

PMTurkeyCOLPEm Resource

From: Terry, Tomeka
Sent: Monday, June 13, 2011 11:50 AM
To: Orthen, Richard; Brown, Alison; Bortone, Pilar; Franzone, Steve; Hamrick, Steven; Madden, George; Maher, William
Cc: TurkeyCOL Resource; Kugler, Andrew; Weisman, Robert; Bryce, Robert W; Clouser, Megan L SAJ
Subject: Turkey Point Env. - Final RAI EIS 9.4 (RAI No. 5770) - System Design Alternatives
Attachments: RAI 5770 EIS 9.4.doc

Rick,

Attached is RAI EIS 9.4 (System Design Alternatives) for the Turkey Point COL Application. Based our discussions, we understand you have no further questions on this RAI. You are requested to respond to this request within 45 days. If additional time is required to respond, please inform Andy Kugler or myself of your proposed schedule to respond at your earliest opportunity.

If you have any questions, please contact me.

Tomeka L. Terry
Environmental Project Manager
NRO/DSER/RAP2
U.S. Nuclear Regulatory Commission
301-415-1488
tomeka.terry@nrc.gov

Hearing Identifier: TurkeyPoint_COL_Public
Email Number: 360

Mail Envelope Properties (0A64B42AAA8FD4418CE1EB5240A6FED132ABCE19D8)

Subject: Turkey Point Env. - Final RAI EIS 9.4 (RAI No. 5770) - System Design
Alternatives
Sent Date: 6/13/2011 11:50:05 AM
Received Date: 6/13/2011 11:50:08 AM
From: Terry, Tomeka

Created By: Tomeka.Terry@nrc.gov

Recipients:

"TurkeyCOL Resource" <TurkeyCOL.Resource@nrc.gov>
Tracking Status: None
"Kugler, Andrew" <Andrew.Kugler@nrc.gov>
Tracking Status: None
"Weisman, Robert" <Robert.Weisman@nrc.gov>
Tracking Status: None
"Bryce, Robert W" <rw.bryce@pnl.gov>
Tracking Status: None
"Clouser, Megan L SAJ" <Megan.L.Clouser@usace.army.mil>
Tracking Status: None
"Orthen, Richard" <Richard.Orthen@fpl.com>
Tracking Status: None
"Brown, Alison" <Alison.Brown@fpl.com>
Tracking Status: None
"Bortone, Pilar" <Pilar.Bortone@fpl.com>
Tracking Status: None
"Franzone, Steve" <Steve.Franzone@fpl.com>
Tracking Status: None
"Hamrick, Steven" <Steven.Hamrick@fpl.com>
Tracking Status: None
"Madden, George" <George.Madden@fpl.com>
Tracking Status: None
"Maher, William" <William.Maher@fpl.com>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	Size	Date & Time
MESSAGE	634	6/13/2011 11:50:08 AM
RAI 5770 EIS 9.4.doc	33274	

Options

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

Request for Additional Information No. 5770
Letter Number 2011001
ER Revision 2

6/13/2011

Turkey Point Units 6 and 7
Florida P and L
Docket No. 52-040 and 52-041
EIS 9.4 - System Design Alternatives
Application Section: Part 3, Environmental Report, Section 9.4

QUESTIONS for Environmental Technical Support Branch (RENV)

EIS 9.4-1

Provide information that supports the assertion in the ER Section 9.4.2.1.5, that using the Boulder Zone as a backup water supply in conjunction with reclaimed water is not environmentally preferable to using radial collector wells drawing water from Biscayne Bay/Biscayne Aquifer.

EIS 9.4-2

Work Order #2, Task 1, Initial Water Source Alternative Screening Technical Review Report, Section 5.0 (page 3 and 4) indicates that Reclaimed water ranked highest as a source of cooling water and the Boulder Zone ranked second. Use of radial collector wells ranked fourth. Provide the rationale for selecting the use of Radial Collector wells on Turkey Point as the backup water supply for the proposed units.

EIS 9.4-3

Work Order #2, Task 1, Initial Water Source Alternative Screening Technical Review Report, Appendix A tables (for example Biscayne Bay Construction Footprint page 22) indicate that the evaluation of a radial collector well source was based on a location on Card Sound. Clarify how this location compares with the selected location on Turkey Point in terms of environmental impacts.

EIS 9.4-4

The table on Biscayne Bay Habitat Impacts in Work Order #2, Task 1, Initial Water Source Alternative Screening Technical Review Report Appendix A, indicates no impact to Biscayne Bay because the radial collector wells would be constructed on Card Sound. How would the radial collector well impact ranking change if the location on Turkey Point was the location evaluated?

EIS 9.4-5

The table assessing Card Sound Habitat Impacts in Work Order #2, Task 1, Initial Water Source Alternative Screening Technical Review Report, Appendix A gives a lower score (2) to the radial collector well system because the location would be near shore in close proximity to fresh water inflows. Clarify the environmental impact of locating the radial collector wells on Turkey Point relative to fresh water inflows.

EIS 9.4-6

One alternative water source considered in the Work Order #2, Task 1, Initial Water Source Alternative Screening Technical Review Report, is the Boulder Zone. The Cooling Water Supply and Conceptual Design report (March 2009) indicates on page 32 that it would take over 250 years for water injected through the blowdown injection well (assuming reclaimed water as the source) to travel to production wells located 5 miles away on the Turkey Point site. Clarify why the use of the Boulder Zone as a backup water supply is not environmentally preferable to the use of radial collector wells extending beneath Biscayne Bay.