

D. Fire Protection

FPL shall implement and maintain in effect all provisions of the approved Fire Protection Program as described in the Updated Final Safety Analysis Report (UFSAR) for Turkey Point Units 3 and 4 and as approved in the Safety Evaluation Report (SER) dated March 21, 1979 and supplemented by NRC letters dated April 3, 1980, July 9, 1980, December 8, 1980, January 26, 1981, May 10, 1982, March 27, 1984, April 16, 1984, August 12, 1987, and by Safety Evaluations dated February 25, 1994, February 24, 1998, October 8, 1998, December 22, 1998, May 4, 1999, and May 5, 1999, subject to the following provision:

The licensee may make changes to the approved Fire Protection Program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

- E. The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provision of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Florida Power and Light & FPL Energy Seabrook Physical Security Plan, Training and Qualification Plan and Safeguards Contingency Plan," submitted by letter dated September 23, 2004, and supplemented on October 15, October 22, and October 29, 2004.
- F. 1. The licensee shall restrict the combined number of fuel assemblies loaded in the existing spent fuel pool storage racks and cask pit rack to no more than the capacity of the spent fuel pool storage racks. This condition applies at all times, except during activities associated with a reactor core offload/reload refueling condition. This restriction will ensure the capability to unload and remove the cask pit rack when cask loading operations are necessary.
2. The licensee shall establish two hold points within the rack installation procedure to ensure proper orientation of the cask rack in each unit's spent fuel pool. Verification of proper cask pit rack orientation will be implemented by an authorized Quality Control inspector during installation of the racks to ensure consistency with associated spent fuel pool criticality analysis assumptions.

4. This renewed license is effective as of the date of issuance, and shall expire at midnight July 19, 2032.

FOR THE NUCLEAR REGULATORY COMMISSION

Signed by
Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

Attachments:

- Appendix A – Technical Specifications for Unit 3
- Appendix B – Environmental Protection Plan

Date of Issuance: June 6, 2002

D. Fire Protection

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- F. 1. The licensee shall restrict the combined number of fuel assemblies loaded in the existing spent fuel pool storage racks and cask pit rack to no more than the capacity of the spent fuel pool storage racks. This condition applies at all times, except during activities associated with a reactor core offload/reload refueling condition. This restriction will ensure the capability to unload and remove the cask pit rack when cask loading operations are necessary.
2. The licensee shall establish two hold points within the rack installation procedure to ensure proper orientation of the cask rack in each unit's spent fuel pool. Verification of proper cask pit rack orientation will be implemented by an authorized Quality Control inspector during installation of the racks to ensure consistency with associated spent fuel pool criticality analysis assumptions.

4. This renewed license is effective as of the date of issuance, and shall expire at midnight April 10, 2033.

FOR THE NUCLEAR REGULATORY COMMISSION

Signed by
Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

Attachments:
Appendix A – Technical Specifications for Unit 4
Appendix B – Environmental Protection Plan

Date of Issuance: June 6, 2002

DESIGN FEATURES

5.5 FUEL STORAGE

5.5.1 CRITICALITY

5.5.1.1 The spent fuel storage racks are designed to provide safe subcritical storage of fuel assemblies by providing sufficient center-to-center spacing or a combination of spacing and poison and shall be maintained with:

- a. k_{eff} equivalent to less than 1.0 when flooded with unborated water, which includes a conservative allowance for uncertainties as described in UFSAR Appendix 14D.
- b. A k_{eff} equivalent to less than or equal to 0.95 when flooded with water borated to 650 ppm water, which includes a conservative allowance for uncertainties as described in UFSAR Appendix 14D.
- c. A nominal 10.6 inch center-to-center distance for Region I and 9.0 inch center-to-center distance for Region II for the two region spent fuel pool storage racks. A nominal 10.1 inch center-to-center distance in the east-west direction and a nominal 10.7 inch center-to-center distance in the north-south direction for the Region I cask area storage rack.
- d. The maximum enrichment loading for fuel assemblies is 4.5 weight percent of U-235.

5.5.1.2 The racks for new fuel storage are designed to store fuel in a safe subcritical array and shall be maintained with:

- a. A nominal 21 inch center-to-center spacing to assure k_{eff} equal to or less than 0.98 for optimum moderation conditions and equal to or less than 0.95 for fully flooded conditions.
- b. Fuel assemblies placed in the New Fuel Storage Area shall contain no more than 4.5 weight percent of U-235.

DESIGN FEATURES

5.5.1.3 Credit for burnup is taken in determining placement locations for spent fuel in the two-region spent fuel racks. Administrative controls are employed to evaluate the burnup of each spent fuel assembly stored in areas where credit for burnup is taken. The burnup of spent fuel is ascertained by careful analysis of burnup history, prior to placement into the storage locations. Procedures shall require an independent check of the analysis of suitability for storage. A complete record of such analysis is kept for the time period that the spent fuel assembly remains in storage onsite.

DRAINAGE

5.5.2 The spent fuel storage pit is designed and shall be maintained to prevent inadvertent draining of the pool below a level of 6 feet above the fuel assemblies in the storage racks.

CAPACITY

5.5.3 The spent fuel pool storage racks are designed and shall be maintained with a storage capacity limited to no more than 1404 fuel assemblies in two region storage racks, and the cask area storage rack is designed and shall be maintained with a storage capacity limited to no more than 131 fuel assemblies. The total spent fuel pool storage capacity is limited to no more than 1535 fuel assemblies.

5.6 COMPONENT CYCLIC OR TRANSIENT LIMIT

5.6.1 The components identified in Table 5.6-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.6-1.