

L-2016-212 10 CFR 50.90

U. S. Nuclear Regulatory Commission Attn: Document Control Desk Washington D C 20555-0001

RE:

St. Lucie Units 1 and 2

Docket Nos. 50-335 and 50-389

Renewed Facility Operating Licenses DPR-67 and NPF-16

License Amendment Request to Relocate the Component Cyclic and Transient Limits from the

Technical Specifications to Licensee-Controlled Documents

Pursuant to 10 CFR Part 50.90, Florida Power& Light Company (FPL) hereby requests amendments to Renewed Facility Operating Licenses DPR-67 for St. Lucie Nuclear Plant Unit 1 and NPF-16 for St. Lucie Nuclear Plant Unit 2, respectively. The proposed license amendments relocate the Component Cyclic and Transient Limits Program requirements to the Administrative Controls sections of the St. Lucie Unit 1 and St. Lucie Unit 2 Technical Specifications (TS) and relocate the Component Cyclic or Transient Limits tables detailing the allowable limits from the respective TS to licensee-controlled documents.

The enclosure to this letter provides FPL's evaluation of the proposed changes. Attachment 1 to the enclosure provides the existing St. Lucie Unit 1 TS pages marked up to show the proposed changes. Attachment 2 to the enclosure provides the St. Lucie Unit 1 retyped (clean copy) TS pages with revision bars to identify the proposed changes. Attachment 3 to the enclosure provides the St. Lucie Unit 2 marked up TS pages. Attachment 4 to the enclosure provides the St. Lucie Unit 2 retyped TS pages with revision bars to identify the proposed changes.

FPL has determined that the proposed changes do not involve a significant hazards consideration pursuant to 10 CFR 50.92(c), and there are no significant environmental impacts associated with the change. The St. Lucie Plant Onsite Review Group has reviewed the proposed license amendment. In accordance with 10 CFR 50.91(b)(1), copies of the proposed license amendments are being forwarded to the State designee for the State of Florida.

FPL requests that the proposed changes are processed as a normal license amendment request, with approval within one year of the submittal date. Once approved, the amendment shall be implemented within 90 days.

This letter contains no new regulatory commitments.

Should you have any questions regarding this submittal, please contact Mr. Mike Snyder, St. Lucie Licensing Manager, at (772)467-7036.

ADDI

St. Lucie Nuclear Plant Docket Nos. 50-335 and 50-389

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

Executed on

DEC 2 2 2016

Sincerely,

Christopher R. Costanzo Site Vice President St. Lucie Nuclear Plant

Enclosure

cc: USNRC Regional Administrator, Region II
USNRC Project Manager, St. Lucie Nuclear Plant, Units 1 and 2
USNRC Senior Resident Inspector, St. Lucie Nuclear Plant, Units 1 and 2
Ms. Cindy Becker, Florida Department of Health

## **Enclosure**

## **Evaluation of the Proposed Changes**

St. Lucie Nuclear Plant, Units 1 and 2 License Amendment Request to Relocate the Component Cyclic or Transient Limits to Licensee-Controlled Documents

1.0	SUMMARY DESCRIPTION	2	
2.0	DETAILED DESCRIPTION	2	
2.1 2.2	St. Lucie Unit 1 – Revision of TS 5.9.1 and Deletion of Table 5.9-1		
3.0	TECHNICAL EVALUATION	5	
4.0	REGULATORY EVALUATION	5	
4.1 4.2 4.3 4.4	Applicable Regulatory Requirements/Criteria  Precedents  No Significant Hazards Consideration  Conclusion	.6 .6 .8	
5.0	ENVIRONMENTAL CONSIDERATION	8	
6.0	REFERENCES	8	
Attach	ment 1 - Proposed Unit 1 Technical Specification Pages (markup)1	0	
Attach	ment 2 - Proposed Unit 1 Technical Specification Pages (clean copy)	5	
Attach	Attachment 3 - Proposed Unit 2 Technical Specification Pages (markup)		
Attach	ment 4 - Proposed Unit 2 Technical Specification Pages (clean copy)2	:8	

## 1.0 SUMMARY DESCRIPTION

Florida Power& Light Company (FPL) hereby requests amendments to Renewed Facility Operating Licenses DPR-67 and NPF-16 for St. Lucie Nuclear Plant, Units 1 and 2, respectively. The proposed license amendments modify and relocate the Component Cyclic or Transient Limits requirements of TS 5.9.1 and TS 5.7.1 from the Design Features to the Administrative Controls sections of the St. Lucie Unit 1 and St. Lucie Unit 2 TS, respectively. In addition, the proposed license amendments relocate the Component Cyclic or Transient Limits Table 5.9-1 and Table 5.7-1 from the St. Lucie Unit 1 TS and the St. Lucie Unit 2 TS to the St. Lucie Unit 1 Updated Final Safety Analysis Report (UFSAR) and the St. Lucie Unit 2 UFSAR, respectively. The proposed changes serve to align the St. Lucie Unit 1 and Unit 2 TS more closely with NUREG-1432, Standard Technical Specifications - Combustion Engineering Plants, Revision 4.0 (Reference 6.1).

## 2.0 DETAILED DESCRIPTION

#### 2.1 St. Lucie Unit 1 - Revision of TS 5.9.1 and Deletion of Table 5.9-1

St. Lucie Unit 1, TS 5.9.1, states that the components identified in Table 5.9-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.9-1. The proposed change relocates Table 5.9-1 from the St. Lucie Unit 1 TS to the St. Lucie Unit 1 UFSAR. In addition, the proposed change deletes TS 5.9.1, and relocates the requirement to newly created TS 6.8.4.q, Component Cyclic or Transient Limit Program, within the Administrative Controls section of the St. Lucie Unit 1 TS. Consistent with Section 5.5.5 of NUREG-1432, Revision 4.0 (Reference 6.1), TS 6.8.4.q will state that the [Component Cyclic or Transient Limit] Program provides controls to track the FSAR cyclic and transient occurrences to ensure that components are maintained within the design limits.

The italicized sections below reflect the proposed change:

TS 5.9.1

The components identified in Table 5.9-1 are designed and shall-be maintained within the cyclic or transient limits of Table 5.9-1.

DELETED

## <u>TABLE 5.9-1</u> DELETED COMPONENT CYCLIC OR TRANSIENT LIMITS

<u>COMPONENT</u>	<b>CYCLIC OR TRANSIENT LIMITS</b>	DESIGN CYCLE OR TRANSIENT
Reactor Coolant System	40 Cycles of less of lead without immediate reactor trip	100% to 0% RATED THERMAL POWER
	40 cycles of loss of offsite A.C. electrical power	100% to 0% RATED THERMAL POWER
	400 reactor trips	100% to 0% RATED THERMAL POWER
	<del>16 inadvertent auxiliary</del> <del>spray cycles</del>	Spray line 650°F to 120°F in 1.5 seconds
	<del>200 leak tests</del>	<del>Pressure ≥ 2235 psig</del>
	40 hydrostatic pressure tests	Pressure ≥ 3110 psig
<del>Secondary</del> <del>System</del>	<del>5 steam line breaks</del>	Complete loss of secondary pressure

200 leak tests

Pressure > 985 psia

10 hydrostatic pressure tests

Pressure ≥ 1235 psia

TS 6.8.4.q

Component Cyclic or Transient Limit Program

The Program provides controls to track the FSAR, Section 5.2, cyclic and transient occurrences to ensure that components are maintained within the design limits.

## 2.2 St. Lucie Unit 2 – Revision of TS 5.7.1 and Deletion of Table 5.7-1

St. Lucie Unit 2, TS 5.7.1, states that the components identified in Table 5.7-1 are designed and shall be maintained within the cyclic or transient limits of Table 5.7-1. The proposed change relocates Table 5.7-1 from the St. Lucie Unit 2 TS to the St. Lucie Unit 2 UFSAR. In addition, the proposed change deletes TS 5.7.1, and relocates the requirement to newly created TS 6.8.4.r , Component Cyclic or Transient Limit Program, within the Administrative Controls section of the St. Lucie Unit 2 TS. Consistent with Section 5.5.5 of NUREG-1432, Revision 4.0 (Reference 6.1), TS 6.8.4.r will state that the [Component Cyclic or Transient Limit] Program provides controls to track the FSAR cyclic and transient occurrences to ensure that components are maintained within the design limits.

The italicized sections below reflect the proposed change:

TS 5.7.1

The components identified in Table 5.7-1-are designed and shall-be maintained within the cyclic or transient limits of Table 5.7-1. DELETED

## TABLE 5.7-1 COMPONENT CYCLIC OR TRANSIENT LIMITS DELETED

COMPONENT	<u>CYCLIC OR</u> <u>TRANSIENT LIMITS</u>	DESIGN CYCLE OR TRANSIENT
Reactor Coolant System	500 system heatup and cooldown cycles at rates ≤ 100°F/hr.	Heatup cycle — T <sub>avg</sub> -from <u>&lt; 200°F</u> t <del>o ≥ 532°F; cooldown cycle -</del> T <sub>avg</sub> from ≥ 532°F to ≤ 200°F
	500 pressurizer heatup and cooldown cycles at rates ≤ 200°F/hr.	Heatup cycle - Pressurizer temperature from ≤ 200°F to ≥ 653°F; cooldown ≥ 653°F to ≤ 200°F
	10 hydrostatic testing cycles.	RCS pressurized to 3110 psig with RCS temperature > 60°F above the most limiting components' NDTT value.
	<del>200 leak testing cycles.</del>	RCS pressured to 2250 psia with RCS temperature greater than minimum for hydrostatic testing, but less than minimum RCS temperature for criticality.
	400 reactor trip cycles.	Trip from 100% of RATED THERMAL

POWER.

40 turbine trip eyeles with <del>delayed reactor trip.</del>

Turbine trip (total load rejection) from 100% of RATED THERMAL POWER followed by resulting reactor trip.

40 complete loss of reactor coolant flow cycles:

Simultaneous loss of all Reactor Coolant Pumps at 100% of RATED THERMAL POWER.

Loss of secondary pressure from

5 complete loss of secondary pressure-cycles.

either steam generator while in MODE 1, 2 or 3.

100 pressurizer spray cycles per year with pressurizer/spray water  $\Delta T > 200$ °F or as otherwise calculated by following-method:

Spray-operation consisting of opening and closing either-the-main or auxiliary spray valve(s) spray water/pressurizer-ΔT >200°F.

Method-for Calculating Pressurizer Spray Nozzle Cumulative Usage Factor

<del>∆</del> ∓	₽ <sub>A</sub>	₩	N/N <sub>A</sub>
<del>201 - 300</del>	<del>13,000</del>		
<del>301 - 400</del>	<del>5,000</del>		
<del>401 - 500</del>	<del>3,000</del>		
<del>501 - 600</del>	<del>1,500</del>		
		<del>∑N/N</del> ₄	

## Where:

AT = Temperature-difference between pressurizer-water-and-spray in °F N<sub>A</sub>= Allowable number of spray cycles N = Number of cycles of ∆T range indicated.

### Calculation Method:

- 1. At 12-month intervals the cumulative spray cycles shall be totaled. If the total is equal to or less than 1000, no further action is required.
- 2. If the cumulative total exceeds 1000, the spray nozzle usage factor shall be calculated as follows:
  - A. Fill in Column "N" above.
  - B. Calculate "N/NA" (Divide N and NA).
  - C. Add Column "N/N<sub>A</sub>" to find ∑N/N<sub>A</sub>
  - ∑N/N<sub>A</sub> is the cumulative spray nozzle usage factor. If the calculated usage factor is equal to or less than 0. 75, no further action is required.
- If the calculated usage factor exceeds 0.75, subsequent pressurizer spray operation shall be restricted so that the difference between the pressurizer water temperature and the spray water temperature shall be limited to less than or equal to 200°F when spray is operated. An engineering evaluation of nozzle fatigue shall be performed and shall determine that the nozzle remains-acceptable for additional service prior to removing this restriction.

## Component Cyclic or Transient Limit Program

The Program provides controls to track the FSAR, Section 3.9, cyclic and transient occurrences to ensure that components are maintained within the design limits.

## 3.0 TECHNICAL EVALUATION

The proposed change relocates Component Cyclic or Transient Limits Table 5.9-1 and Table 5.7-1 from the St. Lucie Unit 1 and St. Lucie Unit 2 TS, to the respective St. Lucie Unit 1 and Unit 2 UFSARs. In addition, the proposed change deletes TS 5.9.1 and TS 5.7.1 from the St. Lucie Unit 1 and the St. Lucie Unit 2 TS, respectively, and relocates the requirements to the Component Cyclic or Transient Limit Program, within the Administrative Controls sections of the St. Lucie Units 1 and 2 TS.

The Component Cyclic or Transient Limits are derived from design analyses but are not of controlling importance to operational safety. More specifically, the limits do not impose any limitations or conditions on Reactor operation which are necessary to obviate an abnormal situation or event that could pose an immediate threat to public safety. Hence, changes to the Component Cyclic or Transient Limits should not be subject to Commission approval: a rationale espoused in the NRC's Final Policy Statement on TS Improvements for Nuclear Power Reactors (Reference 6.2). The Component Cyclic or Transient Limits are tracked via plant Administrative Procedure (AP) 0010134, Component Cycles and Transients, and the tracking methodology and periodicity will remain unchanged. The relocation of Table 5.9-1 and Table 5.7-1 to the respective St. Lucie Unit 1 and 2 UFSAR(s) requires that future changes to the cyclic and transient limits are first evaluated pursuant to 10 CFR 50.59. Furthermore, the relocation of the Component Cyclic or Transient Limit Program to the TS Administrative Controls sections is consistent with Section 5.5.5 of NUREG-1432, Revision 4.0 (Reference 6.1). As such, deleting TS 5.9.1 and TS 5.7.1, relocating the Component Cyclic or Transient Limit Program to the TS Administrative Controls sections of the St. Lucie Unit 1 and 2 TS and relocating Table 5.9-1 and Table 5.7-1 to the respective St. Lucie Unit 1 and 2 UFSARs is reasonable.

## 4.0 REGULATORY EVALUATION

## 4.1 Applicable Regulatory Requirements/Criteria

10 CFR 50.36, paragraphs (c)(1), (c)(2) and (c)(3) specify that the TS shall include safety limits, limiting safety system settings, limiting control settings, limiting conditions for operation (LCO), and surveillance requirements (SRs).

10 CFR 50.36(c)(4) specifies that the Design Features to be included in the TS are those features of the facility such as materials of construction and geometric arrangements, which, if altered or modified, would have a significant effect on safety and are not covered in categories described in 10 CFR 50.36 paragraphs (c) (1), (2), and (3).

The Component Cyclic or Transient Limits are not safety limits, limiting safety system settings, or limiting control settings. In addition, they are neither LCOs nor SRs. Hence, the Component Cyclic or Transient Limits are not covered in the categories described in 10 CFR 50.36 paragraphs (c) (1), (2), and (3).

The Component Cyclic or Transient Limits are listed in the respective St. Lucie Unit 1 and 2 TS as Design Features. However, the Component Cyclic or Transient Limits were established to ensure that the associated components are maintained within their design limits over the lifetime of the plant(s). As such, the

Component Cyclic or Transient Limits are not facility features which would have a significant effect on safety if altered or modified.

Based upon the foregoing, the Component Cyclic or Transient Limits do not satisfy the 10 CFR 50.36(c) criteria for inclusion in the TS and hence relocation of Table 5.9-1 and Table 5.7-1 to the respective St. Lucie Unit 1 and 2 UFSARs is reasonable. Following NRC approval of this license amendment, changes to the component cyclic or transient limits will be controlled pursuant to 10 CFR 50.59.

## 4.2 Precedents

The following precedents establish a basis for the proposed changes.

4.2.1 South Texas Project, Units 1 and 2, License Amendment Request, Proposed Amendment to South Texas Project Technical Specifications to Revise Administrative Control Requirements, dated November 5, 2001, (Reference 6.4)

In Reference 6.4, the licensee proposed changes to the South Texas Project Unit 1 and 2 TS that would relocate the details contained in TS 6.8.3.f, regarding the component cyclic or transient limits, to the UFSAR and change the verbiage to be consistent with NUREG 1431 (Reference 6.3). In justifying the change, the licensee stated that the program requirements were being maintained in the TS and that only the specific details of the design limits were being relocated to the UFSAR.

In Reference 6.5, the staff granted the licensee's request to amend the South Texas Project Unit 1 and 2 TS, stating that the change is acceptable and noting that the licensee would retain the program requirements in the TS but would relocate the specific detailed design limits to the UFSAR and that subsequent USFAR changes would be controlled by the provisions of 10 CFR 50.59.

4.2.2 Sequoyah Nuclear Plant (SQN) - Units 1 and 2 - Technical Specifications (TS) Change 05-02 "Cyclic and Transient Limits with Design Features Revision", dated September 30, 2005 (Accession No. ML052870040) (Reference 6.6)

In Reference 6.6, the licensee proposed changes to the Sequoyah Nuclear (SQN) Units 1 and 2 TS that would relocate the component cyclic or transient limits requirements from the Design Features section to the Administrative Controls section of the SQN TS and would relocate Table 5.7.1,"Component Cyclic or Transient Limits", to the USFAR.

In Reference 6.7, the staff granted the licensee's request to amend the SQN Units 1 and 2 TS, stating that the change is administrative in nature since the requirements to track and maintain the [component or cyclic] limits remain in the SQN TSs and that the change also conforms to NUREG-1431 (Reference 6.3).

The above precedents are relevant to this license amendment request (LAR) because the staff acknowledged that the TS requirement to maintain the component and cyclic limits would be retained, that changes to the specific design limits would be subject to the provisions of 10 CFR 50.59, and that the changes conformed to the applicable Improved Standard Technical Specifications.

### 4.3 No Significant Hazards Consideration

The proposed change relocates Component Cyclic or Transient Limits Table 5.9-1 and Table 5.7-1 from the St. Lucie Unit 1 and Unit 2 TS, to the St. Lucie Unit 1 and Unit 2 UFSARs, respectively. In addition, the proposed change deletes TS 5.9.1 and TS 5.7.1 from the St. Lucie Unit 1 and Unit 2 TS, and relocates the *Component Cyclic or Transient Limit Program*, to the Administrative Controls section of the respective TS.

As required by 10 CFR 50.91(a), FPL has evaluated the proposed changes using the criteria in 10 CFR 50.92 and has determined that the proposed changes do not involve a significant hazards consideration. An analysis of the issue of no significant hazards consideration is presented below:

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

Response: No

The relocation of Component Cyclic or Transient Limits Table 5.9-1 and Table 5.7-1 from the St. Lucie Unit 1 and Unit 2 TS, to the St. Lucie Unit 1 and Unit 2 UFSARs, and the relocation of the Component Cyclic or Transient Limits Program requirements within the St. Lucie Unit 1 and Unit 2 TS are administrative changes in nature. The TS changes do not represent any physical change to plant systems, structures, or components, or to procedures established for plant operation. As such, the initial conditions associated with accidents previously evaluated and plant systems credited for mitigating the consequences of accidents previously evaluated remain unchanged.

Therefore, facility operation in accordance with the proposed license amendments would 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?

Response: No

The relocation of Component Cyclic or Transient Limits tables from the St. Lucie Unit 1 and Unit 2 TS, to the St. Lucie Unit 1 and Unit 2 UFSARs, and the relocation of the Component Cyclic or Transient Limits Program requirements within the St. Lucie Unit 1 and Unit 2 TS are administrative changes in nature. No physical change to plant systems, structures, or components, or the manner in which they are operated and maintained will result from the proposed license amendments.

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

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

Response: No

The relocation of Component Cyclic or Transient Limits tables from the St. Lucie Unit 1 and Unit 2 TS, to the St. Lucie Unit 1 and Unit 2 UFSARs, and the

relocation of the Component Cyclic or Transient Limits Program requirements within the St. Lucie Unit 1 and Unit 2 TS are administrative changes in nature. As such, the proposed changes do not involve changes to any safety analyses assumptions, safety limits, or limiting safety system settings nor do they adversely impact plant operating margins or the reliability of equipment credited in safety analyses.

Therefore, operation of the facility in accordance with the proposed amendment will not involve a significant reduction in the margin of safety.

Based upon the above analysis, FPL concludes that the proposed amendment does not involve a significant hazards consideration, under the standards set forth in 10 CFR 50.92, "Issuance of Amendment," and accordingly, a finding of "no significant hazards consideration" is justified.

## 4.4 <u>Conclusion</u>

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

## 5.0 ENVIRONMENTAL CONSIDERATION

The proposed amendment modifies a regulatory requirement with respect to the installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or changes an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

## 6.0 REFERENCES

- 6.1 NUREG-1432, Standard Technical Specifications Combustion Engineering Plants, Revision 4.0 (Accession No. ML12102A169)
- 6.2 NRC Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors," dated July 22, 1993 (58 FR 39132)
- NUREG-1431, Standard Technical Specifications Westinghouse Plants, Revision 4.0, Volume 1, Specifications (Accession No. ML12100A222)
- 6.4 South Texas Project, Units 1 and 2, License Amendment Request, Proposed Amendment to South Texas Project Technical Specifications to Revise Administrative Control Requirements, dated November 5, 2001, (Accession No. ML013510314)
- 6.5 South Texas Project, Units 1 and 2 Issuance of Amendments to Revise Specific Requirements of Technical Specification 6.0, "Administrative Controls" (TAC Nos. MB3589 And MB3593), dated April 24, 2003 (Accession No. MI031140670)

- 6.6 Sequoyah Nuclear Plant (SQN) Units 1 and 2 Technical Specifications (TS) Change 05-02 "Cyclic and Transient Limits with Design Features Revision", dated September 30, 2005 (Accession No. ML052870040)
- 6.7 Sequoyah Nuclear Plant, Units 1 and 2 Issuance Of Amendments Regarding Technical Specification Changes to Cyclic and Transient Limits with Design Features Revision (TAC Nos. MC8532 and MC8533) (TS 05-02), dated August 2, 2006 (Accession No. ML061390231)

St. Lucie Nuclear Plant Docket Nos. 50-335 and 50-389

Attachment 1

# ST. LUCIE UNIT 1 PROPOSED TECHNICAL SPECIFICATION PAGES (MARKUP)

## INDEX

DES	IGN FEATURES
SEC	<u>TION</u> PAG
<u>5.1</u>	SITE
	Exclusion Area5-1
	Low Population Zone5-1
<u>5.2</u>	CONTAINMENT
	Configuration 5-1
	Design Pressure and Temperature5-4
	Penetrations5-4
5.3	REACTOR CORE
	Fuel Assemblies
	Control Element Assemblies
5.4	REACTOR COOLANT SYSTEM
	Design Pressure and Temperature5-5
	Volume
5.5	EMERGENCY CORE COOLING SYSTEMS
<u>5.6</u> _	FUEL STORAGE
	Criticality5-5
	Drainage
5.7	SEISMIC CLASSIFICATION
<u>5.8</u>	METEOROLOGICAL TOWER LOCATION
<u>5.9</u>	-COMPONENT CYCLE OR TRANSIENT LIMITS. DELETED5-6a

DESIGN FEATUR	=

#### DRAINAGE

5.6.2 The fuel pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 56 feet.

#### CAPACITY

5.6.3 The spent fuel pool storage racks are designed and shall be maintained with a storage capacity limited to no more than 1706 fuel assemblies, and the cask pit storage rack is designed and shall be maintained with a storage capacity limited to no more than 143 fuel assemblies. The total Unit 1 spent fuel pool and cask pit storage capacity is limited to no more than 1849 fuel assemblies.

## 5.7 SEISMIC CLASSIFICATION

5.7.1 Those structures, systems and components identified as seismic Class I in Section 3.2.1 of the FSAR shall be designed and maintained to the original design provisions contained in Section 3.7 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirement.

## 5.8 METEOROLOGICAL TOWER LOCATION

5.8.1 The meteorological tower location shall be as shown on Figure 5.1-1.

## 5.9 COMPONENT CYCLE OR TRANSIENT LIMITS DELETED

5.9.1 The components identified in Table 5.9-1 are designed and shall be—maintained within the cyclic or transient limits of Table 5.9.1.—

## TABLE 5.9-1 COMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT	CYCLIC OR TRANSIENT LIMITS	DESIGN CYCLE OR TRANSIENT
-Reactor Coelant System	40 Cycles of loss of load without immediate reactor trip	——————————————————————————————————————
	40 cycles of loss of offsite  A.C. electrical power	100% to 0% RATED THERMAL
	400-reactor trips	100% to 0% RATED THERMAL POWER
	16 inadvertent auxiliary spray cycles	Spray line 650°F to 120°F in 1.5 seconds
	200 leak tests	Pressure ≥ 2235 psig
	40 hydrostatic-pressure-tests	Pressure ≥ 3110 psig
Secondary System	5 steam line breaks	Gemplete loss of secondary pressure—
	200 leak tests	<del></del>
	10-hydrostatic-pressure-tests-	Pressure ≥ 1235 psig

ST. LUCIE - UNIT 1

#### **ADMINISTRATIVE CONTROLS (continued)**

#### o. Surveillance Frequency Control Program

This program provides controls for Surveillance Frequencies. The program shall ensure that Surveillance Requirements specified in the Technical Specifications are performed at intervals sufficient to assure the associated Limiting Conditions for Operation are met

- The Surveillance Frequency Control Program shall contain a list of frequencies of those Surveillance Requirements for which the frequency is controlled by the program.
- Changes to the frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with NEI 04-10, "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1.
- c. The provisions of Surveillance Requirements 4.0.2 and 4.0.3 are applicable to the frequencies established in the Surveillance Frequency Control Program.

## p. Snubber Testing Program

This program conforms to the examination, testing and service life monitoring for dynamic restraints (snubbers) in accordance with 10 CFR 50.55a inservice inspection (ISI) requirements for supports. The program shall be in accordance with the following:

- 1. This program shall meet 10 CFR 50.55a(g) ISI requirements for supports.
- 2. The program shall meet the requirements for ISI of supports set forth in subsequent editions of the Code of Record and addenda of the American Society of Mechanical Engineers (ASME) Boiler and Pressure (BPV) Code and the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code) that are incorporated by reference in 10 CFR 50.55a(b) subject to the conditions listed in 10 CFR 50.55a(b) and subject to Commission approval.
- The program shall, as required by 10 CFR 50.55a(b)(3)(v), meet Subsection ISTA, "General Requirements" and Subsection ISTD, "Preservice and Inservice Examination and Testing of Dynamic Restraints (Snubbers) in Light-Water Reactor Nuclear Power Plants".
- 4. The 120-month program updates shall be made in accordance with 10 CFR 50.55a(g)(4), 10 CFR 50.55a(g)(3)(v) and 10 CFR 50.55a(b) (including 10 CFR 50.55a(b)(3)(v)) subject to the conditions listed therein.

## q. Component Cyclic or Transient Limit Program

The Program provides controls to track the FSAR, Section 5.2, cyclic and transient occurrences to ensure that components are maintained within the design limits.

ST. LUCIE UNIT 1
PROPOSED TECHNICAL SPECIFICATION PAGES (CLEAN COPY)

## INDEX

DESI	GN FEATURES
SECT	<u>PAGE</u>
5.1	SITE
	Exclusion Area5-1
	Low Population Zone5-1
<u>5.2</u>	CONTAINMENT
	Configuration5-1
	Design Pressure and Temperature5-4
	Penetrations
5.3	REACTOR CORE
	Fuel Assemblies5-4
	Control Element Assemblies
5.4	REACTOR COOLANT SYSTEM
	Design Pressure and Temperature5-5
	Volume5-5
5.5	EMERGENCY CORE COOLING SYSTEMS
5.6	FUEL STORAGE
	Criticality5-5
	Drainage5-6
<u>5.7</u>	SEISMIC CLASSIFICATION5-6
<u>5.8</u>	METEOROLOGICAL TOWER LOCATION
59	DELETED

## **DESIGN FEATURES**

#### **DRAINAGE**

5.6.2 The fuel pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 56 feet.

## **CAPACITY**

5.6.3 The spent fuel pool storage racks are designed and shall be maintained with a storage capacity limited to no more than 1706 fuel assemblies, and the cask pit storage rack is designed and shall be maintained with a storage capacity limited to no more than 143 fuel assemblies. The total Unit 1 spent fuel pool and cask pit storage capacity is limited to no more than 1849 fuel assemblies.

## 5.7 SEISMIC CLASSIFICATION

5.7.1 Those structures, systems and components identified as seismic Class I in Section 3.2.1 of the FSAR shall be designed and maintained to the original design provisions contained in Section 3.7 of the FSAR with allowance for normal degradation pursuant to the applicable Surveillance Requirement.

## 5.8 METEOROLOGICAL TOWER LOCATION

5.8.1 The meteorological tower location shall be as shown on Figure 5.1-1.

#### 5.9 DELETED

DELETED

5-7

ST. LUCIE - UNIT 1

#### **ADMINISTRATIVE CONTROLS (continued)**

#### o. <u>Surveillance Frequency Control Program</u>

This program provides controls for Surveillance Frequencies. The program shall ensure that Surveillance Requirements specified in the Technical Specifications are performed at intervals sufficient to assure the associated Limiting Conditions for Operation are met

- The Surveillance Frequency Control Program shall contain a list of frequencies of those Surveillance Requirements for which the frequency is controlled by the program.
- Changes to the frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with NEI 04-10, "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1.
- c. The provisions of Surveillance Requirements 4.0.2 and 4.0.3 are applicable to the frequencies established in the Surveillance Frequency Control Program.

#### p. Snubber Testing Program

This program conforms to the examination, testing and service life monitoring for dynamic restraints (snubbers) in accordance with 10 CFR 50.55a inservice inspection (ISI) requirements for supports. The program shall be in accordance with the following:

- 1. This program shall meet 10 CFR 50.55a(g) ISI requirements for supports.
- 2. The program shall meet the requirements for ISI of supports set forth in subsequent editions of the Code of Record and addenda of the American Society of Mechanical Engineers (ASME) Boiler and Pressure (BPV) Code and the ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code) that are incorporated by reference in 10 CFR 50.55a(b) subject to the conditions listed in 10 CFR 50.55a(b) and subject to Commission approval.
- The program shall, as required by 10 CFR 50.55a(b)(3)(v), meet Subsection ISTA, "General Requirements" and Subsection ISTD, "Preservice and Inservice Examination and Testing of Dynamic Restraints (Snubbers) in Light-Water Reactor Nuclear Power Plants".
- The 120-month program updates shall be made in accordance with 10 CFR 50.55a(g)(4), 10 CFR 50.55a(g)(3)(v) and 10 CFR 50.55a(b) (including 10 CFR 50.55a(b)(3)(v)) subject to the conditions listed therein.

## q. Component Cyclic or Transient Limit Program

The program provides controls to track the FSAR, Section 5.2, cyclic and transient occurrences to ensure that components are maintained within the design limits.

ST. LUCIE UNIT 2
PROPOSED TECHNICAL SPECIFICATION PAGES (MARKUP)

## <u>INDEX</u>

LIST OF TABLES (Continued)			
TABLE	PAGE		
3.7-1	MAXIMUM ALLOWABLE LINEAR POWER LEVEL-HIGH TRIP SETPOINT WITH INOPERABLE STEAM LINE SAFETY VALVES DURING OPERATION WITH BOTH STEAM GENERATORS		
3.7-2	STEAM LINE SAFETY VALVES PER LOOP		
4.7-1	SECONDARY COOLANT SYSTEM SPECIFIC ACTIVITY SAMPLE AND ANALYSIS PROGRAM		
4.7-2	SNUBBER VISUAL INSPECTION INTERVAL		
3.7-3a	DELETED		
3.7-3b	DELETED		
3.7-4	DELETED		
3.7-5	DELETED		
4.8-1	DIESEL GENERATOR TEST SCHEDULE		
4.8-2	BATTERY SURVEILLANCE REQUIREMENT		
3.8-1	MOTOR-OPERATED VALVES THERMAL OVERLOAD PROTECTION BYPASS DEVICES		
4,11-1	DELETED		
4.11-2	DELETED		
3.12-1	DELETED		
3.12-2	DELETED		
4.12-1	DELETED		
5.6-1	MINIMUM BURNUP COEFFICIENTS		
5.7-1	COMPONENT CYCLIC OR TRANSIENT LIMITS DELETED		

#### **DESIGN FEATURES (continued)**

#### **CRITICALITY** (continued)

#### 5.6.1 c. (continued)

- 4. The 2x2 array of fuel assemblies that span the interface between Region 1 and Region 2 of the spent fuel pool storage racks shall comply with the storage pattern definitions of Figure 5.6-3 and the minimum burnup requirements as defined in Table 5.6-1. The allowed special arrangements in Region 2 as shown in Figure 5.6-2 shall not be placed adjacent to Region 1. (See Specification 5.6.1.c.7 for exceptions)
- Fuel placed in the cask pit storage rack shall comply with the storage pattern definitions of Figure 5.6-4 and the minimum burnup requirements as defined in Table 5.6-1. (See Specification 5.6.1.c.7 for exceptions)
- The same directional orientation for Metamic inserts is required for contiguous groups of 2x2 arrays where Metamic inserts are required.
- 7. Fresh or spent fuel in any allowed configuration may be replaced with non-fuel hardware, and fresh fuel in any allowed configuration may be replaced with a fuel rod storage basket containing fuel rod(s). Also, storage of Metamic inserts or control rods, without any fissile material, is acceptable in locations designated as completely water-filled cells.
- d. The new fuel storage racks are designed for dry storage of unirradiated fuel assemblies having a maximum planar average U-235 enrichment less than or equal to 4.6 weight percent, while maintaining a k<sub>eff</sub> of less than or equal to 0.98 under the most reactive condition.

## DRAINAGE

5.6.2 The spent fuel storage pool is designed and shall be maintained to prevent inadvertent draining of the pool below elevation 56 feet.

## CAPACITY

5.6.3 The spent fuel pool storage racks are designed and shall be maintained with a storage capacity limited to no more than 1491 fuel assemblies, and the cask pit storage rack is designed and shall be maintained with a storage capacity limited to no more than 225 fuel assemblies. The total Unit 2 spent fuel pool and cask pit storage capacity is limited to no more than 1716 fuel assemblies.



5.7.1 The components identified in Table 5.7.1 are designed and shall be maintained within the cyclic or transient limits of Table 5.7-1.

## TABLE 5.7-1 DELETED GOMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT	CYCLIC OR TRANSIENT LIMIT	DESIGN CYCLE OR TRANSIENT	
Reactor Coolant System	506 system heatup and cocidown oyolos at-raise < 100°F/hr.	Heatup cycle — T <sub>avg</sub> from ≤ 200°F to ≥ 532°F, cooldown cycle — T <sub>avg</sub> from ≥ 532°F to ≤ 200°F.	+
	500 pressurizer heatup and cooldown cycles at rates ≤200°F/hr.	- Hestup cycle—Pressurizer-temperature- from <u>≤ 200°F to ≥ 653°F;</u> cooldown <u>&gt; 653°F to ≤ 200°F</u>	-
	10 hydrostatic testing cycles.	RGS pressurized to 3119 psig with RGS temperature ≥ 60°F above the most limiting components NDTF value.	ş
	200 leak testing cycles.	RCS pressured to 2250 pale with RCS temperature greater than minimum for hydrostatic testing, but less than-minimum RCS temperature for criticality.	4
	400 reactor trip cycles:	Trip from 100% of RATED THERMAL POWER.	
	40 turbine trip cycles with delayed reactor trip.	Turbine trip (total-load rejection)— from 100% of RATED THERMAL POWER followed by resulting reactor trip.	

ST. LUCIE - UNIT 2

5-5

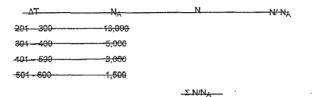
## TABLE 5.7-1 (Gontinued) COMPONENT CYCLIC OR TRANSIENT LIMITS

COMPONENT	CYCLIC OR TRANSIENT LIMITS	DESIGN GYCLE OR TRANSIENT
Reactor Coolant System	40 complete loss of reactor coolant-flow cycles.	—Simulatoneous loss of all-Reactor —Goolant-Pumps at 100% of RATED THERMAL POWER:
	5-complete loss of secondary pressure cycles	Loss of secondary pressure from either steam generator while in MODE 1, 2 or 3.
	100 pressurizer spray cycles per year with pressurizer/spray water  AT > 200°F or as otherwise calculated by the following method:	—Spray operation-consisting of— —opening and closing alther the main—or-auxiliary spray valve(s)— —spray water/pressurizer ∆T→260°F.

## TABLE 6.7-1 (Continued) GOMPONENT CYCLIC OR TRANSIENT LIMITS

	CYCLIC OR	DESIGN CYCLE
<u>COMPONENT</u>		OR TRANSIENT
Poortor-Carlont-Suctors	•	

#### Method for Calculating Pressurizer Spray-Nezzle-Cumulative-Usage Factor



₩here:

-AT = Temperature difference between pressurizer water and spray in °F.

N<sub>A</sub> = Allowable number of sprey cycles.

N = Number of cycles of AT range indicated:

ST, LUCIE - UNIT 2

5-7

## TABLE 5.7-1 (Continued)— COMPONENT CYCLIC OR TRANSIENT LIMITS

		CYCLIC OR	DESIGN CYCLE
	COMPONENT	TRANSIENT LIMIT	OR TRANSIENT
4	Reactor Coolant System		
	Galeu	lation-Method:	

- 1. At 12-month intervals the cumulative spray cycles shall be totaled;
  4f the total is equal to or less than 1000, no further action is required.
- 2. If the cumulative total exceeds 1000, the spray nextle usage factor chailbe calculated as follows:-
  - A: Fill in Column "N" above:
  - B. Calculate "N/NA" (Divide N and NA).
  - G. Add-Galumn-N/NA\* to find S-N/NA.
  - -ΣN/N<sub>A</sub> is the cumulative spray nozzle usage factor. If the calculated usage factor is equal to er less than 0.75, no further action is required,
- 3. If the calculated usage factor exceeds 0.75, subsequent pressurizer aprayoperation shall be restricted so that the difference between the pressurizer 
  water-temperature and the apray water-temperature shall be limited to 
  less than or equal to 200°F when apray is operated. An engineering evaluation 
  of nozzle fatigue shall be performed and shall determine that the nozzle 
  remains acceptable for additional service prior to removing this restriction.

ST. LUCIE - UNIT 2

#### **ADMINISTRATIVE CONTROLS**

## a. Surveillance Frequency Control Program

This program provides controls for Surveillance Frequencies. The program shall ensure that Surveillance Requirements specified in the Technical Specifications are performed at intervals sufficient to assure the associated Limiting Conditions for Operation are met.

- The Surveillance Frequency Control Program shall contain a list of frequencies of those Surveillance Requirements for which the frequency is controlled by the program.
- Changes to the frequencies listed in the Surveillance Frequency Control Program shall be made in accordance with NEI 04-10, "Risk-Informed Method for Control of Surveillance Frequencies," Revision 1.
- c. The provisions of Surveillance Requirements 4.0.2 and 4.0.3 are applicable to the frequencies established in the Surveillance Frequency Control Program.

#### 6.9 REPORTING REQUIREMENTS

#### **ROUTINE REPORTS**

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations; the following reports shall be submitted to the NRC:

#### STARTUP REPORT

- 6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier; and (4) modifications that may have significantly altered the nuclear, thermal or hydraulic performance of the plant.
- 6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.
- 6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

## Component Cyclic or Transient Limit Program

The Program provides controls to track the FSAR, Section 3.9, cyclic and transient occurrences to ensure that components are maintained within the design limits.

ST. LUCIE UNIT 2
PROPOSED TECHNICAL SPECIFICATION PAGES (CLEAN COPY)

Λ

## INDEX

LIST OF TABLES (Continued)				
TABLE	PAGE			
3.7-1	MAXIMUM ALLOWABLE LINEAR POWER LEVEL-HIGH TRIP SETPOINT WITH INOPERABLE STEAM LINE SAFETY VALVES DURING OPERATION WITH BOTH STEAM GENERATORS			
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5 7-1	DELETED 5.5			

#### **DESIGN FEATURES** (continued)

### **CRITICALITY** (continued)

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## 5.7 DELETED

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ST. LUCIE - UNIT 2

DELETED

ST. LUCIE - UNIT 2

5-6

DELETED

5-7

ST. LUCIE - UNIT 2

DELETED

ST. LUCIE - UNIT 2

#### ADMINISTRATIVE CONTROLS

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#### r. Component Cyclic or Transient Limit Program

The Program provides controls to track the FSAR, Section 3.9, cyclic and transient occurrences to ensure that components are maintained within the design limits.

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