FPL

L-2011-130
10 CFR 52.3

April 15, 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
Response to NRC Environmental Request for Additional Information Letter 1102233 (eRAI 5482) Environmental Standard Review Plan
Section 3.1 - External Appearance and Plant Layout

Reference:

1. NRC Letter to FPL dated March 1, 2011, Environmental Request for Additional Information Letter 1102233 Related to ESRP Section 3.1, External Appearance and Plant Layout, 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) 3.1-1 and 3.1-2 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).

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 15, 2011.

Sincerely,

William Maher
Senior Licensing Director – New Nuclear Projects

WDM/RFO

D097
NRO

Attachment 1: FPL Response to NRC RAI No. 3.1-1 (RAI 5482)
Attachment 2: FPL Response to NRC RAI No. 3.1-2 (RAI 5482)

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. 1102233

ESRP Section: EIS 3.1 – External Appearance and Plant Layout

Question from Environmental Projects Branch 2 (RAP2)

NRC RAI Number: 3.1-1 (eRAI 5482)

Identify the volume of fill material needed for each of the following elements of the planned work: the Units 6 & 7 plant area, reclaimed water treatment facility, road upgrades, transmission tower pads and other significant elements. Section 4.1.2.3 of the ER indicates that 8.9 million cubic yards of borrow material would be needed for the Units 6 & 7 plant area, and that additional borrow material would be needed for other building activities including for the FPL reclaimed water treatment facility, road upgrades, transmission tower pads, etc. Section 3.9.1.6 indicates that approximately 7.8 million cubic yards of general area (Category II) backfill would be required and approximately 130,000 cubic yards of safety-related (Category 1) engineered structural fill would be required. Provide a complete and consistent summary of fill material needs for the planned work.

FPL RESPONSE:

The quantities listed below reflect current approximate estimates of fill requirements for each identified onsite area based on conceptual design information. Final designs and therefore quantities cannot be provided until necessary surveys, work plans, conditions of certification with local agencies, and transmission final route selection processes are completed (all quantities are Category II fill unless noted otherwise):

Plant Area (198 acres)	7.8 million cubic yards[1]
Reclaimed Water Treatment Facility (44 acres)	1.6 million cubic yards
Laydown Areas (52 acres)	0.7 million cubic yards
Nuclear Admin/Training/Parking Area (32 acres)	0.6 million cubic yards

[1]Approximately 7.8 million cubic yards of general area (Category I & II) backfill would be required to raise the existing grade elevation of approximately -1.0 feet NAVD 88 to the finished grade elevation adjacent to the power block of 25.5 feet NAVD 88 as currently noted in Section 3.9.1.6 of the ER.

Conceptual ranges are provided for the following offsite associated facilities requiring fill based on best available information at this time.

Transmission Roads and Pads	2.0-3.0 million cubic yards
Access Roads	0.4-0.7 million cubic yards

The estimate for volume of required safety-related Category I fill is approximately 130,000 cubic yards. Based on the above estimates, approximately 10.6 million cubic yards of Category II fill will be required for plant area and associated non-linear facilities construction, and a conceptual range of 2.4-3.7 million cubic yards of Category II fill will be required for the transmission and road areas.

This response is PLANT SPECIFIC.

References:

None

ASSOCIATED COLA REVISIONS:

A paragraph will be inserted after the first paragraph of ER Section 3.9.1.6 in a future COLA revision to reflect the RAI response, as follows:

Approximate estimated fill requirements for the plant area and associated non-linear facilities, and conceptual ranges for offsite transmission and access roads, are as follows:

Onsite areas:

• Plant area (198 acres)	7.8 million cubic yards
• Reclaimed Water Treatment Facility (44 acres)	1.6 million cubic yards
• Laydown Areas (52 acres)	0.7 million cubic yards
• Nuclear Admin/Training/Parking Area (32 acres)	0.6 million cubic yards

Offsite Areas:

• Transmission Roads and Pads	2.0-3.0 million cubic yards
• Access Roads	0.4-0.7 million cubic yards

ER Section 4.1.2.3 will be revised in a future COLA revision to reflect the RAI response, as follows:

Borrow material for the Units 6 & 7 plant area and associated non-linear facilities, estimated at 10.7 ~~8.9~~ million cubic yards, and offsite transmission and access roads, with a conceptual range of 2.4 to 3.7 million cubic yards, would be obtained from a combination of an FPL-owned fill source, other regional sources, or reused material.

ASSOCIATED ENCLOSURES:

None

NRC RAI Letter No. 1102233

ESRP Section: EIS 3.1 – External Appearance and Plant Layout

Question from Environmental Projects Branch 2 (RAP2)

NRC RAI Number: EIS 3.1-2 (e-RAI 5482)

The excavation needed for the new barge unloading facility is described as an area approximately 60 ft by 150 ft in ER Rev. 2 on pages 4.3-3 to 4 and as an area 60 feet by 100 feet and 9 feet deep on page 3.9-5. Clarify the area that will be excavated to create the proposed barge unloading facility.

FPL RESPONSE:

The disturbed area required for the new barge unloading facility will be 130 feet by 250 feet, based on the barge requirements for the AP1000 components. The barge slip is 90 feet by 150 feet in area (0.31 acres). The resulting total area of disturbance (including concrete aprons), based on these dimensions, is approximately 0.75 acres. The estimated area of dredged sediment in the barge turning basin required is 0.1 acres.

This response is PLANT SPECIFIC.

References:

None

ASSOCIATED COLA REVISIONS:

ER Section 2.2.1.1.3 will be revised in a future COLA revision to reflect the RAI response, as follows:

For each new unit, there would be approximately 80 round-trip barge deliveries of modules over approximate six-year duration. The existing equipment barge unloading area, located on the north side of the turning basin (Figure 3.9-1 [Sheet 1]), would be extended landward to approximately 90 ~~60~~ feet by 150 ~~100~~ feet (0.31 acres) and 9 feet deep, with a total disturbed area, including a concrete apron, of 130 by 250 feet (0.75 acres) to facilitate heavy equipment and component unloading for construction of Units 6 & 7.

ER Section 2.4 will be revised in a future COLA revision to reflect the RAI response, as follows:

The existing barge turning basin would be expanded, with a 0.31~~15~~ acre equipment barge unloading area to be excavated, as part of a total disturbed area of 0.75 acres, on previously disturbed industrial lands on a shore of the barge turning area. A heavy haul

road would be built over existing roads between the equipment barge unloading area and the Units 6 & 7 plant area.

ER Section 3.9 will be revised in a future COLA revision to reflect the RAI response, as follows:

- Equipment barge unloading area (0.75~~15~~ acres)

ER Section 3.9.1.2 will be revised in a future COLA revision to reflect the RAI response, as follows:

The existing barge turning basin connects Biscayne Bay to the Turkey Point plant property, and would be used for module and component delivery. The turning basin is approximately 300 feet wide and 1200 feet long and is currently used for fuel deliveries for Units 1 & 2. There would be approximately 80 round-trip barge deliveries for modules and components for each unit over an approximately six-year duration. The existing equipment barge unloading area would be extended to approximately ~~60~~ 90 feet by ~~100~~ 150 feet (0.31 acres) and 9 feet deep, as part of a total disturbed area of 130 feet by 250 feet (0.75 acres), to accommodate heavy component offloading (See Figure 3.9-1 [Sheet 2~~3~~]). Limited dredging would likely be required as part of the upgrade.

ER Figure 3.9-1 (Sheets 1 and 2) will be revised in a future COLA revision to reflect the RAI response.

ER Table 3.9-2 will be revised in a future COLA revision to reflect the RAI response, as follows:

Equipment barge unloading area 0.75~~15~~

ER Section 4.3.1.1 will be revised in a future COLA revision to reflect the RAI response, as follows:

The existing barge facility would be expanded to allow delivery of large components and modules for Units 6 & 7. The expansion, termed the equipment barge unloading area, would be about ~~60~~ 130 feet by 250 ~~150~~ feet in size and ~~would be excavated from~~ located on an existing filled area on the northwest edge of the barge turning basin.

ER Section 4.3.2.2.1 will be revised in a future COLA revision to reflect the RAI response, as follows:

The number of weekly shipments of fuel oil would not be expected to change; however, during the 6-year construction period, there would be approximately 80 additional barge trips for delivery of construction equipment and modules per unit. The equipment barge

unloading area would be expanded to a total area of about 0.7515 acres (32,500 ~~6000~~ square feet).

Enlargement of the equipment barge unloading area would cause some disturbance in the immediate area. As described in Subsection 4.2.1.1.3, enlargement of the equipment barge unloading area would require dredging from a 0.1 acre area (4356 square feet) in the turning basin ~~the removal of about 2700 cubic yards of sediment~~.

ER Table 5.1-1 will be revised in a future COLA revision to reflect the RAI response, as follows:

Equipment barge unloading area	0.7515

ASSOCIATED ENCLOSURES:

None