



U. S. Nuclear Regulatory Commission

Attn.: Document Control Desk Washington, D.C. 20555-0001

Re: Turkey Point Units 3 and 4

Docket Nos. 50-250 and 50-251

Administrative License Amendment Request No. 217 Regarding

Operating License Conditions and Technical Specifications

References:

- (1) J. Paige (NRC) to M. Nazar (FPL), "Turkey Point Units 3 and 4 "Issuance of Amendments Regarding Alternative Source Term (TAC Nos. ME1624 and ME1625)," Accession No. ML110800666, June 23, 2011.
- (2) J. Paige (NRC) to M. Nazar (FPL), "Turkey Point Units 3 and 4 "Issuance of Amendments Regarding Fuel Criticality Analysis (TAC Nos. ME4470 and ME4471)," Accession No. ML11216A057, October 31, 2011.
- (3) J. Paige (NRC) to M. Nazar (FPL), "Turkey Point Units 3 and 4 "Issuance of Amendments Regarding Control Room Habitability Technical Specification Task Force (TSTF)-448 (TAC Nos. ME4277 and ME4278)," Accession No. ML12067A176, March 30, 2012.
- (4) J. Paige (NRC) to M. Nazar (FPL), "Turkey Point Units 3 and 4 "Issuance of Amendments Regarding Extended Power Uprate (TAC Nos. ME4907 and ME4908)," Accession No. ML11293A365, June 15, 2012.

On June 23, 2011, the U.S. Nuclear Regulatory Commission (NRC) issued Amendment Nos. 244 and 240 to Renewed Facility Operating License Nos. DPR-31 and DPR-41 for the Turkey Point Nuclear Plant, Units Nos. 3 and 4, respectively, with supporting Safety Evaluation Report (SER) regarding the Alternative Source Term (AST) [Reference 1]. License Conditions 3.H.1-3 for Unit 3 and 3.I.1-3 for Unit 4 were established addressing the AST modifications.

On October 31, 2011, the NRC issued Amendment Nos. 246 to DPR-31 and 242 to DPR-41 with supporting SER regarding Fuel Criticality Analysis [Reference 2].

On March 30, 2012, the NRC issued Amendment Nos. 248 to DPR-31 and 244 to DPR-41 with supporting SER regarding Control Room Habitability (CRH) [Reference 3]. License Conditions 3.I for Unit 3 and 3.J for Unit 4 were established addressing testing and assessment.

On June 15, 2012, the NRC issued Amendments No. 249 to DPR-31 and 245 to DPR-41 with supporting SER regarding the Extended Power Uprate (EPU) [Reference 4]. License Conditions 3.J, 3.K, & 3.L for Unit 3 and 3.K, 3.L, & 3.M for Unit 4 were established addressing spent fuel pool cooling heat exchanger modifications, fuel thermal conductivity degradation analysis, and burnable absorber credit in the spent fuel pool.



The Unit 3 Cycle 26 Refueling Outage has implemented the AST, CRH, Fuel Criticality Analysis, and EPU Amendments above and satisfied several of the above license conditions for Unit 3 as well as several for Unit 4. These specific conditions can therefore be removed from their respective Operating Licenses.

As discussed with the NRC Reactor Systems Branch (SRXB) technical reviewer, a note allowing the crediting of burnable absorbers other than Integral Fuel Burnable Absorbers (IFBAs) in the spent fuel pool is being removed from two tables and one figure in TS Section 5.5.1. By removing the provision in the notes, crediting any burnable absorber other than Integral Fuel Burnable Absorber (IFBA) rods for the storage of fuel assemblies in the Region I spent fuel racks will be effectively prohibited. Therefore, the same prohibition established by License Conditions 3.L for Unit 3 and 3.M for Unit 4 can be deleted. Several inadvertent errors were also identified in the TS that require correction. Lastly, a revision to License Conditions 3.E for Unit 3 and 3.E for Unit 4 is proposed to update reference to the Physical Security Plan (PSP) to the latest approved title and revision level.

In accordance with the provisions of 10 CFR 50.90, Florida Power and Light Company (FPL) requests that Appendix A of Renewed Facility Operating Licenses DPR-31 and DPR-41 for Turkey Point Units 3 and 4 be amended to incorporate the enclosed Technical Specification (TS) revisions, revision of license condition 3.E for DPR-31 and DPR-41, deletion of license conditions 3.H, 3.I, 3.J, and 3.L for DPR-31 and deletion of license conditions 3.H, 3.I.1 & 3.I.3, 3.J, 3.K, and 3.M for DPR-41.

Descriptions of the proposed TS and OL changes with supporting justifications and a no significant hazards determination and environmental consideration are provided in the Enclosure to this letter.

The Turkey Point Plant Nuclear Safety Committee (PNSC) has reviewed the proposed license amendments. The proposed TS changes have been evaluated in accordance with 10 CFR 50.91(a)(1), using the criteria in 10 CFR 50.92(c). FPL has determined that the proposed TS changes do not involve a significant hazards consideration.

The proposed license amendments change requirements with respect to the use of a facility component located within the restricted area as defined in 10 CFR Part 20. FPL has determined that the proposed amendments involve no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite, and no significant increase in individual or cumulative occupational radiation exposure. Therefore, FPL has concluded that the proposed amendments meet the criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment need not be prepared in connection with issuance of the amendments.

This letter contains no new commitments and no revisions to existing commitments.

In accordance with 10 CFR 50.91(b)(1), a copy of this letter is being forwarded to the State Designee of Florida.

Should you have any questions regarding this submittal, please contact Mr. Robert J. Tomonto, Licensing Manager, at (305) 246-7327.

Turkey Point Nuclear Plant Docket Nos. 50-250 and 50-251

I declare under penalty of perjury that the foregoing is true and correct.

Executed on September //, 2012.

Very truly yours,

Michael Kiley Site Vice President

Turkey Point Nuclear Plant

Enclosure

cc: USNRC Regional Administrator, Region II

USNRC Project Manager, Turkey Point Nuclear Plant

USNRC Senior Resident Inspector, Turkey Point Nuclear Plant

Ms. Cindy Becker, Florida Department of Health

Enclosure
Turkey Point Units 3 and 4
License Amendment Request No. 217
Administrative Changes to Operating License Conditions and Technical Specifications

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LICENSE AMENDMENT REQUEST NO. 217

ADMINISTRATIVE CHANGES TO OPERATING LICENSE CONDITIONS AND TECHNICAL SPECIFICATIONS

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1.0 Purpose and Scope

Florida Power and Light Company (FPL) proposes to amend Renewed Facility Operating Licenses DPR-31 and DPR-41 for Turkey Point Units 3 and 4 to (1) close and remove license conditions that have been fully satisfied as of the end of the Unit 3 Cycle 26 refueling outage, (2) revise TS 5.5.1 to remove related license conditions, (3) correct several inadvertent errors in the TS, and (4) update the reference to the Physical Security Plan (PSP) to the latest approved revision in the related license conditions. The license conditions that have been fully satisfied include 3.H on AST Modifications, 3.I on Control Room Habitability, and 3.J on EPU Modifications for DPR-31 and license conditions 3.H on the Boraflex Remedy, 3.I.1 & 3.I.3 on AST Modifications, 3.J on Control Room Habitability, and 3.K on EPU Modifications for DPR-41.

The proposed amendments will delete TS Table 5.5.1 Notes 4 and 5, and revise TS Table 5.5-3 Note 4 and TS Figure 5.5-1 Note 3 to remove the phrase "or contains an equivalent amount of another burnable absorber". This proposed change prohibits crediting any burnable absorber other than Integral Fuel Burnable Absorber (IFBA) rods for the storage of fuel assemblies in the Region I spent fuel racks and would replace the same prohibition established by License Conditions 3.L for DPR-31 and 3.M for DPR-41; thereby, allowing deletion of these license conditions. In addition, the proposed amendments will correct several inadvertent errors identified in the TS including TS Figure 3.1-2 to address overcompensation for instrument uncertainty in the boric acid tank minimum volume curve for two unit operation as it was added twice, Surveillance Requirement (SR) 4.7.5.c to properly state that the in-place testing acceptance criterion for the assumed 99% filter efficiency (i.e., 99.95% at 95/95 confidence level), SR 4.7.5.d.2 and 4.7.5.g to annotate a footnote, and TS 5.5.1.3 to delete conditional verbiage that was negated by earlier changes to TS 5.5.1.1.f. Lastly, a revision to License Conditions 3.E for DPR-31 and 3.E for DPR-41 is proposed to update the reference to the Physical Security Plan to the latest revision.

2.0 Background Information

On November 13, 2009, the U.S. Nuclear Regulatory Commission (NRC) issued License Amendment No. 237 to DPR-41 for Turkey Point Unit 4 with supporting Safety Evaluation Report (SER) revising the date specified in License Amendment No. 229 for implementation of the Boraflex Remedy in the Turkey Point Unit 4 spent fuel pool [Reference 23]. License Amendment No. 237 established License Condition 3.H applicable for the period prior to the implementation of the Boraflex Remedy for which Boraflex continued to be credited for fuel storage in the Unit 4 spent fuel pool. License Amendment No. 229 has been implemented eliminating all credit for Boraflex in the Unit 4 spent fuel pool.

On October 31, 2011, the NRC issued Amendment Nos. 246 to DPR-31 and 242 to DPR-41 for the Turkey Point Nuclear Plant, Units Nos. 3 and 4, respectively, with supporting SER on the Fuel Criticality Analysis [Reference 1]. These amendments revised the spent fuel storage requirements specified in TS 5.5.1 Fuel Storage – Criticality and have been fully implemented; thereby, superseding the Boraflex Remedy amendments (Amendments 234 and 229) for both Unit 3 and Unit 4 and maintaining no credit for Boraflex.

During subsequent review of additional proposed changes to TS 5.5.1 in support of the Extended Power Uprate (EPU) project, the NRC Reactor Systems Branch (SRXB) technical reviewer identified proposed language in TS 5.5.1.2.b that would have allowed an equivalent

amount of burnable absorber other than Integrated Fuel Burnable Absorber (IFBA) rods to be credited for new fuel storage. On February 15, 2012, FPL eliminated the proposed language via letter L-2012-050 [Reference 2]. Subsequent discussion with the NRC Project Manager (PM) and the SRXB technical reviewer identified similar language in two of the TS Tables and one of the TS Figures addressing spent fuel pool storage requirements and resulted in a proposed license condition for each unit (3.L for DPR-31 (Unit 3) and 3.M for DPR-41 (Unit 4)) that prohibited crediting of any burnable absorber other than IFBA for storage of fuel assemblies in the Region I spent fuel racks via letter L-2012-081 dated February 23, 2012 [Reference 3]. It was understood that these license conditions which were issued as part of the EPU amendments on June 15, 2012 [Reference 4] would remain in place until such time as the cited language in the two tables and one figure were removed.

The proposed amendments will revise TS Table 5.5-1 Note 5, TS Table 5.5-3 Note 4, and TS Figure 5.5-1 Note 3 to remove the phrase "or contains an equivalent amount of another burnable absorber" and to delete associated license conditions 3.L and 3.M for Units 3 and 4, respectively. TS 5.5.1.3 will also be revised to delete conditional phrase "Unless otherwise specified in accordance with Specification 5.5.1.1.f," as TS 5.5.1.1.f was revised via letter L-2011-386 on September 14, 2011 [Reference 5] to ensure that fuel assembly storage in spent fuel pool storage racks other than the cask storage area rack complies with only the storage configurations allowed by TS 5.5.1.3. This language is reflected in Amendment Nos. 246 and 242 [Reference 1].

On June 23, 2011, the NRC issued License Amendment Nos. 244 to DPR-31 and 240 to DPR-41 with supporting SER regarding the Alternative Source Term (AST) [Reference 6]. License Conditions 3.H for Unit 3 and 3.I for Unit 4 were established addressing AST modifications. The modifications required by license conditions 3.H for Unit 3 have been implemented. The modifications required by license conditions 3.I.1 and 3.I.3 for Unit 4 have been implemented. The NaTB baskets associated with license condition 3.I.2 for Unit 4 have been installed; however, the specified quantity of NaTB is not scheduled to be loaded until the Unit 4 Cycle 27 outage.

On March 30, 2012, the NRC issued License Amendment Nos. 248 to DPR-31 and 244 to DPR-41 with supporting SER regarding Control Room Habitability (CRH) [Reference 7]. License Conditions 3.I for Unit 3 and 3.J for Unit 4 were established addressing Control Room Envelope (CRE) testing and CRH assessment. The testing and assessment required by license conditions 3.I for Unit 3 and 3.J for Unit 4 have been successfully completed.

The proposed amendments will correct two inadvertent errors in TS 3/4.7.5 Control Room Emergency Ventilation System. Specifically, TS Surveillance Requirement (SR) 4.7.5.c.(1) will be revised to cite the proper test acceptance criterion given in RG 1.52 [Reference 8] for an assumed 99% filter efficiency (i.e., 99.95% at 95/95 confidence level) and SR 4.7.5.d.2 and SR 4.7.5.g will be annotated with ***footnote to indicate that the subject testing applies to the both the normal filter train and the compensatory filtration unit. In addition, the ***footnote will be modified slightly to clarify that "use of the compensatory filtration unit" is part of the mitigating actions specified in Action a.5.

On June 15, 2012, the NRC issued Amendments Nos. 249 to DPR-31 and 245 to DPR-41 with supporting SER on the Extended Power Uprate [Reference 4]. License Conditions 3.J, 3.K, & 3.L for Unit 3 and 3.K, 3.L, & 3.M for Unit 4 were established addressing spent fuel

pool cooling heat exchanger modifications, fuel thermal conductivity degradation analysis, and burnable absorber usage in the spent fuel pool. The confirmatory design and structural integrity information regarding the Units 3 and 4 spent fuel pool cooling heat exchanger modifications have been provided to the NRC [References 17, 18, and 22].

The proposed amendments will correct an inadvertent error identified in TS Figure 3.1-2 in which the boric acid minimum volume curve for two unit operation was overcompensated for level instrument uncertainty when the correction was applied twice for the same boric acid storage tanks, i.e., these tanks are common components shared by both units.

The proposed amendments will also revise the title for the Physical Security Plan (PSP) in license condition 3.E and delete license conditions 3.H on AST Modifications, 3.I on Control Room Habitability, 3.J on EPU Modifications, and 3.L on Burnable Absorbers for DPR-31. The proposed amendments will also revise the title for the PSP in license condition 3.E and delete license conditions 3.H on the Boraflex Remedy, 3.I.1 & 3.I.3 on AST Modifications, 3.J on Control Room Habitability, 3.K on EPU Modifications, and 3.M.1 on Burnable Absorbers for DPR-41. Note that license condition 3.I.2 regarding the NaTB baskets for Unit 4 will be deleted via a supplement to this submittal once the baskets have been loaded with the buffering agent.

3.0 Description of Proposed Changes

The proposed TS changes affect the following:

- TS Figure 3.1-2, Boric Acid Tank Minimum Volume
- SR 4.7.5.c.(1), Filter penetration and bypass leakage testing
- SR 4.7.5.d.2, CRE differential pressure testing
- SR 4.7.5.g, CRE unfiltered inleakage testing
- TS 5.5.1.3, Fuel Storage Criticality
- TS Table 5.5-1 Notes 4 and 5, Blanketed Fuel Coefficients to Calculate the Minimum Required Fuel Assembly Burnup (Bu) as a Function of Enrichment (En) and Cooling Time (Ct)
- TS Table 5.5-3 Note 4, Fuel Categories Ranked by Reactivity
- TS Figure 5.5-1 Note 3, Allowable Region I Storage Arrays

The proposed OL changes for Unit 3 affect the following:

- 3.E, Physical Security Plan
- 3.H.1, AST Modifications CREVS
- 3.H.2, AST Modifications NaTB Baskets
- 3.H.3, AST Modifications CREFS
- 3.I.(a), CRE Unfiltered Inleakage Test
- 3.I.(b), CRE Habitability Assessment
- 3.I.(c), CRE Differential Pressure Test
- 3.J.1, SFP Heat Exchanger Design
- 3.L.1, Burnable Absorbers

The proposed OL changes for Unit 4 affect the following:

- 3.E, Physical Security Plan
- 3.H.(a), Boraflex Remedy SFP Boron Concentration
- 3.H.(b), Boraflex Remedy BADGER Testing
- 3.H.(c), Boraflex Remedy Burnup/Configuration Restrictions
- 3.H.(d), Boraflex Remedy Fuel Movement Restrictions
- 3.I.1, AST Modifications CREVS
- 3.I.2, AST Modifications NaTB Baskets
- 3.I.3, AST Modifications CREFS
- 3.I.(a), CRE Unfiltered Inleakage Test
- 3.J.(b), CRE Habitability Assessment
- 3.J.(c), CRE Differential Pressure Test
- 3.K.1, SFP Heat Exchanger Design
- 3.M.1, Burnable Absorbers

To provide more specific description of the proposed changes, TS mark-ups are attached and an item-by-item description is provided below with a brief justification for each change.

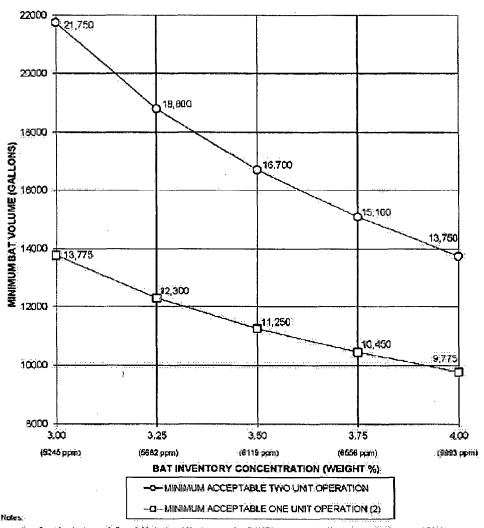
4.0 Basis/Justification for the Proposed Changes

4.1 Changes to the PTN Technical Specifications

4.1.1 Technical Specification Table 3.1-2

<u>Current TS</u>

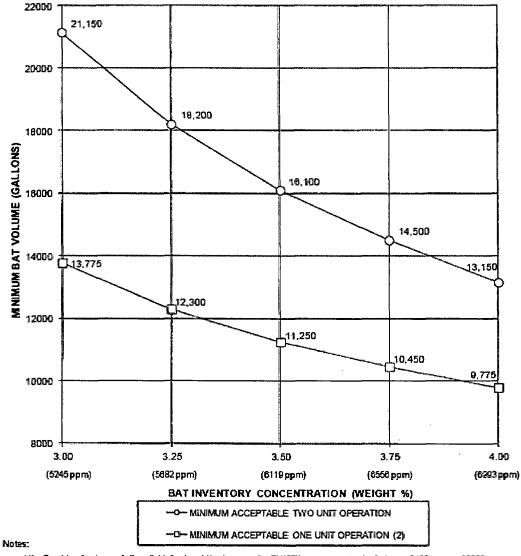
Figure 3.1-2
BORIC ACID TANK MINIMUM VOLUME (1)
Modes 1, 2, 3 and 4



(1) Comtined volume of all available baric sold lanks assuming RWST boron concentration between 2400 ppm and 2600 ppm.
 (2) Includes 2000 gallons for the shittdoon will.

Proposed TS





Combined volume of all avaitable boric acid tanks assuming RWST boron concentration between 2400 ppm and 2600 ppm.
 Includes 2600 gallons for the shutdown unit.

Basis for the Change: An instrument uncertainty of 600 gallons was applied to the Boric Acid Tank (BAT) minimum volume curve for one unit operation and then doubled to 1200 gallons for the BAT minimum curve for two unit operation via L-2011-560 dated January 10, 2012 [Reference 9]. However, the BAT is common equipment that serves both units so the instrument uncertainty for two unit operation should not have been counted twice.

4.1.2 Technical Specification 4.7.5 Surveillance Requirements

Current TS

c.1 Verifying that the air cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of greater than or equal to 99% DOP and halogenated hydrocarbon removal at a system flow rate of 1000 cfm ±10%***.

Proposed TS

c.1 Verifying that the air cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of greater than or equal to 99.95% DOP and 99% halogenated hydrocarbon removal at a system flow rate of 1000 cfm ±10%***.

Basis for the Change: The AST radiological dose consequence analyses assumed 99% control room filter efficiency for particulates which requires an acceptance criterion for the DOP (Dioctyl Phthalate) test of 99.95% per RG 1.52 [Reference 8] rather than 99% as currently stated. The required change to the DOP test acceptance criterion was inadvertently overlooked when the dose consequence analyses were revised to account for new meteorological data, increased filter efficiency, and decreased unfiltered air inleakage and the summary report resubmitted to the NRC via letter L-2010-137 on June 25, 2010 [Reference 10]. Correction of the acceptance criterion for the DOP test assures that the control room filter will satisfy the 99% particulate filter efficiency assumed in the design basis dose analyses. The associated surveillance procedures have been revised and past surveillance results were found to have met this revised acceptance criterion.

A markup of the TS change is attached.

4.1.3 Technical Specification 4.7.5 Surveillance Requirements

Current TS

d.2 On a staggered test basis every 36 months, test the supply fans (trains A and B) and measure CRE pressure relative to external areas adjacent to the CRE boundary.

Proposed TS

d.2 On a staggered test basis every 36 months, test the supply fans (trains A and B) and measure CRE pressure relative to external areas adjacent to the CRE boundary.***

^{***}As the mitigation actions of TS 3.7.5 Action a.5 may include the use of the compensatory filtration unit, the unit shall meet the surveillance requirements of TS 4.7.5.b, by manual initiation from outside the control room and TS 4.7.5.c and d.

^{***}As the mitigation actions of TS 3.7.5 Action a.5 may include the use of the compensatory filtration unit, the unit shall meet the surveillance requirements of TS 4.7.5.b, by manual initiation from outside the control room and TS 4.7.5.c, d and g.

Basis for the Change: The AST Amendments 244 and 240 annotated SR 4.7.5.d with the ***footnote regarding the applicability of surveillance requirement to the compensatory filtration unit [Reference 6]. TSTF-448 Amendments 248 and 244 inadvertently omitted the ***footnote when SR 4.7.5.d was split into SR 4.7.5.d.1 and SR 4.7.5.d.2; thereby, leaving the applicability of the surveillance requirement for the compensatory filtration unit unspecified [Reference 7]. Annotation of SR 4.7.5.d.2 with the ***footnote will simply restore the intent of the surveillance requirement as it applies to the compensatory filtration unit.

The proposed editorial change to the footnote clarifies its intent as indicated in TSTF-448 RAI response letter L-2011-380 dated October 27, 2011 [Reference 11] in which TS 3.7.5 Action a.5 was amended to clarify that in the event of the filter train became inoperable, the mitigating actions required to be implemented included the immediate initiation of the compensatory filtration unit. Thus, the ***footnote needed to be revised to reflect this by deleting "may" and including SR 4.7.5.g.

A markup of the TS change is attached.

4.1.4 Technical Specification 4.7.5 Surveillance Requirements

Current TS

g. By performing required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.

Proposed TS

g. By performing required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.***

Basis for the Change: The AST Amendments 244 and 240 annotated SR 4.7.5.b, c, and d with the ***footnote regarding the applicability of surveillance requirements to the compensatory filtration unit [Reference 6]. TSTF-448 Amendments 248 and 244 inadvertently omitted the ***footnote on TS 4.7.5.g; thereby, leaving applicability of surveillance requirement for the compensatory filtration unit unspecified [Reference 7]. The annotation of SR 4.7.5.g with the ***footnote will simply restore the intent of the surveillance requirement as it applies to the compensatory filtration unit as stated in letter L-2010-197 dated September 15, 2010 [Reference 12]: "The addition of the footnote is appropriate as the maintenance of the compensatory filtration unit must satisfy the applicable surveillance requirements imposed on the normal CREVS filter train (TS 4.7.5.b, c and d) in order to assure its operational readiness."

A markup of the TS change is attached.

4.1.5 Technical Specification 5.5.1 Fuel Storage - Criticality

Current TS

5.5.1.3 Credit for burnup and cooling time is taken in determining acceptable placement locations for spent fuel in the two-region spent fuel racks. Unless otherwise specified in accordance with Specification 5.5.1.1.f, fresh or irradiated fuel assemblies shall be stored in compliance with the following:

Proposed TS

5.5.1.3 Credit for burnup and cooling time is taken in determining acceptable placement locations for spent fuel in the two-region spent fuel racks.

Unless otherwise specified in accordance with Specification 5.5.1.1.f,

Fresh or irradiated fuel assemblies in the Region I or Region II racks shall be stored in compliance with the following:

Basis for the Change: The conditional phrase above was added to TS 5.5.1.3 via letter L-2011-032 dated February 22, 2011 [Reference 13] which submitted the current fuel storage criticality analysis as part of license amendment request 207. TS 5.5.1.1.f was later revised to delete the provision for alternate configurations other than those allowed by TS 5.5.1.3 via letter L-2011-386 dated September 14, 2011 [Reference 5]. The proposed deletion of the conditional phrase in TS 5.5.1.3 removes the inconsistency between TS 5.5.1.1.f and TS 5.5.1.3 as written.

A markup of the TS change is attached.

4.1.6 Technical Specification Table 5.5-1 Blanketed Fuel – Coefficients to Calculate the Minimum Required Fuel Assembly Burnup (Bu) as a Function of Enrichment (En) and Cooling Time (Ct) – Notes 4 and 5

Current TS

- 4. Category I-1 is fresh unburned fuel up to 5.0 wt% U-235 enrichment.
- 5. Category I-2 is fresh unburned fuel that obeys the IFBA requirements in Table 5.5-4 or contains an equivalent amount of another burnable absorber.

Proposed TS

- 4. Deleted.
- 5. Deleted.

Basis for the Change: Although this language was approved by the NRC on October 31, 2011 with the issuance of Amendments 246 and 242 [Reference 1], the SRXB Technical Reviewer, as part of his review of the EPU LAR [Reference 4], questioned the allowance of another burnable absorber other than IFBAs in the spent fuel pool as it was not explicitly identified and documented in the newly approved criticality analysis (WCAP-17094-P, Rev 3) [Reference 14]. As a result, a license condition for each unit (3.L.1 for DPR-31 (Unit 3) and 3.M.1 for DPR-41 (Unit 4)) was established prohibiting credit for any burnable absorber other than IFBA for the storage of fuel assemblies in the Region I spent fuel racks [Reference 4] until the TS language could be corrected by removal of the above provision. In addition, it has been determined that Table 5.5-1 is not applicable to either Category I-1 or I-2 fuel. Therefore, these notes are being deleted.

- 4.1.7 Technical Specification Table 5.5-3 Fuel Categories Ranked by Reactivity Note 4Current TS
 - 4. Category I-2 is fresh unburned fuel that obeys the IFBA requirements in Table 5.5-4 or contains an equivalent amount of another burnable absorber.

Proposed TS

4. Category I-2 is fresh unburned fuel that obeys the IFBA requirements in Table 5.5-4 or contains an equivalent amount of another burnable absorber.

Basis for the Change: Although this language was approved by the NRC on October 31, 2011 with the issuance of Amendments 246 and 242 [Reference 1], the SRXB Technical Reviewer, as part of his review of the EPU LAR [Reference 4], questioned allowing credit for another burnable absorber other than IFBAs in the spent fuel pool as it was not explicitly identified and documented in the newly approved criticality analysis (WCAP-17094-P, Rev 3) [Reference 14]. As a result, a license condition for each unit (3.L for DPR-31 (Unit 3) and 3.M for DPR-41 (Unit 4)) was established prohibiting credit for any burnable absorber other than IFBA for the storage of fuel assemblies in the Region I spent fuel racks [Reference 4] until the TS language could be corrected by removal of the above provision. Therefore, the text is being deleted.

A markup of the TS change is attached.

- 4.1.8 Technical Specification Figure 5.5-1 Allowable Region I Storage Arrays Note 3
 Current TS
 - 3. Category I-2 is fresh unburned fuel that obeys the IFBA requirements in Table 5.5-4 or contains an equivalent amount of another burnable absorber.

Proposed TS

3. Category I-2 is fresh unburned fuel that obeys the IFBA requirements in Table 5.5-4 or contains an equivalent amount of another burnable absorber.

Basis for the Change: Although this language was approved by the NRC on October 31, 2011 with the issuance of Amendments 246 and 242 [Reference 1], the SRXB Technical Reviewer, as part of his review of the EPU LAR [Reference 4], questioned allowing credit for another burnable absorber other than IFBAs in the spent fuel pool as it was not explicitly identified and documented in the newly approved criticality analysis (WCAP-17094-P, Rev 3) [Reference 14]. As a result, a license condition for each unit (3.L for DPR-31 (Unit 3) and 3.M for DPR-41 (Unit 4)) was established prohibiting credit for any burnable absorber other than IFBA for the storage of fuel assemblies in the Region I spent fuel racks [Reference 4] until the TS language could be corrected by removal of the above provision. Therefore, the text is being deleted.

- 4.2 Changes to the PTN Renewed Operating Licenses
 - 4.2.1 Renewed Operating License DPR-31 Condition 3.E. "Physical Security Plan"

Current OL

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 - Revision 3 "submitted by letter dated May 18, 2006.

Proposed OL

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 & Light Turkey Point Nuclear Plant Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program - Revision 15" submitted by letter dated August 3, 2012.

<u>Basis for the Change</u>: Revision 15 to the Physical Security Plan was submitted via letter L-2012-305 dated August 3, 2012 [Reference 15].

A markup of the OL change is attached.

4.2.2 Renewed Operating License DPR-31 Condition 3.H "Alternative Source Term (AST) Modifications"

Current OL

H.1 FPL will relocate the CR Ventilation System emergency air intakes prior to implementation of AST. The relocated intakes and associated ductwork will be designed to seismic criteria, protected from environmental effects, and will meet the requirements of 10 CFR 50 Appendix A, GDC 19. The new intakes will be located near the ground level extending out from the southeast and northeast corners of the auxiliary building and will fall within diverse wind sectors for post-accident contaminants. FPL will perform post-modification testing in accordance with the plant design modification procedures to ensure the TS pressurization flow remains adequate to demonstrate the integrity of the relocated intakes. In addition, FPL will provide to the NRC a confirmatory assessment which demonstrates that the requirements of 10 CFR 50 Appendix A, GDC 19 will be met. The confirmatory assessment will follow the methodology in Amendment 244

- [the alternative source term amendment] including the methods used for the establishment of the atmospheric dispersion factors (X/Q values).
- H.2 FPL will install ten (two large and eight small) stainless steel wire mesh baskets containing NaTB located in the containment basement to maintain pH during the sump recirculation phase following a Design Basis LOCA.
- H.3 The CREVS compensatory filtration unit, which is being installed by FPL as part of the AST methodology implementation at Turkey Point, will be designed in accordance with the Class I Structures, Systems, and Equipment Design Requirements defined in Appendix 5A of the Turkey Point UFSAR. As such, the compensatory filtration unit will be designed so that the stress limits found in Table 5A-1 of the Turkey Point UFSAR will not be exceeded due to the loadings imposed by a maximum hypothetical earthquake. FPL shall ensure that the design of the compensatory filtration unit satisfies these stress limits prior to the implementation of the proposed AST methodology at Turkey Point.

Proposed OL

Deleted.

Basis for the Change: License condition 3.H.1 was satisfied with the relocation of the control room emergency air intakes and post-modification testing that included flow balancing, control room pressurization testing, and tracer gas testing. The required confirmatory assessment was provided to the NRC via letter L-2011-277 on August 11, 2011 [Reference 16]. License condition 3.H.2 was satisfied with the installation of the ten baskets loaded with the specified quantity of NaTB. License condition 3.H.3 was satisfied with installation and testing of compensatory filtration unit. AST Amendment No. 244 including TS 3/4.7.5 on CREVS and EPU Amendment No. 249 have been implemented for Turkey Point Unit 3.

A markup of the OL change is attached.

4.2.3 Renewed Operating License DPR-31 Condition 3.I "Control Room Habitability"

Current OL

Upon implementation of Amendment No. 248 adopting TSTF-448 Revision 3, the determination of control room envelope (CRE) unfiltered air inleakage as required by Surveillance Requirement (SR) 4.7.5.g, in accordance with Technical Specification (TS) 6.8.4.k.c.(i), the assessment of CRE habitability as required by Specification 6.8.4.k.c.(ii), and the measurement of CRE pressure as required by Specification 6.8.4.k.d, shall be considered met. Following implementation:

- (a) The first performance of SR 4.7.5.g, in accordance with Specification 6.8.4.k.c.(i), shall be within the specified Frequency of 3 years, plus the 9 month allowance of SR 4.0.2, as measured from July 31, 2009, the date of the most recent tracer gas test.*
- (b) The first performance of the periodic assessment of CRE habitability, Specification 6.8.4.k.c.(ii), shall be within 3 years, plus the 9-month

- allowance of SR 4.0.2, as measured from July 31, 2009, the date of the most recent tracer gas test.
- (c) The first performance of the periodic measurement of CRE pressure, Specification 6.8.4.k.d, shall be within 36 months on a STAGGERED TEST BASIS, plus the 138 days allowed by SR 4.0.2, as measured from the date of the most recent successful pressure measurement test, or within 138 days of license amendment implementation if not performed previously.
- * The most recent tracer gas test (July 31, 2009) was unsuccessful in that there was a measured 9 cfm control room inleakage: the acceptance criteria is 0 cfm. In accordance with Regulatory Guide (RG) 1.197 Rev. 0, a recalculation of the consequences to the control room operators was performed, and the results were acceptable for continued CREVS operability. Consistent with RG 1.197, a full test is to be conducted three years later to ascertain whether the CRE's integrity has continued to degrade.

Proposed OL

Deleted.

Basis for the Change: License conditions 3.I.(a) & (c) were satisfied with completion of the tracer gas testing and pressurization testing of the Control Room using the main control room emergency ventilation system filter train on July 18, 2012 and using the compensatory filtration unit on July 25, 2012. License condition 3.I.(b) was satisfied with completion of the required CRE Habitability Assessment.

A markup of the OL change is attached.

4.2.4 Renewed Operating License DPR-31 Condition 3.J "Extended Power Uprate Modifications"

Current OL

J.1 Prior to completion of the Cycle 26 refueling outage for Unit 3, the licensee shall provide confirmation to the NRC staff that the design and structural integrity evaluations associated with the modifications related to the spent fuel pool supplemental heat exchangers are complete, and that the results demonstrate compliance with appropriate UFSAR and code requirements. As part of the confirmation, the licensee shall provide a summary of the structural qualification results of the piping, pipe supports, supplemental heat exchanger supports, and the inter-tie connection with the existing heat exchanger for the appropriate load combinations along with the margins.

Proposed OL

Deleted.

Basis for the Change: The above license condition has been satisfied with the submission of the requested design information via letters L-2012-143 and L-2012-179 dated June 19, 2012 and July 13, 2012, respectively [References 17 and 18]. NRC closed this item via letter on August 2, 2012 [Reference 19].

- 4.2.5 Renewed Operating License DPR-31 Condition 3.K "<u>PAD TCD Safety Analyses</u>" is renumbered as 3.H to account for the proposed deletions above.
 - A markup of the OL change is attached.
- 4.2.6 Renewed Operating License DPR-31 Condition 3.L "Burnable Absorbers in the Spent Fuel Pool"

Current OL

L.1 With respect to Technical Specification 5.5.1.3, FPL shall not credit any burnable absorber other than Integral Fuel Burnable Absorber (IFBA) rods for the storage of fuel assemblies in Region I spent fuel racks.

Proposed OL

Deleted.

<u>Basis for the Change</u>: The above license condition was established for each unit to prohibit the crediting of any burnable absorber other than IFBA rods for storage of fuel assemblies in the Region I spent fuel racks [Reference 4] until provisions in TS Table 5.5-1, Table 5.5-3, and Figure 5.5-1 were revised to remove such an allowance. Therefore, the license condition can now be deleted.

A markup of the OL change is attached.

4.2.7 Renewed Operating License DPR-41 Condition 3.E. "Physical Security Plan"

Current OL

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 - Revision 3 "submitted by letter dated May 18, 2006.

Proposed OL

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 & Light Turkey Point Nuclear Plant Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program - Revision 15" submitted by letter dated August 3, 2012.

<u>Basis for the Change</u>: Revision 15 to the Physical Security Plan was submitted via letter L-2012-305 dated August 3, 2012 [Reference 15].

A markup of the OL change is attached.

4.2.8 Renewed Operating License DPR-41 Condition 3.H

Current OL

- H. FPL will implement the following measures as part of the request for a change in the implementation date for Amendment 229 for Unit 4. These measures will remain in place until Amendment No. 229 is implemented or until the NRC approves the license amendment request discussed in Item (b) below but not later than February 28, 2011.
 - (a) The Unit 4 Spent Fuel Pool (SFP) boron concentration will be increased to and maintained no less than 2100 ppm. This measure will be implemented within 72 hours of installing the transfer tube gate isolating the SFP from the reactor cavity during the current Unit 4 refueling outage.
 - (b) FPL will complete Boraflex panel surveillance using EPRI BADGER neutron attenuation methodology in the Unit 4 SFP no later than May 30, 2010. The report documenting the results of the EPRI BADGER testing campaign and the license amendment request updating the SFP licensing basis will be submitted to the NRC no later than 90 days after completion of the BADGER testing.
 - (c) FPL will increase the current MWD/MTU burnup requirements for SFP Region II storage by 10% and will configure the SFP to comply with these requirements or insert an RCCA in any fuel assembly not in compliance with these requirements. These measures will be completed by February 28, 2010.
 - (d) FPL will not move any fuel assemblies into the Unit 4 SFP subsequent to the successful completion of startup physics tests for Unit 4 Cycle 25.

Proposed OL

H. Deleted.

Basis for the Change: The above license conditions 3.H(a), (b), (c), & (d) for Unit 4 are associated with the implementation of the Amendment 229 on Boraflex Remedy. As required by H(b) above, the results of the EPRI Badger testing for Unit 4 were provided to the NRC via letter L-2010-173 dated August 5, 2010 [Reference 20] while License Amendment Request No. 207 updating the SFP licensing basis with a new criticality analysis for new fuel and spent fuel pool storage was submitted to the NRC via letter L-2010-169 dated August 5, 2010 [Reference 21]. The other measures detailed above remained in place until Amendment 229 was fully implemented in September 2010. Since full implementation of Amendment 229, these measures have not been required. In addition, Amendments 246 and 242, issued on October 31, 2011 [Reference 1], and the LAR 207 associated criticality analysis [Reference 14] have been implemented and supersede the fuel storage requirements specified in Amendments 234 and 229. Therefore, the above license condition can be deleted.

4.2.9 Renewed Operating License DPR-41 Condition "Alternative Source Term (AST) Modifications"

Current OL

- I.1 FPL will relocate the CR Ventilation System emergency air intakes prior to implementation of AST. The relocated intakes and associated ductwork will be designed to seismic criteria, protected from environmental effects, and will meet the requirements of 10 CFR 50 Appendix A, GDC 19. The new intakes will be located near the ground level extending out from the southeast and northeast corners of the auxiliary building and will fall within diverse wind sectors for post-accident contaminants. FPL will perform postmodification testing in accordance with the plant design modification procedures to ensure the TS pressurization flow remains adequate to demonstrate the integrity of the relocated intakes. In addition, FPL will provide to the NRC a confirmatory assessment which demonstrates that the requirements of 10 CFR 50 Appendix A, GDC 19 will be met. The confirmatory assessment will follow the methodology in Amendment 240 [the alternative source term amendment] including the methods used for the establishment of the atmospheric dispersion factors (X/Q values).
- I.2 FPL will install ten (two large and eight small) stainless steel wire mesh baskets containing NaTB located in the containment basement to maintain pH during the sump recirculation phase following a Design Basis LOCA.
- I.3 The CREVS compensatory filtration unit, which is being installed by FPL as part of the AST methodology implementation at Turkey Point, will be designed in accordance with the Class I Structures, Systems, and Equipment Design Requirements defined in Appendix 5A of the Turkey Point UFSAR. As such, the compensatory filtration unit will be designed so that the stress limits found in Table 5A-1 of the Turkey Point UFSAR will not be exceeded due to the loadings imposed by a maximum hypothetical earthquake. FPL shall ensure that the design of the compensatory filtration unit satisfies these stress limits prior to the implementation of the proposed AST methodology at Turkey Point.

Proposed OL

- I.1 Deleted.
- I.2 FPL will install ten (two large and eight small) stainless steel wire mesh baskets containing NaTB located in the containment basement to maintain pH during the sump recirculation phase following a Design Basis LOCA.
- I.3 Deleted.

<u>Basis for the Change</u>: License conditions 3.I.1 and 3.I.3 have been satisfied for Turkey Point Unit 4. The NaTB baskets have been installed in Unit 4; however, license condition 3.I.2 will not be completed until the baskets are loaded with the specified quantity of NaTB during the Unit 4 Cycle 27 refueling outage.

4.2.10 Renewed Operating License DPR-41 Condition 3.J "Control Room Habitability"

Current OL

Upon implementation of Amendment No. 244 adopting TSTF-448 Revision 3, the determination of control room envelope (CRE) unfiltered air inleakage as required by Surveillance Requirement (SR) 4.7.5.g, in accordance with Technical Specification (TS) 6.8.4.k.c.(i), the assessment of CRE habitability as required by Specification 6.8.4.k.c.(ii), and the measurement of CRE pressure as required by Specification 6.8.4.k.d, shall be considered met. Following implementation:

- (a) The first performance of SR 4.7.5.g, in accordance with Specification 6.8.4.k.c.(i), shall be within the specified Frequency of 3 years, plus the 9 month allowance of SR 4.0.2, as measured from July 31, 2009, the date of the most recent tracer gas test.*
- (b) The first performance of the periodic assessment of CRE habitability, Specification 6.8.4.k.c.(ii), shall be within 3 years, plus the 9-month allowance of SR 4.0.2, as measured from July 31,2009, the date of the most recent tracer gas test.
- (c) The first performance of the periodic measurement of CRE pressure, Specification 6.8.4.k.d, shall be within 36 months on a STAGGERED TEST BASIS, plus the 138 days allowed by SR 4.0.2, as measured from the date of the most recent successful pressure measurement test, or within 138 days of license amendment implementation if not performed previously.
- * The most recent tracer gas test (July 31, 2009) was unsuccessful in that there was a measured 9 cfm control room inleakage: the acceptance criteria is 0 cfm. In accordance with Regulatory Guide (RG) 1.197 Rev. 0, a recalculation of the consequences to the control room operators was performed, and the results were acceptable for continued CREVS operability. Consistent with RG 1.197, a full test is to be conducted three years later to ascertain whether the CRE's integrity has continued to degrade.

Proposed OL

J. Deleted.

Basis for the Change: License conditions 3.J.(a) & (c) were satisfied with completion of the tracer gas testing and pressurization testing of the Control Room using the main control room emergency ventilation system filter train on July 18, 2012 and using the compensatory filtration unit on July 25, 2012. License condition 3.J.(b) was satisfied with completion of the required CRE Habitability Assessment.

4.2.11 Renewed Operating License DPR-41 Condition 3.K "Extended Power Uprate Modifications

Current OL

K.1 Prior to completion of the Cycle 27 refueling outage for Unit 4, the licensee shall provide confirmation to the NRC staff that the design and structural integrity evaluations associated with the modifications related to the spent fuel pool supplemental heat exchangers are complete, and that the results demonstrate compliance with appropriate UFSAR and code requirements. As part of the confirmation, the licensee shall provide a summary of the structural qualification results of the piping, pipe supports, supplemental heat exchanger supports, and the inter-tie connection with the existing heat exchanger for the appropriate load combinations along with the margins.

Proposed OL

K Deleted.

Basis for the Change: The above license condition has been satisfied with submission of the requested design information via FPL letter L-2012-318 dated August 10, 2012 [Reference 22]. NRC closed this item via letter on September 13, 2012 [Reference 24].

A markup of the OL change is attached.

4.2.12 Renewed Operating License DPR-41 Condition 3.M "Burnable Absorbers in the Spent Fuel Pool"

Current OL

M.1 With respect to Technical Specification 5.5.1.3, FPL shall not credit any burnable absorber other than Integral Fuel Burnable Absorber (IFBA) rods for the storage of fuel assemblies in Region I spent fuel racks.

Proposed OL

Deleted.

<u>Basis for the Change</u>: The above license condition was established for each unit to prohibit the crediting of any burnable absorber other than IFBA rods for storage of fuel assemblies in the Region I spent fuel racks [Reference 4] until provisions in TS Table 5.5-1, Table 5.5-3, and Figure 5.5-1 were revised to remove such an allowance. Therefore, the license condition can now be deleted.

A markup of the OL change is attached.

5.0 List of Commitments

None

Turkey Point Nuclear Plant License Amendment Request No. 217 Enclosure

6.0 Conclusion

The proposed amendments include TS changes to selected notes in Tables 5.5-1 and 5.5-3 and in Figure 5.5-1 to remove the provision for crediting of burnable absorber other than IFBA rods for the storage of spent fuel assemblies in the spent fuel pool racks. Accordingly, the proposed amendments include deletion of license conditions 3.L in DPR-31 and 3.M in DPR-41 with the approval of these TS changes. The proposed amendments will also delete license condition 3.H for Unit 4 only, associated with implementation of the Amendment No. 229 (aka "Boraflex Remedy") as it is no longer required.

Additionally, several inadvertent errors identified in the TS that require correction including TS Figure 3.1-2 to address over-compensation for instrument uncertainty in the boric acid tank minimum volume curve for two unit operation as it was added twice, TS Surveillance Requirement (SR) 4.7.5.c.1 in which the acceptance criterion for the DOP test was incorrectly stated as 99% rather than 99.95%, SR 4.7.5.d.2 & 4.7.5.g to which the applicable footnote regarding the compensatory filtration unit was inadvertently omitted, and TS 5.5.1.3 in which conditional verbiage is deleted to be consistent with a previously approved TS change to TS 5.5.1.1.f. The correction of the acceptance criteria for the DOP test assures test results support the 99% particulate filter efficiency assumed in the dose analyses. The annotation of the footnote to the latter two SRs assures that the compensatory filtration unit will meet the same surveillance requirements as those for the normal filter train.

For DPR-31, the proposed amendments will revise the title for the Physical Security Plan (PSP) in license condition 3.E and delete license conditions that have been fully satisfied including 3.H on AST Modifications, 3.I on Control Room Habitability, and 3.J on EPU Modifications. For DPR-41, the proposed amendments will revise the title for the PSP in license condition 3.E and delete license conditions that have been fully satisfied including 3.H on Boraflex Remedy, 3.I.1 & 3.I.3 on AST Modifications, 3.J on Control Room Habitability, and 3.K on EPU Modifications. Note that license condition 3.I.2 regarding the NaTB baskets for Unit 4 will be deleted via a supplement to this submittal once the baskets have been loaded with the buffering agent.

7.0 No Significant Hazards Determination

The Commission has provided standards in 10 CFR 50.92(c) for determining whether a significant hazards consideration exists. A proposed amendment to an operating license for a facility involves no significant hazard if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The proposed license amendments to Renewed Facility Operating Licenses DPR-31 for Turkey Point Unit 3 and DPR-41 for Turkey Point Unit 4 will revise the Technical Specifications to remove the provisions for crediting of burnable absorber other than IFBA rods for storage of spent fuel assemblies in the spent fuel pool racks in TS Table 5.5-1, Table 5.5-3, and in Figure 5.5-1. The proposed license amendments will also delete license conditions 3.L and 3.M in DPR-31 and DPR-41, respectively, which were established to prohibit the crediting of any burnable absorber other than IFBA rods for storage of fuel assemblies in the Region I spent fuel racks [Reference 4] until the provisions in TS Table 5.5-1, Table 5.5-3, and Figure 5.5-1 were removed. The proposed amendments will also delete license condition 3.H for Unit 4 associated with implementation of the Amendment No. 229 (aka "Boraflex Remedy") as it is no longer required.

Additionally, several inadvertent errors identified in the TS that require correction including TS Figure 3.1-2 to address over-compensation for instrument uncertainty in the boric acid tank minimum volume curve for two unit operation as it was added twice, TS Surveillance Requirement (SR) 4.7.5.c.1 in which the acceptance criterion for the DOP test was incorrectly stated as 99% rather than 99.95%, SR 4.7.5.d.2 & 4.7.5.g to which the applicable footnote regarding the compensatory filtration unit was inadvertently omitted, and TS 5.5.1.3 in which conditional verbiage is deleted to be consistent with a previously approved TS change to TS 5.5.1.1.f.. The correction of the acceptance criteria for the DOP test assures test results support the 99% particulate filter efficiency assumed in the dose analyses. The annotation of the footnote to the latter two SRs assures that the compensatory filtration unit will meet the same surveillance requirements as those for the normal filter train.

For DPR-31, the proposed amendments will revise the title for the Physical Security Plan (PSP) in license condition 3.E and delete license conditions that have been fully satisfied including 3.H on AST Modifications, 3.I on Control Room Habitability, and 3.J on EPU Modifications. For DPR-41, the proposed amendments will revise the title for the PSP in license condition 3.E and delete license conditions that have been fully satisfied including 3.H on Boraflex Remedy, 3.I.1 & 3.I.3 on AST Modifications, 3.J on Control Room Habitability, and 3.K on EPU Modifications. Note that license condition 3.I.2 regarding the NaTB baskets for Unit 4 will be deleted via a supplement to this submittal once the baskets have been loaded with the buffering agent.

FPL has reviewed this proposed license amendment for FPL's Turkey Point Units 3 and 4 and determined that its adoption would not involve a significant hazards consideration. The bases for this determination are:

The proposed amendment does not involve a significant hazards consideration for the following reasons:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

No. The proposed amendments do not change or modify the fuel, fuel handling processes, fuel storage racks, number of fuel assemblies that may be stored in the spent fuel pool (SFP), decay heat generation rate, or the spent fuel pool cooling and cleanup system. The proposed amendments only limit crediting of burnable absorbers in the spent fuel pool to Integrated Fuel Burnable Absorber (IFBA) rods that were specifically addressed in the currently approved criticality analysis (WCAP-17094-P, Revision 3) [Reference 14]. The removal of the phrase "or an equivalent amount of another burnable absorber" eliminates the possibility of crediting a burnable absorber other than IFBA for storage of spent fuel assemblies in the spent fuel pool without prior NRC approval. The deletion of the license condition associated with the Boraflex Remedy is editorial as it is no longer applicable. The proposed amendments do not affect the ability of the BAST to perform its function or the ability of the CREVS to perform its function. These latter proposed TS changes correct inadvertent errors and are consistent with the stated intent of original license submittals or delete license conditions that have been fully satisfied.

The proposed amendments do not cause any physical change to the existing spent fuel storage configuration or fuel makeup. The proposed amendments do not affect any precursors to any accident previously evaluated or do not affect any known mitigation equipment or strategies.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

No. The proposed amendments do not change or modify the fuel, fuel handling processes, fuel racks, number of fuel assemblies that may be stored in the pool, decay heat generation rate, or the spent fuel pool cooling and cleanup system. The proposed amendments do not result in any changes to spent fuel or to fuel storage configurations. The removal of the phrase "or an equivalent amount of another burnable absorber" eliminates the possibility of crediting a burnable absorber other than IFBA for storage of spent fuel assemblies in the spent fuel pool without prior NRC approval. The proposed amendments do not affect the ability of the BAST to perform its function or the ability of the CREVS to perform its function. These latter proposed TS changes correct inadvertent errors and are consistent with the stated intent of the original license submittals, delete license conditions that are no longer applicable or have been fully satisfied.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed amendment involve a significant reduction in the margin of safety?

No. The proposed amendments do not change or modify the fuel, fuel handling processes, fuel racks, number of fuel assemblies that may be stored in the pool, decay heat generation rate, or the spent fuel pool cooling and cleanup system. Therefore, the proposed amendments have no impact to the existing margin of safety for subcriticality required by 10 CFR 50.68 (b)(4). The other proposed TS changes correct inadvertent errors and are consistent with the stated intent of the original license submittals or delete license conditions that are no longer applicable or have been fully satisfied.

Therefore, the proposed amendments do not involve a significant reduction in the margin of safety.

Based on the above discussion, FPL has determined that the proposed change does not involve a significant hazards consideration.

8.0 Environmental Consideration

10 CFR 51.22(c)(9) provides criteria for and identification of licensing and regulatory actions eligible for categorical exclusion from performing an environmental assessment. A proposed amendment of an operating license for a facility requires no environmental assessment, if the operation of the facility in accordance with the proposed amendment does not: (1) involve a significant hazards consideration, (2) result in a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, and (3) result in a significant increase in individual or cumulative occupational radiation exposure. FPL has reviewed this LAR and determined that the proposed amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared in connection with the issuance of this amendment. The basis for this determination follows.

Basis

This change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) for the following reasons:

- 1. As demonstrated in the 10 CFR 50.92 evaluation, the proposed amendment does not involve a significant hazards consideration.
- 2. The proposed amendment does not result in a significant change in the types or increase in the amounts of any effluents that may be released offsite. The proposed amendments do not change or modify the fuel, fuel handling processes, fuel racks, number of fuel assemblies that may be stored in the pool, decay heat generation rate, or the spent fuel pool cooling and cleanup system. The proposed amendments do not change the design or operation of the spent fuel or spent fuel storage system. The proposed amendments do not affect the ability of the BAST to perform its function or the ability of the CREVS to perform its function. The proposed amendments do not directly or indirectly affect effluent discharges.
- 3. The proposed amendment does not result in a significant increase in individual or cumulative occupational radiation exposure. The proposed amendments do not change or modify the fuel, fuel handling processes, fuel racks, number of fuel assemblies that may be stored in the pool, decay heat generation rate, or the spent fuel pool cooling and cleanup system. The proposed amendments do not change the design or operation of the spent fuel or spent fuel storage system. The proposed amendments do not affect the ability of the BAST to perform its function or the ability of the CREVS to perform its function. The proposed amendments do not directly or indirectly affect the radiological source terms.

9.0 Summary of Results

The proposed amendments include TS changes to selected notes in Tables 5.5-1 and 5.5-3 and in Figure 5.5-1 to remove the provision for crediting of burnable absorber other than IFBA rods for the storage of spent fuel assemblies in the spent fuel pool racks. Accordingly, the proposed amendments include deletion of license conditions 3.L in DPR-31 and 3.M in DPR-41 with the approval of these TS changes. The proposed amendments will also delete license condition 3.H for Unit 4 associated with implementation of the Amendment No. 229 (aka "Boraflex Remedy") as it is no longer required.

Additionally, several inadvertent errors identified in the TS that require correction including TS Figure 3.1-2 to address over-compensation for instrument uncertainty in the boric acid tank minimum volume curve for two unit operation as it was added twice, TS Surveillance Requirement (SR) 4.7.5.c.1 in which the acceptance criterion for the DOP test was incorrectly stated as 99% rather than 99.95%, SR 4.7.5.d.2 & 4.7.5.g to which the applicable footnote regarding the compensatory filtration unit was inadvertently omitted, and TS 5.5.1.3 in which conditional verbiage is deleted to be consistent with a previously approved TS change to TS 5.5.1.1.f. The correction of the acceptance criteria for the DOP test assures test results support the 99% particulate filter efficiency assumed in the dose analyses. The annotation of the footnote to the latter two SRs assures that the compensatory filtration unit will meet the same surveillance requirements as those for the normal filter train.

For DPR-31, the proposed amendments will revise the title for the Physical Security Plan (PSP) in license condition 3.E and delete license conditions that have been fully satisfied including 3.H on AST Modifications, 3.I on Control Room Habitability, and 3.J on EPU Modifications. For DPR-41, the proposed amendments will revise the title for the PSP in license condition 3.E and delete license conditions that have been fully satisfied including 3.H on Boraflex Remedy, 3.I.1 & 3.I.3 on AST Modifications, 3.J on Control Room Habitability, and 3.K on EPU Modifications. Note that license condition 3.I.2 regarding the NaTB baskets for Unit 4 will be deleted via a supplement to this submittal once the baskets have been loaded with the buffering agent.

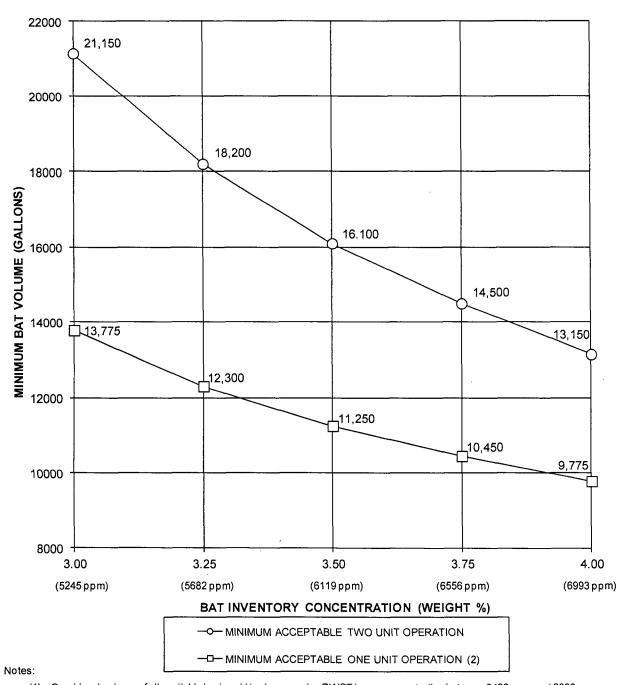
10.0 References

- 1. J. Paige (NRC) to M. Nazar (FPL), "Turkey Point Units 3 and 4 "Issuance of Amendments Regarding Fuel Criticality Analysis (TAC Nos. ME4470 and ME4471)," Accession No. ML11216A057, October 31, 2011.
- 2. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2012-050), "Response to NRC Reactor Systems Branch Request for Additional Information Regarding Extended Power Uprate License Amendment Request No. 205 and New Fuel Storage Requirements," Accession No. ML12048A068, February 15, 2012.
- 3. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2012-081), "Response to NRC Reactor Systems Branch Request for Additional Information Regarding Extended Power Uprate License Amendment Request No. 205 and Spent Fuel Pool Storage Requirements," Accession No. ML12058A126, February 23, 2012.
- 4. J. Paige (NRC) to M. Nazar (FPL), "Turkey Point Units 3 and 4 "Issuance of Amendments Regarding Extended Power Uprate (TAC Nos. ME4907 and ME4908)," Accession No. ML11293A365, June 15, 2012.

- 5. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2011-386), "License Amendment Request No. 207 Fuel Storage Criticality Analysis Supplement 2, Accession No. ML11259A007, September 14, 2011.
- 6. J. Paige (NRC) to M. Nazar (FPL), "Turkey Point Units 3 and 4 "Issuance of Amendments Regarding Alternative Source Term (TAC Nos. ME1624 and ME1625)," Accession No. ML110800666, June 23, 2011.
- 7. J. Paige (NRC) to M. Nazar (FPL), "Turkey Point Units 3 and 4 "Issuance of Amendments Regarding Control Room Habitability Technical Specification Task Force (TSTF)-448 (TAC Nos. ME4277 and ME4278)," Accession No. ML12067A176, March 30, 2012.
- 8. Regulatory Guide 1.52, Revision 3, "Design, Inspection, and Testing Criteria for Air Filtration and Adsorption Units of Post-Accident Engineered-Safety-Feature Atmosphere Cleanup Systems in Light-Water-Cooled Nuclear Power Plants," June 2001.
- 9. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2011-560), "Supplement 3 to Extended Power Uprate License Amendment Request No. 205 Regarding Proposed Technical Specification Changes," Accession No. ML11362A383, January 10, 2012.
- 10. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2010-137), "Revised Radiological Dose Consequences for Alternative Source Term and Conforming License Amendment Request 196," Accession No. ML101800220, June 25, 2010.
- 11. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2011-380), "License Amendment Request (LAR 194) Control Room Habitability TSTF-448 Responses to NRC Questions and LAR 194 Changes (TAC Nos. ME0004 and ME0005)," Accession No. ML11304A184, October 27, 2011.
- 12. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-197), "Response to Request for Additional Information (RAI) Regarding Alternative Source Term (AST) License Amendment Request (LAR) 196 and Proposed Changes to Technical Specification (TS) 3/4.7.5 on Control Room Emergency Ventilation System (CREVS) (TAC Nos. ME1624 and ME1625), Accession No. ML102630160, September 15, 2010.
- 13. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2011-032), "License Amendment Request No. 207 Supplement 1 to Fuel Storage Criticality Analysis," Accession No. ML110560335, February 22, 2011.
- 14. WCAP-17094-P, Revision 3, Turkey Point Units 3 and 4 New Fuel Storage Rack and Spent Fuel Pool Criticality Analysis," February 2011.
- 15. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2012-305), "Revision 15 to the Physical Security Plan," August 3, 2012.

- 16. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2011-277), "Confirmatory Dose Assessment for Control Room Emergency Ventilation System Air Intake Modification to Satisfy Operating License Conditions 3.H.1 for DPR-31 and 3.I.1 for DPR-41, Accession No. ML11228A011, August 11, 2011.
- 17. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2012-143), "Supplemental Response to NRC Request for Additional Information Regarding Extended Power Uprate License Amendment Request No. 205 and Spent Fuel Pool Cooling System Structural Design (Unit 3)," June 19, 2012.
- 18. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2012-179), "Response to NRC Request for Additional Information Regarding Extended Power Uprate and Unit 3 License Condition 3.J.1 on Spent Fuel Pool Cooling System Heat Exchanger Design," Accession No. ML12199A010, July 13, 2012.
- 19. Farideh E. Saba (NRC) to M. Nazar (FPL), Turkey Point Nuclear Generating Unit No. 3 License Condition 3.J.1, "Extended Power Uprate Modifications," Regarding Spent Fuel Pool Supplemental Heat Exchangers (TAC No. ME9003), Accession No. ML12214A303, August 2, 2012.
- 20. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2010-173), "BADGER Test Results License Condition 3.H(b)," Accession No. ML102250419, August 5, 2010.
- 21. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2010-169), License Amendment Request No. 207 Fuel Storage Criticality Analysis, Accession No. ML102220022, August 5, 2010.
- 22. M. Kiley (FPL) to U. S. Nuclear Regulatory Commission (L-2012-318), "Supplemental Response to NRC Request for Additional Information Regarding Extended Power Uprate Amendment 245 and License Condition 3.K.1 on Spent Fuel Pool Cooling System Supplemental Heat Exchanger Structural Design," Accession No. ML12227A684, August 10, 2012.
- 23. J. Paige (NRC) to M. Nazar (FPL), Turkey Point Unit 4 Issuance of Amendment Regarding Implementation Date Change for License Amendment 229 (TAC No. ME2161), Accession No. ML092890635, November 13, 2009.
- 24. Farideh E. Saba (NRC) to M. Nazar (FPL), Turkey Point Nuclear Generating Unit No. 4 License Condition 3.K.1, "Extended Power Uprate Modifications," Regarding Spent Fuel Pool Supplemental Heat Exchangers (TAC No. ME9246), Accession No. ML12248A082, September 13, 2012.

FIGURE 3.1-2 BORIC ACID TANK MINIMUM VOLUME (1) MODES 1, 2, 3 AND 4



- (1) Combined volume of all available boric acid tanks assuming RWST boron concentration between 2400 ppm and 2600 ppm.
- (2) Includes 2900 gallons for the shutdown unit.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

99.95% 99%

- Verifying that the air cleanup system satisfies the in-place penetration and bypass leakage testing acceptance criteria of greater than or equal to 99% DOP and halogenated hydrocarbon removal at a system flow rate of 1000 cfm ±10%***.
- Verifying, Within 31 days after removal, that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, and analyzed per ASTM D3803 1989 at 30°C and 95% relative humidity, meets the methyl iodide penetration criteria of less than 2.5% or the charcoal be replaced with charcoal that meets or exceeds the stated performance requirement***, and
- Verifying by a visual inspection the absence of foreign materials and gasket deterioration***.
- d.1 At least once per 12 months by verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 6 inches Water Gauge while operating the system at a flow rate of 1000 cfm ±10%***;
- d.2 On a staggered test basis every 36 months, test the supply fans (trains A and B) and measure CRE pressure relative to external areas adjacent to the CRE boundary.
- At least once per 18 months by verifying that on a Containment Phase "A" isolation test signal the system automatically switches into the recirculation mode of operation,
- At least once per 18 months by verifying operability of the kitchen and toilet area exhaust dampers,
- g. By performing required CRE unfiltered air inleakage testing in accordance with the Control Room Envelope Habitability Program.

^{***}As the mitigation actions of TS 3.7.5 Action a.5 may include the use of the compensatory filtration unit, the unit shall meet the surveillance requirements of TS 4.7.5.b, by manual initiation from outside the control room and TS 4.7.5.c and d. < 4.7.5.c, d and g.

DESIGN FEATURES

Fresh or irradiated fuel assemblies in the Region I or Region II racks

- 5.5.1.3 Credit for burnup and cooling time is taken in determining acceptable placement locations for spent fuel in the two-region spent fuel racks. Unless otherwise specified in accordance with Specification 5.5.1.1.f, fresh or irradiated fuel assemblies shall be stored in compliance with the following:
 - a. Any 2x2 array of Region I storage cells containing fuel shall comply with the storage patterns in Figure 5.5-1 and the requirements of Table 5.5-1 and 5.5-2, as applicable. The reactivity rank of fuel assemblies in the 2x2 array (rank determined using Table 5.5-3) shall be equal to or less reactive than that shown for the 2x2 array.
 - Any 2x2 array of Region it storage cells containing fuel shall;
 - Comply with the storage patterns in Figure 5.5-2 and the requirements of Table 5.5-1 and 5.5-2, as applicable. The reactivity rank of fuel assemblies in the 2x2 array (rank determined using Table 5.5-3) shall be equal to or less reactive than that shown for the 2x2 array,
 - Have the same directional orientation for Metamic inserts in a contiguous group of 2x2 arrays where Metamic inserts are required, and
 - iii. Comply with the requirements of 5.5.1.3.c for cells adjacent to Region I racks.
 - Any 2x2 array of Region II storage cells that interface with Region I storage cells shall comply with the rules of Figure 5.5-3.
 - d. Any fuel assembly may be replaced with a fuel rod storage basket or non-fuel hardware.
 - Storage of Melamic inserts or RCCAs is acceptable in locations designated as empty (waterfilled) cells.

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 storage pool is designed and shall be maintained with a storage capacity limited to no more than 1535 fuel assemblies.

Table 5.5-1 Blanketed Fuel - Coefficients to Calculate the Minimum Required Fuel Assembly Burnup (Bu) as a Function of Enrichment (En) and Cooling Time (Ct) See notes 1-6 for use of Table 5.5-1

Coeff.	Fuel Category						
Coen.	I-3	1-4	11-1	II-2	11-3	11-4	II-5
A1	5.66439153	-14.7363682	-7.74060457	-7.63345029	24.4656526	8.5452608	26.2860949
A2	-7.22610116	11.0284547	5.13978237	10.7798957	-20.3141124	-4.47257395	-18.0738662
А3	2.98646188	-1.80672781	-0.360186309	-2.81231555	6.53101471	2.09078914	5.8330891
A4	-0.287945644	0.119516492	0.0021681285	0.29284474	-0.581826027	-0.188280562	-0.517434342
A5	-0.558098618	0.0620559676	-0.0304713673	0.0795058096	-0.16567492	0.157548739	-0.0614152031
A6	0.476169245	0.0236575787	0.098844889	-0.0676341983	0.243843226	-0.0593584027	0.134626308
A7	-0.117591963	-0.0088144551	-0.0277584786	0.0335130877	-0.0712130368	0.0154678626	-0.0383060399
A8	0.0095165354	0.0008957348	0.0024057185	-0.0040803875	0.0063998706	-0.0014068318	0.0033419846
A9	-47.1782783	-20.2890089	-21.424984	14.6716317	-41.1150	-0.881964768	-12.1780
A10	33.4270029	14.7485847	16.255208	-10.0312224	43.9149156	9.69128392	23.6179517
A11	-6.11257501	-1.22889103	-1.77941882	5.62580894	-9.6599923	-0.18740168	-4.10815592
A12	0.490064351	0.0807808548	0.127321203	-0.539361868	0.836931842	0.0123398618	0.363908736

Notes:

All relevant uncertainties are explicitly included in the criticality analysis. For instance, no additional allowance for burnup uncertainty or enrichment
uncertainty is required. For a fuel assembly to meet the requirements of a Fuel Category, the assembly burnup must exceed the "minimum burnup"
(GWd/MTU) given by the curve fit for the assembly "cooling time" and "initial enrichment." The specific minimum burnup required for each fuel assembly
is calculated from the following equation:

Bu =
$$(A_1 + A_2 \cdot En + A_3 \cdot En^2 + A_4 \cdot En^3) \cdot exp[-(A_5 + A_6 \cdot En + A_7 \cdot En^2 + A_8 \cdot En^3) \cdot Ct] + A_9 + A_{10} \cdot En + A_{11} \cdot En^2 + A_{12} \cdot En^3$$

- 2. Initial enrichment, En, is the nominal central zone U-235 enrichment. Axial blanket material is not considered when determining enrichment. Any enrichment between 2.0 and 5.0 may be used.
- 3. Cooling time, Ct, is in years. Any cooling time between 0 years and 25 years may be used. An assembly with a cooling time greater than 25 years must use 25 years.
- Gategory I 1 is fresh unburned fuel up to 5.0 wt% U 235 enrichment. DELETED
- 5. Category I 2 is fresh unburned fuel that obeys the IFBA requirements in Table 5.5-4 or contains an equivalent amount of another burnable absorber. DELETED
- 6. This Table applies for any blanketed fuel assembly.

Table 5.5-3

Fuel Categories Ranked by Reactivity
See notes 1-5 for use of Table 5.5-3

	I-1	High Reactivity
Danier I	1-2	
Region I	1-3	
	1-4	Low Reactivity
	11-1	High Reactivity
	II- 2	
Region⊪II	11-3	
	11-4	
	11-5	Low Reactivity

Notes:

- Fuel Category is ranked by decreasing order of reactivity without regard for any reactivity-reducing
 mechanisms, e.g., Category I-2 is less reactive than Category I-1, etc. The more reactive fuel categories
 require compensatory measures to be placed in Regions I and II of the SFP, e.g., use of water filled cells,
 Metamic inserts, or full length RCCAs.
- Any higher numbered fuel category can be used in place of a lower numbered fuel category from the same Region.
- 3. Category I-1 is fresh unburned fuel up to 5.0 wt% U-235 enrichment.
- Category I-2 is fresh unburned fuel that obeys the IFBA requirements of Table 5.5-4 or contains an
 equivalent amount of another burnable absorber.
- 5. All Categories except I-1 and I-2 are determined from Tables 5.5-1 and 5.5-2.

Table 5.5-4

IFBA Requirements for Fuel Category I-2

Nominal Enrichment (wt% U-235)	Minimum Required Number of IFBA Pins		
Enr. ≤ 4.3	0		
4.3 < Enr. ≤ 4.4	32		
4.4 < Enr. ≤ 4.7	64		
4.7 < Enr. ≤ 5.0	80		

FIGURE 5.5-1

ALLOWABLE REGION I STORAGE ARRAYS See notes 1-8 for use of Figure 5.5-1

DEFINITION

ILLUSTRATION

Array I-A

Checkerboard pattern of Category I-1 assemblies and empty (water-filled) cells.

1-1	Х
Х	I-1

Array I-B

Category I-4 assembly in every cell.

1-4	1-4
1-4	1-4

Array I-C

Combination of Category I-2 and I-4 assemblies. Each Category I-2 assembly shall contain a full length RCCA.

1-2	1-4
1-4	1-4

1-2	1-2
1-4	1-4

1-2	1-2
1-2	1-4

	111		en.				200
	面			100	100		
	E.		~				720
	100	u				Lie	48
1	100	age.	779	503	E STORY	63/30	REGISTA
	100	2%	33			100	
8	135	ы	£			12	2.65

Array I-D

Category I-3 assembly in every cell. One of every four assemblies contains a full length RCCA.

1-3	1-3
1-3	1-3

Notes:

- 1. In all arrays, an assembly of lower reactivity can replace an assembly of higher reactivity.
- 2. Category I-1 is fresh unburned fuel up to 5.0 wt% U-235 enrichment.
- Category I-2 is fresh unburned fuel that obeys the IFBA requirements in Table 5.5-4 or contains an
 equivalent amount of another burnable absorber.
- 4. Categories I-3 and I-4 are determined from Tables 5.5-1 and 5.5-2.
- 5. Shaded cells indicate that the fuel assembly contains a full length RCCA.
- 6. X indicates an empty (water-filled) cell.
- 7. Attributes for each 2x2 array are as stated in the definition. Diagram is for illustrative purposes only.
- 8. An empty (water-filled) cell may be substituted for any fuel containing cell in all storage arrays.

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 - Revision 3 "submitted by letter dated May 18, 2008):

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Turkey Point Nuclear Generating Station CSP was approved by License Amendment No. 245.

- 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.

assumptions. "Florida Power and Light Turkey Point Nuclear Plant Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program - Revision 15" submitted by letter dated August 3, 2012.

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Mitigation Strategy License Condition

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3 Designated staging areas for equipment and materials
 - 4. Command and control
 - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6 Training on integrated fire response strategy:
 - Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of
 - Water spray scrubbing
 - 2. Dose to onsite responders

H: Alternative Source Term (AST) Modifications

- 1. FPL will relocate the CR Ventilation System emergency air intakes prior to implementation of AST. The relocated intakes and associated ductwork will be designed to seismic criteria, protected from environmental effects, and will meet the requirements of 10 CFR 50 Appendix A, CDC 19. The new intakes will be located near the ground level extending out from the southeast and northeast corners of the suxiliary building and will fall within diverse wind sectors for post-accident conteminants. FPL will perform post-modification testing in accordance with the plant design modification procedures to ensure the TS pressurization flow remains adequate to demonstrate the integrity of the relocated intakes—in-addition, FPL-will-provide to the NRG-a-confirmatory assessment which demonstrates that the requirements of 10 CFR 50 Appendix A, GDC 19 will be met. The confirmatory assessment will follow the methodology in Amandment 244 (the alternative source term-amendment) including the methods used for the establishment of the atmospheric dispersion factors (X/Q-values):
- FPL will install ten (two large and eight small) stainless steel wire mesh baskets
 containing NaTB-located in the containment besement to maintain pH during
 the sump recirculation phase following a Design Basis LOCA.

3. The CREVS compensatory filtration unit, which is being instalted by FPL as part of the AST methodology implementation at Turkey Point, will be designed in accordance with the Clase I Structures. Systems, and Equipment Design Requirements defined in Appendix 5A of the Turkey Point UFSAR. As such, the compensatory filtration unit will be designed so that the stress limits found in Table 5A-1 of the Turkey Point UFSAR will not be exceeded due to the loadings imposed by a maximum hypothetical earthquake. FPL shall ensure that the design of the compensatory filtration unit satisfies these stress limits prior to the implementation of the proposed AST methodology at Turkey Point.

I. Control Room Habitability

Upon-implementation of Amendment-No.-248 adopting TSTF-448-Revision-3, the determination of control room envelope (GRE) unfiltered air inteckage as required by Surveillance-Requirement (SR) 4.7.5.5, in accordance with Technical-Specification (TS) 6.8.4.k.c.(i), the assessment of GRE habitability as required by Specification 6.8.4.k.c.(ii), and the measurement of GRE pressure as required by Specification 6.8.4.k.d. shall be considered met. Following implementation:

- (a) The first performance of SR 4.7.6.g. in accordance with Specification 6.8.4.k.c. (i), shall be within the specified Frequency of 3 years, plus the 0menth allowance of SR 4.9.2, as measured from July 31, 2009, the date of the most recent tracer gas test.*
- (b) The first performance of the periodic assessment of CRE habitability; Specification 6.8.4 k.c. (ii), shall be within 3 years, plus the 9-month allowance of SR 4.0.2; as measured from July 31,2009, the date of the most recent tracer gas test.
- (e) The first parformance of the periodic measurement of CRE pressure, Specification 6.8.4 k.d., shall be within 36 months on a STACGERED TEST BASIS, plus the 138 days ollowed by SR 4.0.2, as measured from the date of the most recent successful pressure measurement test, or within 138 days of license omendment implementation if not performed previously.
- * The most recent tracer gas test (July 31, 2009) was unsuccessful in that there was a measured 9 cfm control room inleakage: the acceptance criteria is 0 cfm. In accordance with Regulatory Guide (RG)-1-197-Rev.-0;-a-recalculation of the consequences to the control room operators was performed, and the results were acceptable for continued CREVS operability. Consistent with RG 1:197, a full test is to be conducted three years later to ascertain whether the CRE's integrity has continued to degrade.

J. Extended Power Uprete Modifications

1. Prior to completion of the Cycle 26 refueling outage for Unit 3, the licensee shall provide confirmation to the NRC steff that the design and structural integrity evaluations associated with the modifications related to the spent fue pool supplemental heat exchangers are complete, and that the results demonstrate compliance with appropriate UFSAR and code requirements. As part of the confirmation, the licensee shall provide a summary of the structural qualification results of the piping, pipe supports, supplemental heat exchanger supports, and the inter-tie connection with the existing heat exchanger for the appropriate load combinations along with the morgine.

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PAD TCD Safety Analysos

- PAD 4.0 TCD has been specifically approved for use for the Turkey Point licensing basis analyses. Upon NRC's approval of a revised generic version of PAD that accounts for Thermal Conductivity Degradation (TCD), FRL will within six months:
 - a. Demonstrate that PAD 4.0 TCD remains conservatively bounding in licensing basis analyses when compared to the new generically approved version of PAD w/TCD, or
 - b. Provide a schedule for the re-analysis using the new generically approved version of PAD w/TCD for any of the affected licensing basis analyses.
- L. Burnable Absorbers in Spent Fuel Pool
 - With respect to Technical Specification 5.5.1.3, FPL shall not credit any burnable absorber other than integral Fuel Burnable Absorber (IFBA) rods for the storage of fuel accembliss in the Region I spent fuel racks.
- This renowed 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

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 Revision 3, "submitted by letter dated May 18, 2006

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved cyber security plan (CSP), including changes made pursuant to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The Turkey Point Nuclear Generating Station CSP was approved by License Amendment No. 241.

- 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 refuelling 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.

"Florida Power and Light Turkey Point Nuclear Plant Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program - Revision 15," submitted by letter dated August 3, 2012.

G. <u>Mitigation Strategy License Condition</u>

Develop and maintain strategies for addressing large fires and explosions and that include the following key areas:

- (a) Fire fighting response strategy with the following elements:
 - 1. Pre-defined coordinated fire response strategy and guidance
 - 2. Assessment of mutual aid fire fighting assets
 - 3. Designated staging areas for equipment and materials
 - Command and control
 - 5. Training of response personnel
- (b) Operations to mitigate fuel damage considering the following
 - 1. Protection and use of personnel assets
 - 2. Communications
 - 3. Minimizing fire spread
 - 4. Procedures for implementing integrated fire response strategy
 - 5. Identification of readily-available pre-staged equipment
 - 6. Training on integrated fire response strategy
 - 7. Spent fuel pool mitigation measures
- (c) Actions to minimize release to include consideration of:
 - 1. Water spray scrubbing
 - 2. Dose to onsite responders

Deleted

FPL will implement the following measures as part of the request for a change in the implementation date for Amendment 229 for Unit 4. These measures will remain in place until Amendment No. 229 is implemented or until the NRC approves the license amendment request discussed in Item (b) below but not later than February 28, 2011.

- (a) The Unit 4 Spent Fuel Pool (SFP) boron concentration will be increased to end maintained no less than 2100 ppm. This measure will be implemented within 72 hours of installing the transfer tube gate isolating the SFP from the reactor cavity during the current Unit 4 refueling outage.
- (b) FPL will complete Beraflex panel surveillance using EPRI BADGER neutron attenuation methodology in the Unit 4 SFP no later than May 30, 2010. The report documenting the results of the EPRI BADGER testing compaign and the license omendment request updating the SFP licensing basis will be submitted to the NRC no later than 90 days after completion of the BADGER testing.
- (c) FPL will increase the current MWD/MTU burnup requirements for SFP
 Region II storage by 10% and will configure the SFP to comply with these
 requirements or insert an RGCA in any fuel assembly not in compliance
 with these requirements. These measures will be completed by
 February 28, 2010.

(d) FPL will not move any fuel assemblies into the Unit 4 SFP subsequent to the successful completion of startup physics tosts for Unit 4 Cycle 25.

I. Alternative Source Term Modifications

- 4. FPL will release the CR Ventilation System emergency air intakes prior to implementation of AST. The relocated intakes and associated ductwork will be designed to ceismic criteria, protocted from environmental effects, and will meet the requirements of 10 CFR 50 Appendix A, GDC 19. The new intakes will be located near the ground level extending out from the southeast and nertheast corners of the auxiliary building and will fall within diverse wind sector for post-recident contaminants. FPL will perform post-modification testing in accordance with the plant design modification procedures to ensure the TS pressurization flow remains adequate to demonstrate the integrity of the relocated intakes. In addition, FPL will provide to the NRC a confirmatory assessment which demonstrates that the requirements of 10 CFR 50 Appendix A, GDC 19 will be met. The confirmatory assessment will-follow the methodology in Amendment 240 (the atternative source term amendment) including the methods used for the establishment of the atmospheric dispersion factors (X/Q-values).
- FPL will install ten (two large and eight small) staintess steel wire mesh baskets containing NaTB located in the containment basement to maintain pH during the sump recirculation phase following a Design Basis LOCA.
- 3. The CREVS compensatory filtration unit, which is being installed by FPL as part of the AST methodology implementation at Turkey Point will be designed in accordance with the Class I Structures, Systems, and Equipment Design Requirements-defined-in-Appendix-SA-of-the-Turkey-Point-UESAR,-As-such, the compensatory filtration unit will be designed so that the stress limits found in Table-5A-1-of-the-Turkey-Point-UESAR-will-not-be-exceeded-due-to-the-loadings imposed by a maximum hypothetical earthquake. FPL shall ensure that the design-of-the-compensatory-filtration-unit-satisfies-these-stress-limits-prior-to-the implementation of the proposed AST methodology at Turkey Point.

J. Control Room Habitability DELETED

Upon-implementation of Amendment No. 244 adopting TSTF-448 Revision 3, the determination of control-room envelope (CRE) unfiltered air inleakage as required by Survellance Requirement (SR) 4.7.5.g. in accordance with Technical Specification (TS) 6.8.4.k.c.(i), the assessment of CRE-habitability as required by Specification 6.8.4.k.c.(ii), and the measurement of CRE-pressure as required by Specification 6.8.4.k.d. shall be considered met. Following Implementation:

(a) The first performance of SR 4.7.5.g. in accordance with Specification 6.8.4.k.c.(i), shall be within the specified Frequency of 3 years, plus the 6-month.

ellowance of SR 4.0.2, as measured from July 31, 2009, the date of the most recent tracer-gas test.*

- (b) The first performance of the periodic assessment of CRE habitability; Specification 6.8.4.k.e.(ii), shall be within 3 years, plus the 9-month allowance of SR 4.0.2, as measured from July 31,2009, the date of the most recent (recorgas test.
- (e) The first performance of the periodic measurement of CRE pressure, Specification 6.8.4.k.d. shall be within 36 months on a STAGGERED TEST BASIS, plus the 138 days allowed by SR 4.9.2, as measured from the date of the most recent successful pressure measurement test, or within 138 days of license amendment implementation if not performed previously.
- The most recent tracer gas test (July 31, 2009) was unsuccessful in that there was a measured 9 cfm control room inleakage: the acceptance criteria is 0 cfm. In accordance with Regulatory Guide (RG) 1,197 Rev. 0, a recalculation of the consequences to the control room operators was performed, and the results were acceptable for continued GREVS operability. Consistent with RG 1,197, a full test is to-be-conducted-three-years-later-to-ascertain-whether-the-GRE's-integrity-has continued to degrade.

K. Extended Power Uprate Modifications DELETED

1. Prior to completion of the Cycle 27 refueling outage for Unit 4, the licensee shall provide confirmation to the NRC staff that the design and structural integrity evaluations associated with the modifications related to the spent fuel pool supplemental heat exchangers are complete, and that the results demonstrate compliance with appropriate UFSAR and code requirements. As part of the confirmation, the licensee shall provide a summary of the structural qualification results of the piping, pipe supports, supplemental heat exchanger supports, and the inter-tie connection with the existing heat exchanger for the appropriate load combinations along with the margins.

L. PAD TCD Safety Analyses

- PAD 4.0 TCD has been specifically approved for use for the Turkey Point ilicensing basis analyses. Upon NRC's approval of a revised generic version of PAD that accounts for Thermal Conductivity Degradation (TCD), FPL will within six months:
 - Demonstrate that PAD 4.0 TCD remains conservatively bounding in licensing basis analyses when compared to the new generically approved version of PAD w/TCD, or
 - Provide a schedule for the re-analysis using the new generically approved version of PAD w/TCD for any of the affected licensing basis analyses.

M. Burnable Absorbers in Spent Fuel Pool

- With respect to Technical Specification 5.5.1.3, FPL shall not credit any burnable absorber other than Integral Fuel Burnable Absorber (IFBA) rods for the storage of-fuel-assemblies-in-the-Region-I-spem-fuel-racks;
- 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

Dale of Issuance: June 6, 2002