

PMTurkeyCOLPEm Resource

From: Comar, Manny
Sent: Wednesday, August 20, 2014 3:18 PM
To: steve.Franzone@fpl.com
Cc: TurkeyCOL Resource
Subject: FW: Turkey Pt 6 & 7-Clarification/additional information needed to complete Ch 12 SE
Attachments: Turkey Pt-additional info needed to complete SE (7-11-14).doc

Steve can you call me on this issue tomorrow.

From: Hinson, Charles
Sent: Wednesday, August 20, 2014 2:29 PM
To: Comar, Manny
Cc: McCoppin, Michael
Subject: FW: Turkey Pt 6 & 7-Clarification/additional information needed to complete Ch 12 SE

Hi Manny

As you may recall, on July 15 I sent you the below questions outlining the additional info I needed from Turkey Pt to complete my Ch 12 SE input. On July 24 we had a call with Turkey Pt where I discussed these questions with the applicant. During the call, the applicant agreed to give me access to the site reading room to evaluate the answers to some of my questions. For several of the other questions, the applicant agreed to provide me with written responses to my questions, either in the form of modifying their revised responses to the deep well questions submitted on April 22, 2014, or in the form of a separate response letter.

I have reviewed some of the items in the TP reading room but have not received any responses to my other questions as of yet. I will be out of the office for the next 2-3 weeks (following shoulder surgery tomorrow), so will not be able to work on the TP SE input during that time, assuming I receive the responses from the applicant. Regarding the info in the reading room, I did review the info covering the estimated construction worker doses from the operating units. However, I could not locate the information on the description of the ISFSI location and calculations used to determine the ISFSI direct dose contributions to the Unit 6 and 7 construction workers. Could you please ask the applicant to direct me to where this information is located?

I will be reading my emails from home over the next 2-3 weeks, but will be focusing most of this time working on generating RAIs for the North Anna review.

Charlie Hinson

From: Hinson, Charles
Sent: Tuesday, July 15, 2014 9:15 AM
To: Comar, Manny
Cc: McCoppin, Michael (Michael.McCoppin@nrc.gov); Conatser, Richard
Subject: Turkey Pt 6 & 7-Clarification/additional information needed to complete Ch 12 SE

Hi Manny

As we discussed, I have completed my Ch 12 SE input for Turkey Point Units 6 & 7, with the exception of several places where the applicant has either 1) provided information in response to staff RAIs in the FPL online reference portal instead of on the docket or 2) provided information in response to staff RAIs which did not contain all the pertinent information for the staff to prepare a complete safety evaluation.

Attached is a list of nine questions addressing additional information needed by the staff to complete its review.

Questions 1 and 2 pertain to issues related to construction worker doses. These issues were addressed in the applicant's August 19, 2011 response to NRC's RAI letter No. 031 (eRAI 5430). However, in the applicant's response to many of these RAIs, the applicant stated that the responses to the staff's RAIs were addressed in FPL's online reference portal. Although the staff were able to adequately evaluate the applicant's responses to most of these RAIs, the staff requires that the information requested in the attached Questions 1 and 2 be provided on the docket. For these two questions, the applicant can either modify the content of the PTN COL FSAR so that it addresses the information requested, or reissue the applicable RAI responses to provide the information requested.

Questions 3 through 8 pertain to issues related to the applicant's deep well injection system. These questions are based on the applicant's April 22, 2014 supplemental response to NRC's RAI letter No. 72 (eRAI 6985) and pertain specifically to the responses to staff RAIs 11.02-6-6 and 11.02-6-8. In asking Questions 3 through 8, the staff is requesting that the applicant provide additional information to address how the deep well injection system (including the discharge piping and associated valves and appurtenances) is designed to minimize leakage of discharge water to the environment.

Question 9 points out a minor editorial mistake in Chapter 13 of the PTN COL FSAR which should be corrected.

As stated above, these questions request clarification/additional information relating to the applicant's responses to staff RAIs previously addressed by the applicant. Please let me know when the applicant will be able to address these questions.

Thank you,
Charlie Hinson
X1845

Hearing Identifier: TurkeyPoint_COL_Public
Email Number: 909

Mail Envelope Properties (377CB97DD54F0F4FAAC7E9FD88BCA6D00185891C8F81)

Subject: FW: Turkey Pt 6 & 7-Clarification/additional information needed to complete Ch
12 SE
Sent Date: 8/20/2014 3:17:37 PM
Received Date: 8/20/2014 3:17:38 PM
From: Comar, Manny

Created By: Manny.Comar@nrc.gov

Recipients:
"TurkeyCOL Resource" <TurkeyCOL.Resource@nrc.gov>
Tracking Status: None
"steve.Franzone@fpl.com" <steve.Franzone@fpl.com>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

Files	Size	Date & Time
MESSAGE	4563	8/20/2014 3:17:38 PM
Turkey Pt-additional info needed to complete SE (7-11-14).doc		35322

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Supplemental information regarding Turkey Pt 6 and 7 needed to complete the Ch 12 SE:

Construction worker doses

1. Provide a layout drawing showing the location of the ISFSI in relation to Turkey Point Units 6 and 7 (if this information is currently provided in the PTN COL FSAR, specify the location in the FSAR where this information is provided). In the response to RAI 12.4.1.9.3-1, the applicant assumed a fully loaded ISFSI with 52 horizontal storage modules in calculating the dose rate to a construction worker at Turkey Point Unit 7. Based on the estimated construction schedule for Unit 7, provide a realistic estimate of the loading of the ISFSI at that time.
2. Section 12.4.1.9.3 of the PTN COL FSAR states that gaseous effluent doses from Units 3 and 4 were estimated from the annual reports for those units. Specify the years of the applicable annual reports that were used as the basis for determining the Unit 7 construction worker dose due to gaseous effluents from Units 3 and 4. In addition, provide the assumed effluent source terms, locations where the exposure results were calculated, and assumed dispersion and deposition factors used to perform the calculations.

Discharge line

3. PTN SUP 11.2-1 states that the “Integrity of the injectate piping will be monitored for leakage or will be accessible for visual inspection or remote surveillance in conjunction with groundwater monitoring, as necessary, as part of the Units 6 & 7 Groundwater Monitoring Program.” The response to RAI 11.02-6-8 (on page 3 of 4 of Attachment 4) states that the integrity of the injectate piping will be monitored for leakage by performing periodic walkdowns and by groundwater monitoring, as necessary, as part of the Units 6 & 7 Groundwater Monitoring Program.

Clarify the wording in PTN SUP 11.2-1 to specify what type of “remote surveillance” will be used (e.g. use of such techniques as a groundwater observation well network, piping leak detection systems), in conjunction with the Groundwater Monitoring Program, to monitor potential unidentified releases to the environment from the buried portions of the discharge piping.

4. PTN COL FSAR Subsection 2.4.12.4 states that, consistent with the NEI groundwater initiatives, “the groundwater observation well network will be evaluated and an environmental monitoring program developed as part of detailed design activities for Units 6 & 7.” Subsection 2.4.12.4 then states that the groundwater monitoring program will monitor changes in the Biscayne and Florida aquifers. Verify that the monitoring of these two aquifers will be sufficient to detect unidentified releases to the environment from the buried portions of the discharge piping, or whether the readings from other monitoring wells will also be used to monitor for leaks from the discharge piping.

5. PTN COL FSAR Table 1.9-201, "Regulatory Guide/FSAR Section Cross-References," contains a reference to Regulatory Guide 4.21, "Minimization of Contamination and Radioactive Waste Generation: Life-Cycle Planning." RG 4.21 states that applicants should strive to minimize leaks and spills, provide containment in areas where such events might occur, and provide for detection that supports timely assessment and appropriate response. PTN COL FSAR Subsection 2.4.12.4, "Monitoring or Safeguard Requirements," references the use of the guidance from this RG with respect to the applicant's groundwater monitoring program. Clarify how the applicant has used the guidance from RG 4.21 in the design of the discharge piping and the associated valves and appurtenances.
6. The responses to RAI 11.02-6-6 (on page 23 of 31 of Attachment 2) and RAI 11.02-6-8 (on page 2 of 4 of Attachment 4) describe the use and operation of air/vacuum release valves on the Turkey Point 6 & 7 discharge lines. Describe features associated with the air/vacuum release valves that will minimize/detect/control any leakage from these valves.
7. The response to RAI 11.02-6-8 (on page 3 of 4 of Attachment 4) describes the use and operation of the vent and drain valves on the Turkey Point 6 & 7 discharge lines. The response also states that personnel will be present at the vent valve locations during startup, as needed, to allow air to escape and then close the vent valves when the lines fill with water. Describe what actions would be taken by plant personnel in the event of spillage from the vent valves during pump startup.
8. The response to RAI 11.02-6-6 (on page 22 of 31 of Attachment 2) states that the injectate piping connecting the pump station to the deep injection wells is constructed of steel. PTN SUP 11.2-1 states that the injectate piping to each deep injection well isolation valve is "constructed of material suitable for the range of injectate composition, flow rates, and pressures, as well as environmental factors." Modify the text of PTN SUP 11.2-1 to state that the injectate piping is constructed of steel.
9. PTN COL FSAR Table 13.4-201 (in the Program Source column for Item 10, Radiation Protection Program) incorrectly references 10 CFR 20.1406 as "10 CRF 20.1406." This editorial error should be corrected in a future revision to the FSAR.