assume? Will the present design pressure of 1950 psi be maintained?
- (9) Please provide information on the new coating which I'm assuming will be applied to the piping? What is the life of the coating? What re-inspection period will PSEG use for future inspections?

I'm not looking for immediate answers but will look at whatever you can provide as soon as I receive it. Email will be fine. If we need a conference call on any of this I'm available. Call me at (b)(6)

Tim OHara