



L-2011-188
10 CFR 52.3

May 23, 2011

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
First Response to NRC Environmental Request for Additional Information Letter
1104071 (RAI 5588) Environmental Standard Review Plan
Section 9.3.1 – Alternative Site Selection Process

Reference:

1. NRC Letter to FPL dated April 6, 2011, Environmental Request for Additional Information Letter 1104071 Related to ESRP Section 9.3.1, Alternative Site Selection Process, for the Combined License Application Review for Turkey Point Units 6 and 7

Florida Power & Light Company (FPL) provides, as an attachment to this letter, its response to the Nuclear Regulatory Commission's (NRC) Environmental Request for Additional Information (RAI) 9.3.1-3 through 9.3.1-5, 9.3.1-10, and 9.3.1-13 provided in the referenced letter. 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).

The response to RAI 9.3.1-2, 9.3.1-6 through 9.3.1-9, 9.3.1-11, and 9.3.1-15 through 9.3.1-16 will be provided by July 11, 2011. The response to RAI 9.3.1-12 and 9.3.1-14 will be provided by August 17, 2011.

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 May 23, 2011.

Sincerely,

A handwritten signature in black ink, appearing to read "William Maher", is written over a horizontal line.

William Maher
Senior Licensing Director – New Nuclear Projects

DO97
MRO

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WDM/RFO

Attachment 1: FPL Response to NRC RAI No. 9.3.1-3 (RAI 5588)
Attachment 2: FPL Response to NRC RAI No. 9.3.1-4 (RAI 5588)
Attachment 3: FPL Response to NRC RAI No. 9.3.1-5 (RAI 5588)
Attachment 4: FPL Response to NRC RAI No. 9.3.1-10 (RAI 5588)
Attachment 5: FPL Response to NRC RAI No. 9.3.1-13 (RAI 5588)

cc:

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

NRC RAI Letter No. 1104071 Dated April 6, 2011

SRP Section: EIS 9.3.1 – Alternative Site Selection Process

Question from Environmental Technical Support Branch

NRC RAI Number: EIS 9.3.1-3 (RAI 5588)

Clarify the EPRI section citations on Table 9.3-4 and Table 9.3-5 (ER Rev 2 pages 9.3-125 & 126). Although text states that the factors match the EPRI Siting Guide, the cross-referencing is unclear because the referenced section numbers from the EPRI Siting Guide appear to be incomplete. So, for example, in the EPRI Siting Guide, Geology/Seismology is Section 3.1.1.1. But in ER Table 9.3-4, it is listed as Section 1.1.1.

FPL RESPONSE:

Criteria listed in ER Rev 2 Tables 9.3-4 and 9.3-5 are found in Chapter 3 of the EPRI Siting Guide; section numbers listed in the two tables correspond to subsection numbering within that Chapter. For example, Geology/Seismology is listed as Section 1.1.1 in the ER tables and appears in the Siting Guide in Section 3.1.1.1. Similarly, the Cooling System Requirements (1.1.2 in the ER tables) is found in Siting Guide Section 3.1.1.2 and so on, with the final criterion Labor Rates (ER tables 4.3.3) discussed in Siting Guide Section 3.4.3.3.

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

Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
FPL Response to NRC RAI No. 9.3.1-4 (RAI 5588)
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NRC RAI Letter No. 1104071 Dated April 6, 2011

SRP Section: EIS 9.3.1 – Alternative Site Selection Process

Question from Environmental Technical Support Branch

NRC RAI Number: EIS 9.3.1-4 (RAI 5588)

Clarify the definition of "Population center" used in Criterion P3, Table 9.3-2, (ER Rev 2, page 9.3-122) as it appears that the 10 CFR Part 100 definition was not used.

FPL RESPONSE:

The definition of population centers, as used in the Criterion P3 evaluation, referred to the nearest "place" or "concentration of population" as defined by the US Census Bureau, where a place is either legally incorporated under the laws of its respective state, or a statistical equivalent that the Census Bureau treats as a Census Designated Place (CDP). Population centers, as used in the Criterion P3 evaluation, are more encompassing than population centers, as defined in 10 CFR Part 100, in that they also include towns and cities with population less than 25,000 persons.

This response is PLANT SPECIFIC.

References:

Geographic Areas Reference Manual, United States Census Bureau, United States Department of Commerce. Chapter 9 Places. Published in 1994 (no major changes in geographic areas for Census 2000).

<http://www.census.gov/geo/www/GARM/Ch9GARM.pdf> (accessed May 10, 2011)

ASSOCIATED COLA REVISIONS:

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

ASSOCIATED ENCLOSURES:

None

NRC RAI Letter No. 1104071 Dated April 6, 2011

SRP Section: EIS 9.3.1 – Alternative Site Selection Process

Question from Environmental Technical Support Branch

NRC RAI Number: EIS 9.3.1-5 (RAI 5588)

Provide the document - "Site Requirements Document to Support Combined Construction and Operation License Application". This report explains the region-to-candidate area screening called for by the ESRP guidance.

FPL RESPONSE:

The purpose of the Site Requirements Document was to "provide the necessary and recommended criteria to assist Florida Power & Light Company (FPL) in identifying candidate locations for the siting of a new nuclear power plant within the State of Florida." The document provided technical and business guidance for site identification that "...should be used only as a guide in determining potential sites..." Thus, the Site Requirements Document does not explain or provide results of regional screening to candidate areas, and since it is a proprietary and confidential document presenting internal guidance only, is not being provided.

A regional screening/candidate area identification process is included in a site selection augmentation analysis being conducted by FPL; results of this analysis and associated modifications to ER 9.3 will be submitted in future responses to RAI 5588.

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

NRC RAI Letter No. 1104071 Dated April 6, 2011

SRP Section: EIS 9.3.1 – Alternative Site Selection Process

Question from Environmental Technical Support Branch

NRC RAI Number: EIS 9.3.1-10 (RAI 5588)

Define the process by which FPL “canvassed” (ER Rev. 2 p. 9.3-5) its employees to identify the initial 23 sites submitted to the detailed screening process. Provide a more detailed description of the process by which the 23 sites were identified by FPL.

FPL RESPONSE:

As noted in ER Rev 2 Section 9.3.2.1, FPL established a site selection team to identify potential sites for consideration in the site selection study. Internal FPL members of the team were identified such that they represented the full span of FPL business units and their associated specialized knowledge of existing and available sites that could be initially considered. Business units represented included:

- Resource Assessment and Planning
- Nuclear Division
- Environmental Services
- Transmission Planning
- External and Governmental Affairs
- Corporate Real Estate
- Legal
- Development

Thus, in representing their business units, the team collectively provided access to the full knowledge and capability of the Company with respect to sites in the FPL service territory and nearby regions.

Functionally, the canvassing was conducted at an August 2006 meeting during which each FPL business unit representative was asked to bring to the meeting all site-related knowledge available within their units. The team was polled to identify the full spectrum of known existing and available sites (e.g., undeveloped land already owned by FPL or an interested seller) within or near the FPL service territory. Once all site alternatives available within the region of interest had been identified, the team – again representing the knowledge and insights inherent in their business units – determined the feasibility of developing a new nuclear power plant at the identified sites. The result of this process was the list of 23 potential sites referenced in ER Rev 2 Section 9.3.2.1.

Further canvassing of candidate areas to identify additional potential sites is in a site selection augmentation analysis being conducted by FPL; results of this analysis and associated modifications to ER 9.3 will be submitted in future responses to RAI 5588.

This response is PLANT SPECIFIC.

Proposed Turkey Point Units 6 and 7
Docket Nos. 52-040 and 52-041
FPL Response to NRC RAI No. 9.3.1-10 (RAI 5588)
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References:

None

ASSOCIATED COLA REVISIONS:

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

ASSOCIATED ENCLOSURES:

None

NRC RAI Letter No. 1104071 Dated April 6, 2011

SRP Section: EIS 9.3.1 – Alternative Site Selection Process

Question from Environmental Technical Support Branch

NRC RAI Number: EIS 9.3.1-13 (RAI 5588)

Provide the basis for the 5,000 acres used in wetland screening when only 491 acres would be disturbed (ER p 9.3-18) and the criterion for Desired Owner Buffer Area was 3,000 acres.

FPL RESPONSE:

To provide a consistent basis for site evaluation and comparison, each potential site was initially identified as a 5,000-acre area, nominally a circle centered on a site center-point. This area size was based on the upper bound of the Desired Owner Buffer Area, as identified by FPL for the site selection study. Evaluation of wetlands within the 5,000 acre area provided a consistent basis for comparison of potential sites while also providing flexibility for ultimately locating plant components within the evaluated area. This flexibility allows for the refinement of detailed plant locations as more information (e.g., environmental and geotechnical considerations, land availability) is developed regarding the site in subsequent steps in the siting process, while avoiding the need to re-evaluate the site area as locational refinements are made.

The lower bound of the Desired Owner Buffer Area (3,000 acres) was used as the basis for comparing sites according to the need for acquisition of additional land and the associated land costs.

The disturbed area of 491 acres was developed as a best estimate of the total amount of land disturbance expected at each alternative site as a result of construction activities; this estimate was prepared as part of the evaluation and comparison of alternative sites with the proposed site in Section 9.3.3 of the ER Rev 2, versus the earlier process of site screening. More detailed impact evaluations of alternative sites, based on site-specific conceptual plant layouts and acreage requirements at each site, are being developed and will be submitted as part of future FPL responses to RAI 5589.

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