



L-2013-070
10 CFR 52.3

February 20, 2013

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. 67
(eRAI 6915) - Related to SRP Section 14.02.02 Initial Plant Test Program

Reference:

1. NRC Letter to FPL dated December 4, 2012, Request for Additional Information Letter No. 067 Related to SRP Section 14.02.02 Initial Plant Test Program for the Turkey Point Nuclear Plant Units 6 and 7 Combined License Application
2. FPL Letter to NRC dated January 10, 2013, Schedule for Response to NRC Request for Additional Information Letter No. 67 (eRAI 6915) - Related to SRP Section 14.02.02 Initial Plant Test Program

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) 14.02-1 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). Reference 2 provided a schedule for the response.

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 February 20, 2013.

Sincerely,

A handwritten signature in black ink, appearing to read 'William Maher'.

William Maher
Senior Licensing Director – New Nuclear Projects

WDM/ETC

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Attachment: FPL Response to NRC RAI No. 14.02-1 (eRAI 6915)

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-067 Dated December 04, 2012

SRP Section: 14.02.02 Initial Plant Test Program

NRC RAI Number: 14.02-1 (eRAI 6915)

COL FSAR Tier 2, Rev. 3, Section 14.2.3.2 (Review of Test Results) and Section 14.2.10 (Startup Test Procedures) address considerations in determining whether any phases of the pre-operational tests should proceed to the next power level. For example, the considerations identify plant transients, core anomalies, or plant stability issues that would be reviewed, along with test results, by the Joint Test Working Group (JTWG) in determining whether to proceed to the next power level. While it is recognized that such considerations are important in ensuring plant safety, there is a second tier of plant conditions that are equally important but not included in the descriptions. The second tier of plant conditions is associated with radiation safety requirements under 10 CFR Part 20 and Appendix B to Part 20, and Part 50.36a in controlling and monitoring liquid and gaseous effluents under Part 50, Appendix I.

Accordingly, the applicant is requested to revise the scope of plant conditions to include test outcomes that should be reviewed by the JTWG in identifying actions (such as stopping a test or not proceeding to the next power plateau) for events that could lead to violations of NRC radiation protection regulations of Part 20 in controlling doses to plant workers and in monitoring and controlling effluent releases and doses to members of the public under Part 20 and Part 50, Appendix I design objectives.

FPL RESPONSE:

This response addresses startup testing as opposed to pre-operational testing (as mentioned in the RAI) because radiological plant conditions will not exist prior to initial criticality; pre-operational tests are performed prior to fuel load.

The initial test program for the AP1000 standard plant is described in Chapter 14 of the Design Control Document (DCD). In particular, section 14.2 describes the test program that is performed during initial startup of the AP1000 plant. The NRC review and acceptance of DCD Chapter 14, "Initial Test Program," is documented in NUREG-1793, Supplement 2 (2011). In this section, the NRC found the Startup Test program to meet applicable regulatory acceptance criteria.

The overall objective of the initial test program is to demonstrate that the plant has been constructed as designed, that the systems perform consistent with the plant design, and that activities culminating in operation at full licensed power including initial fuel load, initial criticality, and power ascension are performed in a controlled and safe manner.

An example of Administrative procedures and requirements that govern the activities of the conduct of the initial test program is included in DCD, Revision 19, section 14.2.3.1, "Conduct of Test Program." In particular, the fifth bullet, which covers all plant conditions before and

after fuel load, states that the following is included in administrative procedures and requirements:

- “Various phases of the initial test program and the requirements for progressing from one phase to the next, as well as requirements for moving beyond selected hold points or milestones within a given phase”

COLA section 14.2.3.2, “Review of Test results,” is standard content (STD COL 14.4-4), except for one site specific content (PTN COL 14.4-4) paragraph. PTN COL 14.4-4 is site specific only due to the inclusion of an FPL specific organizational title, Project Director New Nuclear Projects. The PTN COL 14.4-4 differs with STD COL 14.4-4, that Vogtle and V.C. Summer provided in their COLAs, only in the organizational title.

PTN COL 14.4-4 also addresses plant conditions that have a potential for unexpected radioactivity in effluents to occur. However, the discussion presented is a generic test program and applies to all startup testing.

A more specific reference that addresses unexpected radiological concerns is in the COLA, section 14.2.10, “Startup Test Procedures,” standard supplemental content (STD SUP 14.2-3), fifth and sixth bullets which state:

- “Perform general surveys of plant systems and equipment to confirm that they are operating within expected values.”
- “Check for unexpected radioactivity in process systems and effluents.”

Information on plant test conditions including test outcomes will be shared with the Joint Test Working Group. If there is any indication of a non-compliant test condition or test outcome that does not meet the acceptance criteria, an evaluation of that non-compliance to assure continued safe conduct of operations will be completed before proceeding to the next power level.

In conclusion, the comprehensive initial test program described in the DCD and as supplemented in the COLA specifically addresses the identification of unexpected radiological concerns.

This response is PLANT SPECIFIC

References:

1. APP-GW-GL-700, AP1000 Design Control Document, Revision 19, June 2011.
2. NUREG-1793, Final Safety Evaluation Report Related to Certification of the AP1000 Standard Design, Volume 2, 2004.
3. NUREG-1793, Final Safety Evaluation Report Related to Certification of the AP1000 Standard Design, Supplement 2, 2011

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ASSOCIATED COLA REVISIONS:

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

ASSOCIATED ENCLOSURES:

None