



L-2012-021  
10 CFR 52.3

January 18, 2012

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 Request for Additional Information Letter No. 045 (eRAI 6176) -  
Standard Review Plan Section 18.0 - Human Factors Engineering

Reference:

1. NRC Letter to FPL dated December 19, Request for Additional Information Letter No. 045 Related to SRP Section 18.0 - Human Factors Engineering for the Turkey Point Nuclear Plant Units 6 and 7 Combined License Application

Florida Power & Light Company (FPL) provides, as an attachment to this letter, its response to the Nuclear Regulatory Commission's (NRC) request for additional information (RAI) 18-1 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 January 18, 2012.

Sincerely,

A handwritten signature in blue ink, appearing to read 'W. Maher', is written over a horizontal line.

William Maher  
Senior Licensing Director – New Nuclear Projects

WDM/ETC

DD97  
NRD

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Attachment: FPL Response to NRC RAI No. 18-1 (RAI 6176)

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. PTN-RAI-LTR-045**

**SRP Section: 18.0 – Human Factors Engineering**

Question from Operating Licensing and Human Performance Branch (AP1000/EPR Projects) (COLP)

**NRC RAI Number: 18-1 (eRAI 6176)**

The information provided in the Turkey Point COL application, revision 2, for PTN COL action item 18.2-2 does not address the changes that were made to the information item in revision 18 of the AP1000 design certification. The revised COL information item no longer includes EOF location and includes the additional areas bolded below:

“Specific information regarding **EOF and TSC communications, and EOF and TSC human factors attributes** will be provided by the Combined Operating License applicant to address the Combined License information requested in this subsection.”

The standard response received in other applications has been something similar to, “The EOF and TSC communication strategies, as well as the EOF and TSC human factors attributes, are described in the emergency plan.” Typically, EOF and TSC human factors attributes are not explicitly described in the emergency plan. As an alternative the staff has accepted a statement that the EOF and TSC designs incorporate NUREG-0696 guidance. The staff assumed you would follow the standard response and reviewed the Turkey Point Emergency Plan, Revision 2. The staff found the EOF design specifically addressed NUREG-0696 but the TSC reference was too generic. Section H.1.b (page H-2) of the emergency plan states:

“The TSC meets **most** of the requirements of NUREG-0696, *Functional Criteria for Emergency Response Facilities* and RG 1.206, *Combined License Applications for Nuclear Power Plants*.” (Emphasis added)

This statement is not sufficiently specific for the staff to draw a conclusion.

**Question:**

1. Revise the response to COL information item 18.2-2 so it reflects the latest revision in the DCD.
2. If the standard COL information item response is used, provide a more specific reference to NUREG-0696 (similar to the reference used for the EOF.)

**FPL RESPONSE:**

**Question 1:**

Revision 2 of the Turkey Point Units 6 & 7 COL Application incorporated AP1000 DCD revisions up to Revision 17. Revision 3 of the Turkey Point Unit 6 & 7 COL Application was submitted to the Nuclear Regulatory Commission on December 16, 2011 by FPL Letter L-2011-529 and incorporates Revision 19 of the AP1000 DCD. As part of Revision 3 of the Turkey Point Units 6 & 7 COL Application, COL Information Item 18.2-2 response was revised to read “The EOF and TSC communications strategies are described in the Emergency Plan. The EOF and the TSC human factors will be in accordance with NUREG-0696, *Functional Criteria for Emergency Response Facilities*.” This change to the Turkey Point Unit 6 & 7 COL Information Item 18.2-2 response

addresses the EOF and TSC communication and EOF and TSC human factors attributes by stating that the EOF and TSC communication strategies are described in the Emergency Plan and that the EOF and TSC human factors attributes will be in accordance with NUREG-0696.

However, as noted in this RAI, the revised Turkey Point Unit 6 & 7 COL Information Item 18.2-2 response does not match the language used by other COL applicants verbatim. To be consistent with the AP1000 Reference COL Application (VEGP Units 3 and 4) and other AP1000 applicants, COL Information Item 18.2-2 response will be revised in a future COLA revision to state "The EOF and TSC communication strategies, as well as the EOF and TSC Human Factors attributes, are described in the Emergency Plan."

**Question 2:**

As described in the response to Question 1 of this RAI, the Turkey Point Unit 6 & 7 COL Information Item 18.2-2 response will be revised to match verbatim the COL Information Item 18.2-2 response provided by the Reference COL Application and other AP1000 applicants. In order to provide a more specific reference to NUREG-0696, as it pertains to the TSC, COLA Part 5, Section H.1.b will be revised in the future COLA Revision to state specifically that, "The TSC meets the guidance of NUREG-0696, *Functional Criteria for Emergency Response Facilities* and RG 1.206, *Combined License Applications for Nuclear Power Plants* regarding structure, habitability, size, communications, instrumentation, data system equipment, power supplies, technical data, records availability, and management."

The TSC, however, does not meet the guidance with respect to location. The location of the TSC is described in Emergency Plan, Section H.1.b. The impact of the location of the TSC is addressed by Turkey Point Units 6 & 7 Departure 18.8-2 which states that "relocating the TSC does not adversely affect its function," "does not affect the resolution of a severe accident issue identified in the plant-specific DCD," and "therefore, this departure has no safety significance."

This response is PLANT SPECIFIC.

**References:**

FPL Letter L-2011-529 to NRC, dated December 16, 2011, Combined License Application Submittal 9 - Submittal of the Annual Update of the COL Application - Revision 3 and the Semi-Annual Update of the Departures Report

United States Nuclear Regulatory Commission, *Functional Criteria for Emergency Response Facilities* NUREG-0696, February 1981

United States Nuclear Regulatory Commission, Regulatory Guide 1.206, *Combined License Applications for Nuclear Power Plants*, June, 2007

**ASSOCIATED COLA REVISIONS:**

COLA Subsection 18.2.1.3, Applicable Facilities, will be revised in a future COLA revision as shown below:

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The EOF and TSC communications strategies, **as well as the EOF and TSC Human Factors attributes**, are described in the Emergency Plan. The EOF and the TSC human factors will be in accordance with ~~NUREG-0696, Functional Criteria for Emergency Response Facilities.~~

The first paragraph of COLA Part 5, Section H.1.b will be revised in a future COLA revision as shown below:

Turkey Point has established a TSC for use during emergency situations by plant management, technical, and engineering support personnel. This facility is located in the Turkey Point Nuclear Training Building. This location provides the ability to respond and activate the facility in a timely fashion independent of the facility **unit(s)** that may be affected by the emergency. It also will permit the use of the TSC in a security event that may curtail the entry of ERO personnel into a Protected Area of the affected unit(s).

The TSC meets most of the requirements **guidance** of NUREG-0696, *Functional Criteria for Emergency Response Facilities* and RG 1.206, *Combined License Applications for Nuclear Power Plants regarding structure, habitability, size, communications, instrumentation, data system equipment, power supplies, technical data, records availability, and management. The TSC does not meet the guidance of NUREG-0696, Functional Criteria for Emergency Response Facilities, regarding location of the TSC. The location of the TSC is outside the Protected Areas between the Control Room for Units 3 & 4 and the Control Rooms for Units 6 ~~and~~ 7. Although the TSC does not provide capability for face-to-face communications with the affected Control Rooms(s), it is provided with communication links that can transmit and receive direct voice and data communications from the affected Control Room. These communications have alternative pathways that can also be used as needed. Security personnel are positioned in the TSC to expedite the movement of personnel between the TSC and the Control Room as necessary.*

**ASSOCIATED ENCLOSURES:**

None