

PMTurkeyCOLPEm Resource

From: Kugler, Andrew
Sent: Thursday, May 05, 2011 7:57 AM
To: Orthen, Richard; Franzone, Steve; Maher, William; steven.hamrick@fpl.com
Cc: Bryce, Robert W; TurkeyCOL Resource; Moulding, Patrick; Clouser, Megan L SAJ; Haque, Mohammad; Masnik, Michael
Subject: Forwarding Draft RAIs 5769 and 5770-Hydrology for Chapter 9
Attachments: 110505-Draft RAI 5770 - Hydro 9-4.doc; 110505-Draft RAI 5769 - Hydro 9-3.doc

Steve

Attached are draft RAIs 5769 and 5770 prepared by the NRC staff for the environmental review of Turkey Point Units 6 and 7. These RAIs are related to the Hydrology evaluation for Chapter 9.

After you've had an opportunity to review the RAIs, we can set up a call involving FPL and NRC for any clarifications of the request. At that time we can also discuss an appropriate timeframe for the FPL response. If you have any questions, please give me a call.

Andrew Kugler
Sr. Environmental Project Manager
NRC/NRO/RAP2
301-415-2828

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Subject: Forwarding Draft RAIs 5769 and 5770-Hydrology for Chapter 9
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Created By: Andrew.Kugler@nrc.gov

Recipients:

"Bryce, Robert W" <rw.bryce@pnl.gov>
Tracking Status: None
"TurkeyCOL Resource" <TurkeyCOL.Resource@nrc.gov>
Tracking Status: None
"Moulding, Patrick" <Patrick.Moulding@nrc.gov>
Tracking Status: None
"Clouser, Megan L SAJ" <Megan.L.Clouser@usace.army.mil>
Tracking Status: None
"Haque, Mohammad" <Mohammad.Haque@nrc.gov>
Tracking Status: None
"Masnik, Michael" <Michael.Masnik@nrc.gov>
Tracking Status: None
"Orthen, Richard" <Richard.Orthen@fpl.com>
Tracking Status: None
"Franzone, Steve" <Steve.Franzone@fpl.com>
Tracking Status: None
"Maher, William" <William.Maher@fpl.com>
Tracking Status: None
"steven.hamrick@fpl.com" <steven.hamrick@fpl.com>
Tracking Status: None

Post Office: HQCLSTR01.nrc.gov

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Options

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Draft Request for Additional Information No. 5770

Turkey Point Units 6 and 7
Florida P and L
Docket No. 52-040 and 52-041
SRP Section: 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-***

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-***

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-***

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-***

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-***

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-***

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.

Draft Request for Additional Information No. 5769

Turkey Point Units 6 and 7
Florida P and L
Docket No. 52-040 and 52-041
SRP Section: EIS 9.3 - Alternative Sites
Application Section: Part 3, Environmental Report, Section 9.3

QUESTIONS for Environmental Technical Support Branch (RENV)

EIS 9.3-***

Provide current and past water usage from the Floridan Aquifer at the West County Fossil Plant including flow, and hydrogeologic strata, and depth range from which the water was obtained. The applicant's experience with water withdrawals from the Floridan Aquifer at the nearby West County plant will inform the staff on how agencies might handle similar requests involving the Floridan Aquifer for alternative sites.

EIS 9.3-***

Provide water quality information for all water resources considered as viable sources of water or receivers of effluent for the alternative sites (Glades, Martin, Okeechobee 2, and St. Lucie), including but not limited to the Floridan Aquifer, Biscayne Aquifer, Kissimmee River, C-43 and C-44 canals, and the Atlantic Ocean near St. Lucie.

EIS 9.3-***

Provide the receiving water bodies and expected rates of discharge for the plant excavation dewatering for each alternative site (Glades, Martin, Okeechobee 2, St. Lucie).

EIS 9.3-***

Provide information on the calculation of flow rates available from surface water and groundwater resources listed in the ER at each alternative site (groundwater only for St. Lucie). Clarify whether droughts and population trends and resulting demand on water resources were considered in the site selection process.

EIS 9.3-***

Identify general locations of fill sources for each alternative site (Glades, Martin, Okeechobee 2, and St. Lucie) and provide estimates of environmental impacts of obtaining and transporting the fill.

EIS 9.3-***

For all alternative sites (Glades, Martin, Okeechobee 2, and St. Lucie), clarify if makeup water reservoirs will be necessary. If they are needed, provide an estimate of the volume/acreage necessary for the reservoirs at each site.

EIS 9.3-***

Where excavation is necessary, estimate the total volume to be excavated for each alternative site and identify where spoils from building the plant would likely be placed.

EIS 9.3-***

Provide the estimate of reuse water that will be used at the West County Plant. Describe whether reuse water is a possible supplement to building and/or operational water needs (availability currently and projected in future) at each alternative site.