

PMTurkeyCOLPEm Resource

From: Orthen, Richard [Richard.Orthen@fpl.com]
Sent: Thursday, April 18, 2013 9:14 AM
To: Williamson, Alicia; Matthews, David; Nguyen, John-Chau; Maher, William; Comar, Manny; Hoeg, Tim; McCree, Victor
Subject: FPL Letter L-2013-137 Dated 04-18-2013: eRAI 6353 9.3.1-3 Supplemental Response
Attachments: L-2013-137 Dated 04-18-2013 RAI Ltr 120830 eRAI 6353 9.3.1-3 Rev 2 SUP Response.pdf

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Re: Florida Power & Light Company
Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
Supplemental Response to NRC Request for Additional Information Letter 120830 (eRAI 6353 Rev. 2)
Related to ESRP Section 9.3.1 - Alternative Site Selection Process

Reference:

1. NRC Letter to FPL dated February 13, 2013, Follow-up Questions to Environmental Request for Additional Information 6353 Question 3 Related to ESRP Section 9.3.1, Alternative Site Selection, for the Combined License Application Review for Turkey Point Units 6 and 7
2. FPL Letter L-2013-118 dated April 1, 2013, Schedule for Supplemental Response to NRC Follow-Up Questions to Request for Additional Information Letter 120830 (eRAI 6353 Rev. 2) Related to ESRP Section 9.3.1 Alternative Site Selection Process

Florida Power & Light Company (FPL) provides, as an attachment to this letter, its response to the Nuclear Regulatory Commission's (NRC) follow-up questions for Request for Additional Information (RAI) No. EIS 9.3.1-3 (eRAI 6353 Rev. 2) provided in Reference 1. In the Reference 2 letter, FPL provided the schedule for providing this supplemental response. The attachment identifies changes that will be made in a future revision of the Turkey Point Units 6 and 7 Combined License Application (if applicable).

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Hearing Identifier: TurkeyPoint_COL_Public
Email Number: 793

Mail Envelope Properties (AC64FC620563494A9FBAD712DBEE56700B8331)

Subject: FPL Letter L-2013-137 Dated 04-18-2013: eRAI 6353 9.3.1-3 Supplemental Response
Sent Date: 4/18/2013 9:13:48 AM
Received Date: 4/18/2013 9:13:59 AM
From: Orthen, Richard

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Files	Size	Date & Time
MESSAGE	1692	4/18/2013 9:13:59 AM
L-2013-137 Dated 04-18-2013 RAI Ltr 120830 eRAI 6353 9.3.1-3 Rev 2 SUP Response.pdf		
172946		

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Priority: Standard
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L-2013-137
10 CFR 52.3

April 18, 2013

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Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
L-2013-137 Page 2 of 2

If you have any questions, or need additional information, please contact me at 561-691-7490.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on April 18, 2013.

Sincerely,



William Maher
Senior Licensing Director – New Nuclear Projects

WDM/RFO

Attachment: FPL Supplemental Response to NRC RAI No. EIS 9.3.1-3
(eRAI 6353 Rev. 2)

cc:

PTN 6 & 7 Project Manager, AP1000 Projects Branch 1, USNRC DNRL/NRO
Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Units 3 & 4

NRC RAI Letter No. 120830 Dated August 30, 2012

SRP Section: EIS 9.3.1 – Alternative Site Selection Process

Question from Environmental Projects Branch 1 (EPB1)

NRC Follow-up Questions for RAI Number: EIS 9.3.1-3 (eRAI 6353)

The NRC staff has reviewed the draft response to RAI 6353, Question 3, submitted by FPL on October 16, 2012. The draft response addressed NRC concerns in part. However, additional information is needed to reach full resolution of the associated issues. The following summarizes those issues¹ for which the staff still needs clarification/information with regard to RAI 6353, Q3. The staff requests that FPL explain the apparent conflicts among the environmental report (ER), the Augmentation report, the RAI responses, and FPL's The Least Environmentally Damaging Practicable Alternative (LEDPA) report that are described below.

FPL RESPONSE:

Note: Each NRC follow-up question/statement is italicized below.

Martin Site

The ER still indicates that Martin is more highly rated because of FPL ownership in a number of places, although on page 9.3-52 it acknowledges the need for additional land for the reservoir. The Augmented report gave the Martin site the highest possible rating (5), even though by the time that report was prepared FPL knew it would need a considerable amount of additional land to use the site. The FPL response to RAI 5589 Q8 discusses this issue in more detail, but indicates no changes to the ER. In addition, the LEDPA analysis indicates that obtaining land for the reservoir would be problematic, which appears to conflict with the ER and the Augmented report.

At the time of the 2006 Siting Study, the Martin site was given a "5" rating because the solar plant had not yet been constructed and sufficient land was assumed to be available. In general, the original analyses and set of ratings for those sites evaluated in the 2006 Siting Report were used in the Augmentation Report, in order to preserve the basis on which the original site selection decision was actually made in 2006. In the Augmentation Report, the newly identified sites were analyzed in the same manner as the original set of sites where feasible (i.e., data were available to reflect 2006 conditions). As stated in the Augmentation Report:

The AA does not supersede or replace analyses in the original Siting Report. The original site selection methodologies are preserved, and augmented with the regional screening, candidate area identification, and additional potential site evaluations noted above. The augmented analysis relies primarily on information concurrent and consistent with the assumptions in the 2006 Siting Report.

¹ Issues related to water availability are being addressed separately and will not be discussed here.

While material in Sections 9.3.1 and 9.3.2 of the ER reflect analyses and decisions upon which the site selection decision was made, the detailed environmental comparison of alternative sites in Section 9.3.3 (from which the above reference to page 9.3-52 is taken) was based on latest available knowledge and information (included additional site design information developed in response to previous NRC RAIs). Because the two analyses were designed to achieve different objectives and reflect different states of knowledge, there is no inconsistency between the Augmentation Report and the ER or the FPL response to RAI No. 9.3-8 (eRAI 5589), which provided additional detail regarding the analysis in Section 9.3 of the ER.

FPL notes that – should the Martin site be rated in accordance with Criterion D.4.3.2 Land Rights using current conditions – it would still be rated high in this category due to (1) it is an FPL-owned site, (2) a significant amount of unused onsite acreage is available to develop the majority of onsite features (568 acres), (3) FPL’s knowledge of and long-term relationship with adjacent landowners (to assist in potential acquisition of additional land), and (4) the potential option for FPL to relocate, shut down, or reconfigure the solar plant and use the land for a reservoir instead.

Section 5.1.1 of FPL’s LEDPA analysis states that the acquisition or condemnation of sufficient land for the three inland sites *may* be problematic due to the potential number and size of the parcels to be acquired from multiple owners. Further, Section 5.2.2 states that acquiring this land would impact the cost of construction:

While there is sufficient land on the FPL-owned Martin site to accommodate the AP1000 units within the 320-acre plant site, there is insufficient land to support necessary associated facilities such as an additional reservoir. Approximately 3,000 acres of land would have to be acquired adjacent to the Martin site to support a reservoir, impacting costs of construction.

The potential that obtaining sufficient land may be problematic and would impact costs of construction does not alter the basis upon which the ER siting decision was made, and is consistent with the above discussion of site ratings using current conditions.

The Augmented report indicates that the Martin site is scored a 4 or 5 for attributes related to transportation and transmission access. But the LEDPA analysis submitted to USACE states that one of the reasons the site is impracticable is because of inadequate infrastructure.

These analyses were conducted at different stages of the siting process, responded to different regulatory guidelines, and analyzed different sources of information in different manners as documented in each. As such, the two analyses cannot be directly compared and are not in conflict with each other. For instance, the referenced transportation and transmission scores in the Augmentation Report are for railroad, highway, barge, and transmission access, while the cited discussion of infrastructure in the LEDPA analysis is focused on other aspects of infrastructure. Within the context of the LEDPA analysis, existing infrastructure is a component of the “Availability” practicability factor and is defined as “existing infrastructure to support nuclear generation” (page 52 and Table 5.1-1). The LEDPA report states, “Although existing infrastructure is available, the existing Martin facility does not support nuclear generation. The Martin site currently has existing fossil-fueled generation units and

FPL would need to develop separate infrastructure to support nuclear units such as security and administration.” This statement is referring to the Martin site as compared to the St. Lucie and Turkey Point sites. The intent was to highlight that although the Martin site contains an existing power plant, additional infrastructure would be needed to support a nuclear facility. Additional infrastructure would not be necessary at the Turkey Point and St. Lucie sites as nuclear support facilities currently exist at these sites. These additional factors were not specifically scored in the site selection process.

Martin A and Glades A Sites

In discussing the deferral of the Martin A site, the ER at page 9.3-15 discusses that the site is questionable in terms of developing a water supply. But the response to RAI 6353, Q3 states that this site was not deferred because of water availability issues. A similar conflict exists for the Glades A site. In addition, the Augmented report (pages D-23 to D-26) scores the Martin A site higher than the Martin site, and the Glades A site higher than the Glades site, in the area of “Cooling Water.”

As noted in other communications with NRC, scenarios are described where cooling water requirements could be met at the inland sites. Additionally, the Martin and Martin A sites would be expected to utilize similar cooling water acquisition strategies, as would the Glades and Glades A sites, providing essentially no differentiation between the related sites based on cooling water availability. Methodologically, this circumstance is reflected in screening criteria ratings (Augmentation Report, Appendix C, Criterion P1 – Cooling Water Supply), in which all four sites were given the same rating. The cited passage in Augmentation Report Appendix D reflects the general siting criterion D.1.1.2.1, which carries forward the rating for these four sites with respect to the water availability component (i.e., meeting cooling water requirements). However, the Appendix D evaluation adds another component to the overall criterion score related to site proximity to sensitive areas. Only when this sub-criterion rating was added did the overall composite rating for water availability for the Martin A and Glades A sites score marginally higher than the Martin and Glades sites. When considering only the water availability component, however, the scores do not differentiate among the sites. Due to these similarities, the Martin A and Glades A sites were not deferred due to water availability issues, but rather on the basis of overall considerations and issues identified in the response to RAI No. EIS 9.3.1-3 (eRAI 6353 Rev. 2).

The response to RAI 6353, Q3, indicates that neither the Martin A or Glades A site would have met the business objectives of the project because of the potential for lengthy land negotiations. It is not clear why this concern, which the NRC does not concede is relevant, would not have prevented FPL from considering the Okeechobee 2 site.

FPL notes that the referenced passage to RAI 6353 was specifically directed to a NRC request for additional detail on the rationale for deferral of Martin A versus Martin and Glades A versus Glades. The factor of timely land acquisition was one of the overall considerations in identifying candidate sites from the set of potential sites, only applied in the context of the previous RAI response (i.e., deferral of Martin A versus Martin and Glades A versus Glades) and was not generally applied as an exclusionary or other methodological consideration in the site selection analyses. The Okeechobee 2 site utilized an alternative water source and

provided environmental and locational diversity and was brought forward as a candidate site for that reason. FPL's position is that the business objectives for the project (including the ability to acquire land in time to meet those objectives) are relevant to the site selection process as they define the purpose and need of the project and frame the requirements against which the set of potential sites must be evaluated.

This response is PLANT SPECIFIC.

References:

None

ASSOCIATED COLA REVISIONS:

No COLA changes have been identified as a result of this response.

ASSOCIATED ENCLOSURES:

None